

9th Asia-Pacific Conference on Plasma Physics

AAPPS-DPP2025 Program Book

**September 21-26, 2025
Fukuoka International
Congress Center
Fukuoka, JAPAN**

Hakata Port Tower

9th Asia-Pacific Conference on Plasma Physics

(AAPPS-DPP2025) September 21-26, 2025 <https://www.aappsdpp.org/DPP2025/>

Fukuoka International Congress Center, Fukuoka, Japan

Organized by AAPPS-DPP

Issued September 17, 2025

The Division of Plasma Physics of the Association of Asia Pacific Physics Societies (AAPPS-DPP) has been successfully organizing annual conferences on plasma physics in the Asia Pacific region for the past 8 years. The 1st Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2017) was held during September 18-23, 2017 in Chengdu, China (<http://aapspdpp.org/DPP2017rogramlatest/index.html>) followed by AAPPS-DPP2018 during November 12-17, 2018 in Kanazawa, Japan (<http://aapspdpp.org/DPP2018/index.html>), and AAPPS-DPP2019 during November 4-8, 2019 in Hefei, China (<http://aapspdpp.org/DPP2019/index.html>). The subsequent three conferences AAPPS-DPP2020 (<http://aapspdpp.org/DPP2020/index.html>), AAPPS-DPP2021 (<http://aapspdpp.org/DPP2021/index.html>) and AAPPS-DPP2022 (<http://aapspdpp.org/DPP2022/index.html>) were held as online conferences using the Zoom platform. We returned to an in-person format in the 7th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2023) which was held from Nov. 12-17, 2023 in Port Messe Nagoya, Japan (<https://www.aapspdpp.org/DPP2023/index.html>). 8th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2024) was held in Grand Swiss-Bel Hotel, Malacca, Malaysia during Nov. 3-8, 2024, co-organized by Malaysian Institute of Physics (MIP) (<https://www.aapspdpp.org/DPP2024/index.html>).

[1] Scope of the AAPPS-DPP2025:

AAPPS-DPP2025 is a plasma physics conference under the authority of AAPPS-DPP for scientific discussions on plasma physics. This conference provides interdisciplinary and in-depth discussions among and in various fields of plasma physics and applications.

[2] Organization:

AAPPS-DPP (<http://aappsdpp.org/AAPPSPDPF/>) is organizing body of this conference. Kyushu University is co-organizer.



AAPPS-DPP chair
& 2025 IOC chair
Rajdeep S Rawat



AAPPS-DPP CEO
& 2025 General PC chair
Mitsuru Kikuchi



LOC chair, AAPPS-DPP BoD
Senior Vice President of Kyushu U.
Masaharu Shiratani

[3] Program Overview

Conference run from Sunday to Friday. We have A. Hasegawa memorial session on Sunday, who is Maxwell and Alfven prize winner as well as DPP's I-HAC member. Due to large number of talks, F, A1 and A2 topical session starts from Sunday. We have reception on Sunday 15:00-17:00. Monday to Friday are standard conference days where morning sessions are plenary talks dedicated for interdisciplinary discussion and in-depth discussion in specific fields in the afternoon session.

9th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP 2025) *Fukuoka International Congress Center 21-26, September, 2025* [ver. 9-17]

Asia-Pacific Conference on Plasma Physics (APPP-DPP 2025) - Fukuoka International Congress Center 21-26, September, 2025 [Ver. 9-17]											
Sunday (2025.09.21)		Monday (2025.09.22)		Tuesday (2025.09.23)		Wednesday (2025.09.24)		Thursday (2025.09.25)		Friday (2025.09.26)	
		Registration: 7:30~		Registration: 8:00~		Registration: 8:00~		Registration: 8:00~		Registration: 8:00~	
		8:30-10:10:Opening(Chair:Kazumori Koga)		8:30-10:30:Plenary 2 Chairs:R. Matsumoto, P.Diamond, Yu Lin, Y.Kuramitsu		8:30-10:30:Plenary 4 Chairs: CK Huang, TS Hahn, Pin Chen, F. Zonca,		8:30-10:30:Plenary 6 Chairs: T. Johzaki, Feng Chen, Liu Chen, SK Tiwari		8:30-10:30:Plenary 8 Chairs: X.Zhang, Y. Yamashita, X. Garbet, L. Xu	
[3]9:30-16:35: A. Hasegawa memorial symposium (410) Morning session 5 x 25min invited talks Lunch break Afternoon session 5 x 25min invited talks		O-1M: Shortest Opening remark 10min		O-1M: Shortest Opening remark 10min		O-1M: Shortest Opening remark 10min		O-1M: Shortest Opening remark 10min		O-1M: Shortest Opening remark 10min	
		O-2 R: Rawat DPP Chair's address 5min		O-2 R: Rawat DPP Chair's address 5min		O-2 R: Rawat DPP Chair's address 5min		O-2 R: Rawat DPP Chair's address 5min		O-2 R: Rawat DPP Chair's address 5min	
		O-3 M: Kikuchi DPP CEO remarks 5min		O-3 M: Kikuchi DPP CEO remarks 5min		O-3 M: Kikuchi DPP CEO remarks 5min		O-3 M: Kikuchi DPP CEO remarks 5min		O-3 M: Kikuchi DPP CEO remarks 5min	
		O-4 S: Bhattacharjee IPE USO ceremony 15min		O-4 S: Bhattacharjee IPE USO ceremony 15min		O-4 S: Bhattacharjee IPE USO ceremony 15min		O-4 S: Bhattacharjee IPE USO ceremony 15min		O-4 S: Bhattacharjee IPE USO ceremony 15min	
		O-5 Y: Fukui IAWQ award 15min		O-5 Y: Fukui IAWQ award 15min		O-5 Y: Fukui IAWQ award 15min		O-5 Y: Fukui IAWQ award 15min		O-5 Y: Fukui IAWQ award 15min	
		O-6 Y: Yusa Moon JPP ceremony 15min		O-6 Y: Yusa Moon JPP ceremony 15min		O-6 Y: Yusa Moon JPP ceremony 15min		O-6 Y: Yusa Moon JPP ceremony 15min		O-6 Y: Yusa Moon JPP ceremony 15min	
		O-7 Lou C: Chaudhary ceremony 15min		O-7 Lou C: Chaudhary ceremony 15min		O-7 Lou C: Chaudhary ceremony 15min		O-7 Lou C: Chaudhary ceremony 15min		O-7 Lou C: Chaudhary ceremony 15min	
		O-8 Y: Kikuchi Award Kuroki award 5min		O-8 Y: Kikuchi Award Kuroki award 5min		O-8 Y: Kikuchi Award Kuroki award 5min		O-8 Y: Kikuchi Award Kuroki award 5min		O-8 Y: Kikuchi Award Kuroki award 5min	
		O-9 L: Chan Aloor Akira Hasegawa 5min		O-9 L: Chan Aloor Akira Hasegawa 5min		O-9 L: Chan Aloor Akira Hasegawa 5min		O-9 L: Chan Aloor Akira Hasegawa 5min		O-9 L: Chan Aloor Akira Hasegawa 5min	
		O-10S: Woe Yuse AIWSP-DPP2024 10min		O-10S: Woe Yuse AIWSP-DPP2024 10min		O-10S: Woe Yuse AIWSP-DPP2024 10min		O-10S: Woe Yuse AIWSP-DPP2024 10min		O-10S: Woe Yuse AIWSP-DPP2024 10min	
	O-11 Woebe Choe IAWQ award 5min		O-11 Woebe Choe IAWQ award 5min		O-11 Woebe Choe IAWQ award 5min		O-11 Woebe Choe IAWQ award 5min		O-11 Woebe Choe IAWQ award 5min		
	10:10-11:00: Photo & Coffee Break		10:30-11:00: Coffee break		10:30-11:00: Coffee break		10:30-11:00: Coffee break		10:30-11:00: Coffee break		
	11:00-13:00: Plenary1 Chairs: LC Lee, SY Moon, ZX Wang, P. Yoon		11:00-13:00:Plenary3 Chairs: D. Batani, T. Tokuzawa, Wen-Ha Ko, H. Tanaka		11:00-13:00:Plenary 5 Chairs: XZ Zhao, S. Zenitani, Kai Zhao, Thomas Borman		11:00-13:00:Plenary 7 Chairs: QZ Zhang, S. Benkadda, H. Kurita, T. Hada		11:00-13:00:Plenary 9 Chairs: S.Toko, Y. Omura, Jak Levell, S.Jacquemont		
	11:00-11:30: PL-1 Qiu-Gang Zong (Chandra)		11:00-11:30:PL-9 Tobias Dornheim(L1)		11:00-11:30:PL-17 Mark Chung(SA)		11:00-11:30:PL-25 Ramzes Snoeckx(A1)		11:00-11:30:PL-33 Erik Vanhaemaers(A1)		
	11:30-12:00: PL-2 Keizhi Sakamoto (PIP)		11:30-12:00:PL-10 Haigang Liu(B1)		11:30-12:00:PL-18 Takahiro Miyoshi(B1)		11:30-12:00:PL-26 Brendan Lyons(B1)		11:30-12:00:PL-34 Xinlin Li(SG)		
[4] 12:00-16:10	12:00-12:30: PL-3 Felix Wanner(MF1)		12:00-12:30:PL-11 Y. One(MF1)		12:00-12:30:PL-19 Ya Zhang(A1)		12:00-12:30:PL-27 Joanna Pawlat(A2)		12:00-12:30:PL-35 GaurMano Polli (MF2)		
	12:30-13:00: PL-4 Lughua Wang(SG)		12:30-13:00:PL-12 Bormali Sarma(A2)		12:30-13:00:PL-20 A. Kirichenko(MF2)		12:30-13:00:PL-28 NS Saini(SG)		12:30-13:00:PL-36 Naotama Iwata(L1)		
	F-1(414)		13:00-14:00: Lunch 13:05-14:05: WIPP WS(1) room 203+204		13:00-14:00: Lunch 13:05-14:05: WIPP WS(2) room 203+204		13:00-14:00: Lunch 13:00-14:00: BoD [404]		13:00-14:00: Lunch 13:00-14:00: H-AC [404]		
	A2-1(405+406)		14:00-16:10: Topical 1 14:00-16:00 Poster session 1 201+202		14:00-16:10: Topical 3 14:00-16:10 Poster session 3 201+202		14:00-16:10: Topical 5 14:00-16:10 Poster session 5 201+202		14:00-16:10: Topical 7 14:00-16:10 Poster session 7 201+202		
	F-2(414)		CD-1(401)		CD-3(401)		CD-5(401)		CD-7(401)		
	A1-1(402+403)		F-3(414)		F-5(414)		F-7(414)		F-11(413)		
	A2-2(405+406)		B1-1(413)		B1-5(413)		B1-8(413)		B1-12(413)		
	RMPP Editor meeting (410) 17:00-18:00		B2-1(404)		B1-6(404)		B2-5(504+505)		B1-7(411)		
			B2-1(504+505)		B2-3(504+505)		A1-6(402+403)		L2-7(412)		
			A2-2(402+403)		A1-4(402+403)		A2-7(405+406)		SG-7(503)		
			A2-3(405+406)		A2-5(405+406)		L1-5(411)		SA-7(502)		
			L1-1(411)		SG-3(503)		L2-5(412)		MF1-7(409)		
			L2-1(412)		SA-3(502)		SG-5(503)		MF1-11(402+403)		
			SG-1(503)		MF1-3 (409)		SA-5(502)		MF2-7(410)		
			SA-1(502)		MF1-10(412)		MF1-5(409)				
			MF1-1(409)		MF2-3 (410)		MF2-5(410)				
			MF2-1(410)								
			16:10-16:30: Coffee Break		16:10-16:30: Coffee Break		16:10-16:30: Coffee Break		16:10-16:30: Coffee Break		
			16:30-18:40 Topical 2 16:30-18:40 Poster session 2 201+202		16:30-18:40 Topical 4 16:30-18:40 Poster session 4 201+202		16:30-18:40 Topical 6 16:30-18:40 Poster session 6 201+202		16:30-18:40 Topical 8 16:30-18:40 Poster session 8 201+201		
			CD-2(401)		CD-4(401)		CD-6(410)		CD-8(401)		
			F-4(414)		F-6(414)		F-8(414)		F-10(414)		
			B1-3(413)		B1-7(413)		B1-9(413)		A1-9(402+403)		
			B1-4(404)		B2-4(504+505)		B2-6(504+505)		A1-10(404)		
			B2-2(504+505)		A1-5(402+403)		A1-7(402+403)		A2-10(405+406)		
			A1-3(402+403)		A2-6(405+406)		A2-8(405+406)		L1-8(411)		
			A2-4(405+406)		L1-4(411)		L1-6(411)		L2-8(412)		
			L1-2(411)		L2-4(412)		L2-6(412)		SG-8(503)		
			L2-2(412)		SG-4(503)		MF1-6(409)		SA-8(502)		
			SG-2(503)		SA-4(502)		P-B fusion(410)		MF1-8(409)		
			SA-2(502)		MF1-4(409)		HEDP-1 (404)		MF2-8(410)		
			MF1-2 (409)		MF2-4(410)						
			MF2-2 (410)		MF2-10(404)						
			19:30-~ : Reception for VIP		18:50-19:50: EV-2 (410) EV-3 (410)				20:00-23:00: Conference Dinner at Incheon Grand Hotel		

Table 1 Program Overview

[4] Conference Place: <https://www.youtube.com/watch?v=64FaAlZpX4>

Conference place is Fukuoka International Congress Center, Fukuoka, Japan.

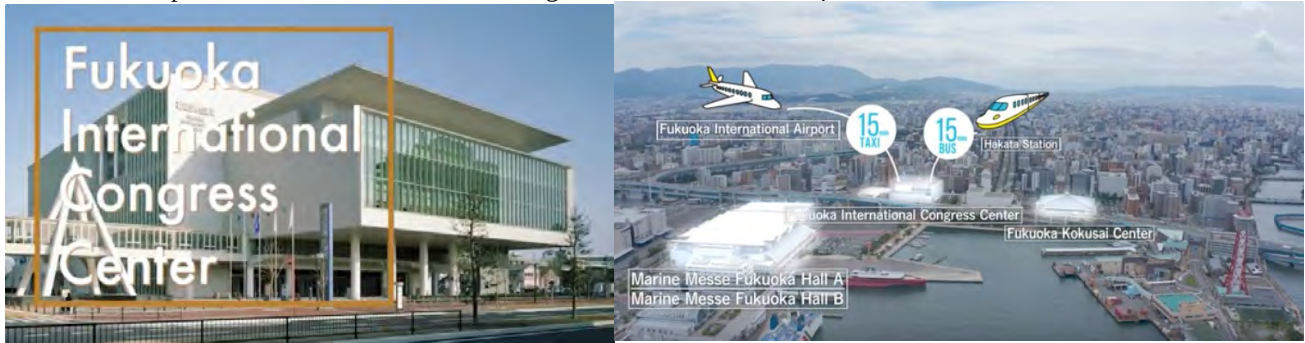


Fig 1 Fukuoka International Congress Center, Fukuoka, Japan

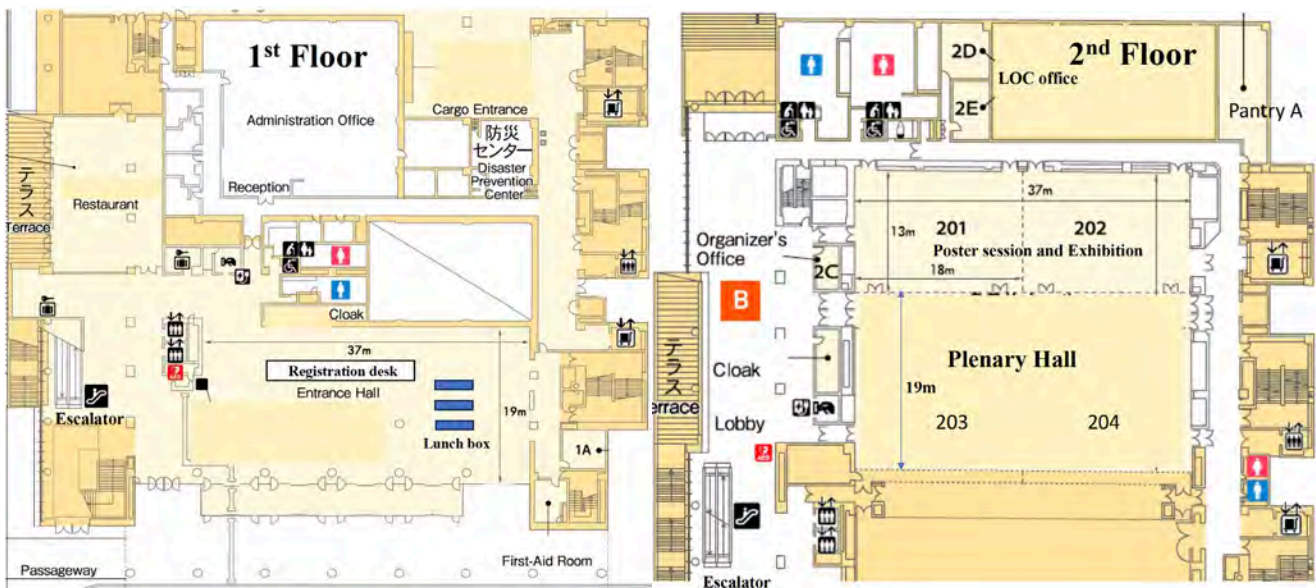


Fig. 2 First floor and 2nd floor



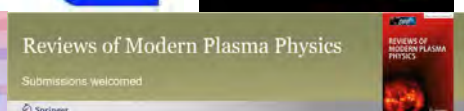
Fig. 3 First floor restaurant and 2nd floor lobby

[4] Sponsors

AAPPS-DPP2025 is financially sponsored by following organizations.

4.1 AAPPS-DPP Award Sponsors

1. STARTORUS FUSION (Sponsor for 2025 Chandrasekhar Prize) <https://www.startorus.com/>
2. MDPI (Partial sponsor for 2025 Plasma Innovation Prize) <https://www.mdpi.com/>
3. Springer (Partial sponsor for 2025 U40 award) <https://link.springer.com/journal/41614>
4. IFE Forum (Sponsor for Mima U30 award) <https://www.ilt.or.jp/ife-forum/>
5. Elsevier (sponsor for Elsevier Student poster prize) <https://www.sciencedirect.com/journal/fundamental-plasma-physics>
6. Plasma Science Society of India (Chandrasekhar Medal) <https://www.pssi.in/>



4.2 Sponsor

1. IUPAP (Conference support: 5000Euro) <https://iupap.org/>
2. APCTP (Conference support: 5 Million KRW) <https://www.apctp.org/>



International Union of Pure and Applied Physics



asia pacific center for theoretical physics

4.3 Exhibition

1. Kenix <https://kenix.jp/>
2. East Photonix <https://www.eastphotonics.com/>
3. Springer Nature <https://www.springer.com/jp>
4. Innovation Science <https://innovation-science.co.jp/>
5. Hiden Analytical <https://www.hidenanalytical.com/>
6. Korean Institute of Fusion Energy (KFE) <https://www.kfe.re.kr/eng>

Kenix



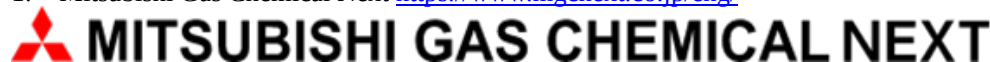
INNOVATION
SCIENCE

HIDEN
ANALYTICAL

SPRINGER NATURE KFE KOREA INSTITUTE OF FUSION ENERGY

4.4 Poster Advertisement

1. Mitsubishi Gas Chemical Next <https://www.mgcnext.co.jp/eng/>



Disclaimer: The attendance of AAPPS-DPP2025 conference is at own risk. While the organizers will make every effort to conduct this conference according to the announced schedule, unlikely, unforeseen circumstances may result in change of the schedule or cancelation of the conference. These changes will be posted at the conference website. No liability is assumed for inaccuracy, misdescription, delay, damage, and loss.

Fraud attempt to participants: There were some phone calls and follow-up emails asking for credit card information for hotel accommodations to the speakers of past in-person conferences. Do not respond and ignore in case. It is fraud attempt.

[5] Conference Rooms

5.1 Plan views of Conference rooms

Conference rooms locates in 2nd, 4th and 5th floors. Plan views are shown below. Plenary hall (203+204) has >700 seats. Poster and exhibition rooms (201+202) is beside plenary hall. LOC staffs are in LOC rooms (2D and 2E) and can provide any assistance needed. Coffee, cold drinks and snacks are available in lobby and poster and exhibition room. Women in Plasma Physics (WIPP) mini-symposium will be held at plenary hall (lunch time in Monday-Tuesday).

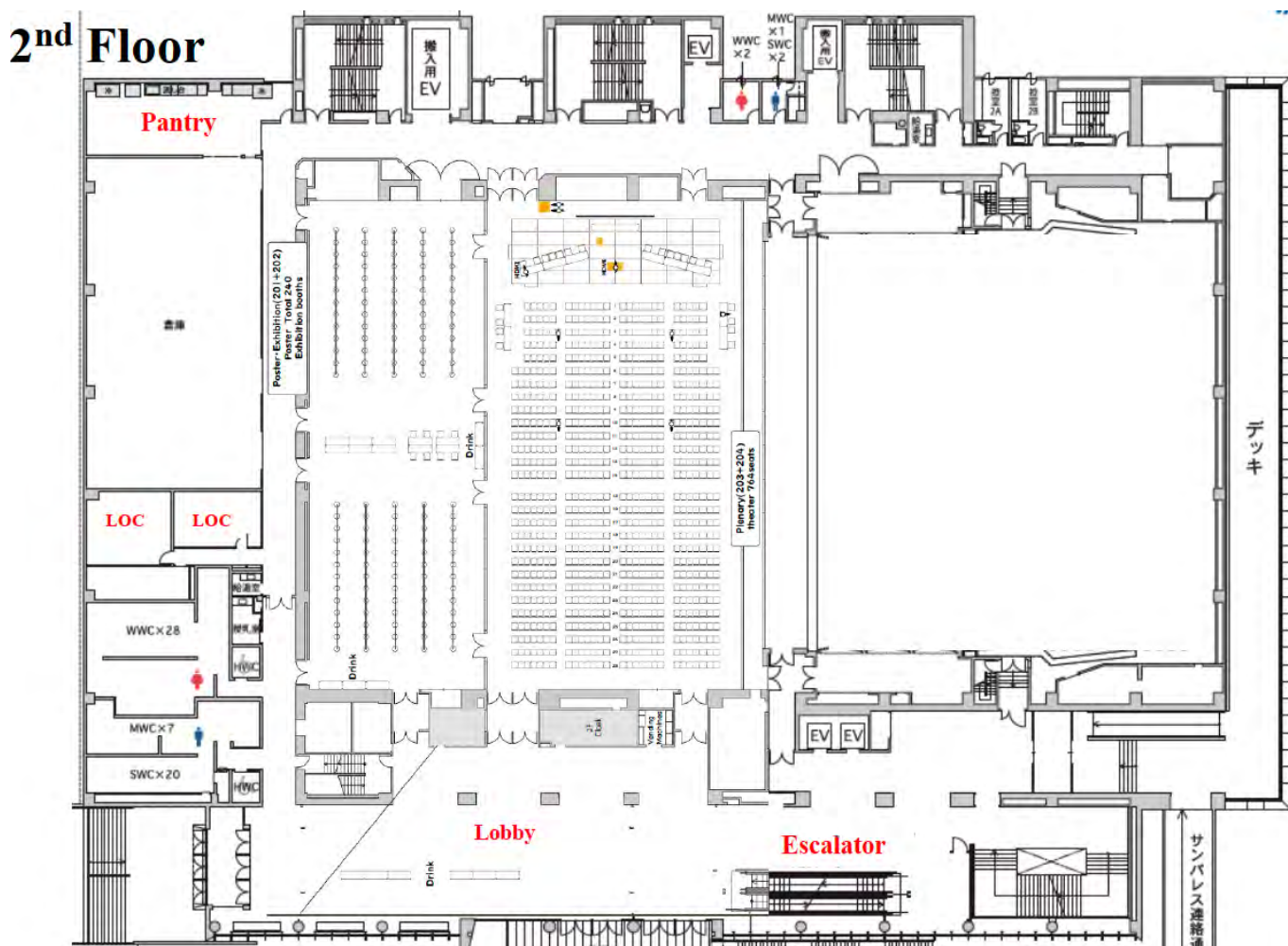


Fig. 4 Plan view of 2nd floor

Topical sessions for CD, F, B1, B2, A1, A2, L1, L2, SG, SA, MF1, MF2 will be held in 4th and 5th floor. Main rooms for each program categories are shown in the plan views. Coffee are available in 4th and 5th floors.

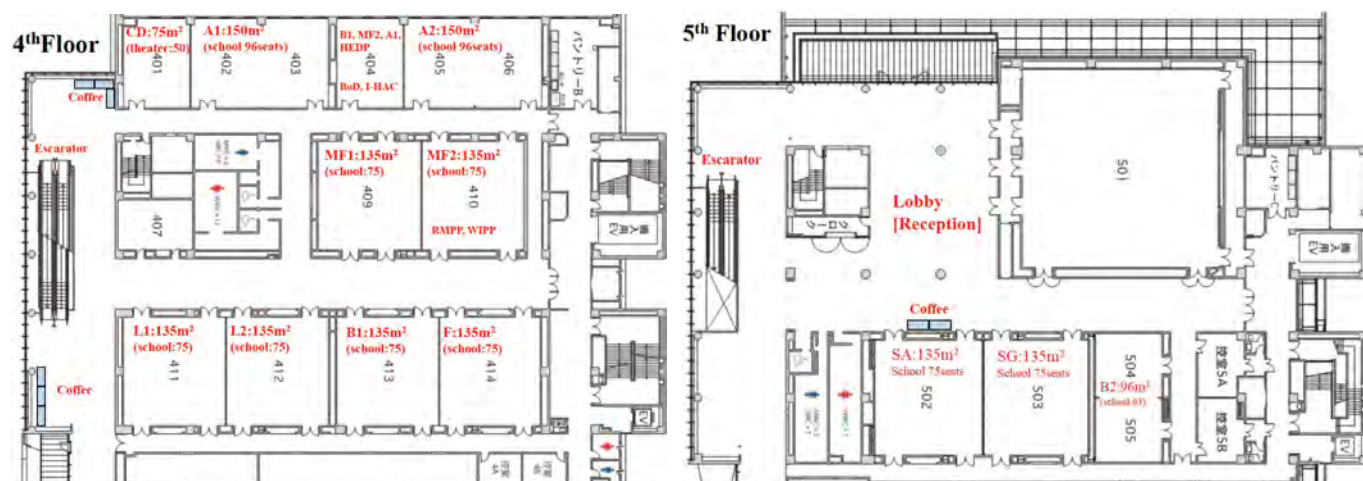


Fig. 5 Plan views of 4th, 5th floors

5.2 Room arrangement

Conference runs from Sunday(21 Sept.) to Friday(26 Sept). Room arrangement for topical sessions is shown below.

	21[Sun] AM	21[Sun] PM	22[Mon] Early PM	22[Mon] Late PM	23[Tue] Early PM	23[Tue] Late PM	24[Wed] Early PM	24[Wed] Late PM	25[Thu] Early PM	25[Thu] Late PM	26[Fri] Early PM
401			CD-1	CD-2	CD-3	CD-4	CD-5	CD-6	CD-7	CD-8	CD-9
414		F-1, F-2	F-3	F-4	F-5	F-6	F-7	F-8	-	F-10	F-11
413			B1-1	B1-3	B1-5	B1-7	B1-8	B1-9	B1-10	--	B1-12
504+505			B2-1	B2-2	B2-3	B2-4	B2-5	B2-6	B2-7	--	B2-9
402+403		A1-1	A1-2	A1-3	A1-4	A1-5	A1-6	A1-7	MF1-11	A1-9	A1-11
405+406		A2-1, A2-2	A2-3	A2-4	A2-5	A2-6	A2-7	A2-8	--	A2-9	A2-10
411			L1-1	L1-2		L1-4	L1-5	L1-6	L1-7	L1-8	L1-9
412			L2-1	L2-2	MF1-10	L2-4	L2-5	L2-6	L2-7	L2-8	L2-9
503			SG-1	SG-2	SG-3	SG-4	SG-5	--	SG-7	SG-8	SG-9
502			SA-1	SA-2	SA-3	SA-4	SA-5	--	SA-7	SA-8	SA-9
409			MF1-1	MF1-2	MF1-3	MF1-4	MF1-5	MF1-6	MF1-7	MF1-8	MF1-9
410	AH symp	AHsymp/ RMPP	MF2-1	MF2-2	MF2-3	MF2-4	MF2-5	P-B Fusion	MF2-7	MF2-8	MF2-9
404			B1-2	B1-4	B1-6	MF2-10	[BoD]	HEDP-1	[I-HAC]	A1-10	HEDP-2

[6] Registration

6.1 On-line registration

Registration fee should be paid on-line before the conference. At the conference site, payment will take time since there will be minimum peoples in charge. Registration fee includes 1) Admission to all conference sessions, 2) Coffee breaks, and 3) Conference Materials. Welcome reception is free. Lunch is not included different from Malacca conference. Conference banquet fee is 8,000 JPY. In case a participant is unable to come to the conference and notify about it AAPS-DPP CEO M. Kikuchi (aapps.dpp.ceo@gmail.com) before the conference week, paid fee will be reimbursed with some reduction.

	Early registration before Aug. 1	Late registration after Aug. 1
DPP Member/Join DPP	75,000JPY(~500USD)	90,000JPY(~600USD)
Member (Retired)/Join DPP	39,000JPY(~260USD)	45,000JPY(~300USD)
Member(Student)/Join DPP	30,000JPY(~200USD)	37,500JPY(~250USD)
Non member	90,000JPY(~600USD)	105,000JPY(~700USD)

- 1) Receipt can be downloaded from my page. Download from my page will be closed soon after the conference. So it is highly recommended to download before end of the conference. DPP will not provide receipt after its closure.
- 2) No tax is levied on members , For non-members, the price includes consumption tax.

6.2 On-site registration

Conference bag including name tag, lunch ticket, dinner ticket, etc. will be given at the on-site registration desk at 1st floor as shown in Fig. 2. On-line payment is highly appreciated even on-site and LOC will provide PC to do it. Limited number of cash handling will be made for lunch box, conference dinner.

[7] Coffee, Drink and snack locations

Coffee, water bottle, snacks are available at 2nd, 4th and 5th floors. Sandwich and drink will be provided during WIPP symposium while participants may bring one's own lunch box.

[8] Conference Dinner

Conference dinner will be held in Japanese style IZAKAYA, Shiroya(しろ屋) and Shomon(笑門) near Hakata Station from 20:00. Participants are encouraged to take your own way to this place.



Within just one minute walk from the Chikushi-guchi, Hakata Station

Hakata Station Chikushi-guchi

(1) Shiroya Hakata Station

(2) Shomon Hakata Station

[9] Scientific Program

9.1 Scientific Program

9th Asia-Pacific conference on Plasma Physics will cover following sub-disciplines of plasma physics.

- | | |
|--|------------------------------|
| 1. CD : Cross-disciplinary (Focused Topics related turbulence and structure formation) | :PC chair ;Patrick Diamond |
| 2. F : Fundamental disciplines in plasma physics | :PC chair ; Fulvio Zonca |
| 3. B1 : Plasma Simulation, Diagnostics and Data Science | :PC chair ; T-H Watanabe |
| 4. B2 : Quantum/Dusty plasma, Plasma Source, Basic Experiments, A&M | :PC chair ; Yan Feng |
| 5. A1 : Plasma Materials and Processing | :PC chair ; Se Young Moon |
| 6. A2 : Plasma Life Science | :PC chair ; Masafumi Jinno |
| 7. L1 : ICF, HEDS, Laboratory Astro Physics | :PC chair ; Yasuhiko Sentoku |
| 8. L2 : LWFA/PWFA, Photon beam Science | :PC chair ; Min Chen |
| 9. SG : Space plasma & Geomagnetism | : PC chair ;Yoshiharu Omura |
| 10. SA : Solar &Astro plasma | : PC chair ;Peng-Fei Chen |
| 11. MF1 : Magnetic Fusion plasma (Core) | : PC chair ;Zheng-Xiong Wang |
| 12. MF2 : Magnetic Fusion plasma (Edge) | : PC chair ; Young-chul Ghim |

CD(Cross-Disciplinary) covers cross-disciplinary focused topics related to turbulence and structure formation

F(Fundamental disciplines in plasma physics) covers 1. Mathematical plasma physics, 2. MHD and Reconnection, 3. Kinetic MHD, 4. Plasma turbulence, 5. Gyro kinetics, 6. Collisional transport, 7. Turbulent transport, 8. Phase space dynamics, 9. Relativistic plasma physic

B1 (Basic 1) covers 1. Plasma simulation and computational method, 2. Plasma diagnostics and techniques, 3. Data Science

B2 (Basic 2) covers 1. Quantum and Dusty plasmas, 2. Plasma Sources, 3. Basic experiments and emerging topics, 4. Atomic& Molecular physics in plasma,

A1 (Applied 1) covers Plasma Materials and Processing

A2 (Applied 2) covers Plasma Life Science

L1 (Laser 1) covers Inertial Confinement Fusion, High Energy Density Science, and Laboratory Astro Physics

L2 (Laser 2) covers Laser and plasma wakefield acceleration, and Photon beam Science

SG(Space&Geomagnetism) covers space and geomagnetic plasma physics program covers

SA(Solar/Astro) covers solar plasma physics and astro plasma physics

MF1 (Magnetic fusion (Core)) covers magnetic confinement fusion plasma (core)

MF2 (Magnetic fusion (Edge)) covers magnetic confinement fusion plasma, edge, SOL, divertor and PMI)

9.2 Satellite Meeting : symposium, mini-workshops

There are several symposiums, mini-workshops, special sessions.

1. Akira Hasegawa memorial symposium

Our distinguished professor Akira Hasegawa (I-HAC member) passed on June 22. Zensho Yoshida (U. Tokyo) and Liu Chen (UCI, JZU, Acad. Sinica) are organizing memorial symposium on his scientific achievements such as Kinetic Alfven wave, Hasegawa-Mima equation, Dipole plasma confinement, Self-organization and formation of thermal barrier (Hasegawa-Wakatani equation), Optical Soliton.

2. Special Session in honor of 2024 S. Chandrasekhar Prize Laureate Pisin Chen

In Laser plasma sessions (L2), special session on Prof. Pisin Chen's scientific achievements on Plasma Wakefield Acceleration and Laboratory Astro Plasma Physics will be organized by Pisin Chen.

3. K. Mima Memorial Session

Memorial session (L1-4) will honor the scientific achievements and legacy of Prof. Kunioki Mima, who was a great academic in the field of theoretical and computational plasma physics. Organizers are Y. Kishimoto and N. Iwata.

4. Mini Workshop on Woman in Plasma Physics

Mini Workshop for Women in Plasma Physics (WIPP) started from AAPS-DPP2023 and continued to AAPS-DPP2024. 2025 WIPP WS will be held 13:05-14:05 on Monday 22th and Tuesday 23th of September 2025. Organizers are Anisa Qamar and A.B. Murphy.

5. Mini Symposium: Advancements in Hydrogen-Boron Fusion

This symposium covers the landscape of hydrogen-boron research with both magnetic confinement and laser-driven approaches. Organizers are Dimitri Batani and Martin Peng.

6. EPS-AAPS joint session

L1-5 session is EPS-AAPS session organized by Dimitri Batani to strengthen this cooperation.

Plenary talks: Morning sessions will be plenary talks with 30 minutes long including Q&A. Plenary speakers should gave short general introduction in the beginning and should not use Jargon in your sub-field since the audience is not expert in your sub-field.

[Plenary Session]

Opening

Sep. 22 8:30-10:10 [203+204]

Chair: Kazunori Koga



LOC chair's Opening remark

(10min)

Masaharu Shiratani
Kyushu University



Chandrasekhar prize ceremony

(15min)

Lou Chuang Lee
Academia Sinica



DPP Chair's address

(5min)

Rajdeep Singh Rawat
Nanyang Technological
University



Kunioki Mima memorial

(5min)

Yasuaki Kishimoto
Kyoto University



DPP CEO remark

(5min)

Mitsuru Kikuchi
AAPPS-DPP



Akira Hasegawa memorial

(5min)

Liu Chen
Zhejiang University



U30 award ceremony

(15min)

Sudeep Bhattacharjee
Indian Institute of Technology
Kanpur



Invitation to AAPPS-DPP2026

(10min)

Siwoo Yoon
KFE



U40 award ceremony

(15min)

Hyyong Suk
GIST



IUPAP Early Career Award ceremony

(5min)

Wonho Choe
IUPAP C16 Member



PIP prize ceremony

(15min)

Se Youn Moon
Jeonbuk National University

Plenary1 Sep. 22 11:00-13:00 [203+204]

Chair: Lou Chuang Lee, Se Youn Moon, Zeng-Xiong Wang, Peter Yoon



[PL-1](#) (30min)

Cross Scale Wave-Particle Interaction in Geospace

Qiu-Gang Zong(Chandrasekhar Lecture)

Peking University/ Macao University of Science and Technology



[PL-2](#)(30min)

Progress of High Power Gyration for Fusion Devices

Keishi Sakamoto(Plasma Innovation Lecture)

Kyoto Fusioneering,Ltd.



[PL-3](#)(30min)

Latest performance achievements of the Wendelstein 7-X Stellarator

Felix Warmer(MF1)

Max Planck Institute for Plasmaphysics



[PL-4](#)(30min)

Interplanetary Energetic Electrons

Linghua Wang(SG) Peking University

Plenary2 Sep. 23 8:30-10:30 [203+204]

Chairs: Ryoji Matsumoto, Patrick Diamond, Yu Lin, Yasuhiro Kuramitsu



[PL-5](#) (30min)

X-Ray Imaging and Spectroscopy Mission (XRISM): High-Resolution Spectroscopy of Astrophysical Plasmas

Hiroya Yamaguchi(SA)

JAXA/ISAS



[PL-6](#) (30min)

Theory of Wave Turbulence

Vladimir Rosenhaus(CD)

CUNY Graduate Center



[PL-7](#) (30min)(30min)

Compressible effects in solar wind turbulence

Anna Tenerani(F)

The University of Texas at Austin



[PL-8](#) (30min)(30min)

Laboratory astroparticle physics: from the stability of laboratory blazar's jets to heavy axion searches

Gianluca Gregori(L2)

University of Oxford

Plenary3

Sep. 23 11:00-13:00 [203+204]

Chairs: Dimitri Batani, Tokihiko Tokuzawa, Won-Ha Ko, Hiromasa Tanaka



[PL-9](#) (30min)

Understanding warm dense matter: from theory to experiment

Tobias Dornheim(L1)

Helmholtz-Zentrum Dresden-Rossendorf (HZDR)



[PL-10](#) (30min)

Progress on Burning Plasma Diagnostic Design for CFETR

Haiqing Liu(B1)

Institute of Plasma Physics, Chinese Academy of Sciences



[PL-11](#) (30min)

Magnetic Reconnection for Fusion Plasma Ignition and Current Drive

Yasushi Ono(MF1)

University of Tokyo



[PL-12](#) (30min)

Fabrication of TENG inspired Ag-Cu coated banana fabric textile for wearable and sustainable Bio Sensor adopting plasma sputtering technology

Bornali Sarma(A2)

CSIR-National Institute of Science Communication and Policy Research

Plenary4

Sep. 24 8:30-10:30 [203+204]

Chairs: Chen-Kang Huang, Taik Soo Hahm, Pisin Chen, Fulvio Zonca



[PL-13](#) (30min)

From supercritical transition of dusty plasmas to diffusion mechanism of 2D fluids

Yan Feng(B2) Soochow University



[PL-14](#) (30min)

Studies of cross phase in turbulent Reynolds stress and particle flux in the edge of tokamak plasma

Ting Long(CD)

Southwestern Institute of Physics



[PL-15](#) (30min)
 Plasma Wakefield Accelerators in Application: the Road to Discovery Science
 James Rosenzweig(L2)
 UCLA Dept. of Physics and Astronomy



[PL-16](#) (30min)
 Kolmogorov-like turbulence phenomenology in magnetohydrodynamics
 Mahendra Verma(F)
 Indian Institute of Technology Kanpur

Plenary5 Sep. 24 11:00-13:00 [203+204]
 Chairs: Xiaozhou Zhao, Seiji Zenitani, Kai Zhao, Thomas Bosman



[PL-17](#) (30min)
 Data-driven Modelling of Solar Eruptive Flares
 Mark Cheung(SA)
 CSIRO



[PL-18](#) (30min)
 Riemann solvers for MHD: 20 years of the HLLD solver and beyond
 Takahiro Miyoshi(B1)
 Hiroshima University



[PL-19](#) (30min)
 Numerical Study of RF Plasmas using PIC/MCC Simulations with External Circuitry
 Ya Zhang(A1)
 Wuhan University of Technology



[PL-20](#) (30min)
 Review of prompt redeposition in fusion devices with focus on tungsten-based plasma-facing components
 Andreas Kirschner(MF2)
 Forschungszentrum Jülich GmbH

Plenary6

Sep. 25 8:30-10:30 [203+204]

Chairs: Tomoyuki Johzaki, Feng Chen, Liu Chen, Sanat Kumar Tiwari



[PL-21](#) (30min)

Exploring new physics regimes with ultra-high-intensity laser-plasma interactions
Alexey Arefiev(L1)
UC San Diego



[PL-22](#) (30min)

The solar white-light flares observed by ASO-S and CHASE
Ying Li(SA)
Purple Mountain Observatory



[PL-23](#) (30min)

Recent Progress in our Understanding of Electromagnetic Turbulence in a Conceptual Spherical Tokamak FPP (STEP)
Colin M Roach(F)
UKAEA



[PL-24](#) (30min)

Magnetization of electrons and ions and their influence on dusty plasmas
Edward Thomas(B2)
Auburn University

Plenary7

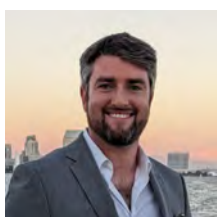
Sep. 25 11:00-13:00 [203+204]

Chairs: Quan-Zhi Zhang, Mitsuru Honda, Hirofumi Kurita, Tohru Hada



[PL-25](#) (30min)

Electrons, kinetics, and entropy: unlocking the full potential of plasma-based gas conversion
Ramses Snoeckx(A1)
Empa, Swiss Federal Laboratories for Materials Science and Technology



[PL-26](#) (30min)

Pulse Design and Digital Twin Capabilities of the FUSE Integrated-Modeling Framework
Brendan Lyons(B1)
General Atomics



[PL-27](#) (30min)

Application of Non-Thermal Plasma in Food Treatment and Biological Material Conditioning

Joanna Pawlat(A2)

Lublin University of Technology



[PL-28](#) (30min)

Breather Structures and Peregrine Solitons in a Polarized Space Dusty Plasma

Nareshpal Singh Saini(SG)

Guru Nanak Dev University Amritsar

Plenary8

Sep. 26 8:30-10:30 [203+204]

Chairs: Xiaoxi Zhang, Yoko Yamanishi, Xavier Garbet, Liang Xu



[PL-29](#) (30min)

Density Limit Disruption Induced by Core-localized Alfvénic Ion Temperature Gradient Instabilities on HL-2A

Wei Chen(MF1)

SWIP



[PL-30](#) (30min)

Synergistic Integration of Biophysics and Plasma Physics: Advancing Biomolecular Applications with Cold Plasma Technology

Kamatchi Sankaranarayanan(A2)

DST-Institute of Advanced Study in Science and Technology Guwahati



[PL-31](#) (30min)

Relaxation and equilibration of baroclinic flows

Julian Mak(CD)

Hong Kong University of Science and Technology



[PL-32](#) (30min)

Charging and Transport of Dust in Plasma: beyond the basics

Lorin Matthews(B2)

Baylor University

Plenary9 Sep. 26 11:00-13:00 [203+204]

Chairs: Susumu Toko, Yoshiharu Omura, Jack Lovell, Sylvie Jacquemot



[PL-33](#) (30min)

Towards control of plasma chemistry in low-temperature plasmas

Erik Wagenaars(A1)

York Plasma Institute, University of York



[PL-34](#) (30min)

The Continuing Journey of REPTiles (Relativistic Electron and Proton Telescope Integrated Little Experiments): Achievements and Future Impact

Xinlin Li(SG)

University of Colorado Boulder



PL-35 (30min)

DTT: a facility to investigate heat exhaust solutions for fusion power plants

Gianmario Polli (MF2) DTT Project



[PL-36](#) (30min)

Mesoscale laser plasma physics explored by kJ petawatt lasers

Natsumi Iwata(L1)

Institute of Laser Engineering, The University of Osaka

Plenary10 Sep. 26 16:30-18:30 [203+204]

Chairs: Young-chul Ghim, Hyyong Suk, Rajdeep Rawat, Mitsuru Kikuchi



[PL-37](#) (30min)

Finite gyro-radius and mean-free-path layers on tokamak walls

Felix Parra(MF2)

Princeton Plasma Physics Laboratory



[PL-38](#) (30min)

Laser wakefield based axion-like particle generation and detection

Min Chen(L2)

Shanghai Jiao Tong university



PL-39(30min)
DPP and Elsevier poster Prizes
Linghua Wang&Peter Yoon
Peking University&University of Maryland



PL-40(30min)
Closing
Wonho Choe
KAIST

[Topical Session]

Cross Disciplinary Session

CD (Cross Disciplinary) Program Committee: PH Diamond (Chair, US), X. Garbet (Vice-Chair,SG), TS Hahm (Vice-Chair, KR), Yusuke Kosuga (JP), Ting Long (CN), Gyungjin Choi (KR), Wei Xin Guo (CN), Steve Tobias (UK), Misha Medvedev (US), Nami Li (US),Prasad Perlekar (IN), Ozgur Gurcan (FR)

CD-1 ELMs, L-H, etc. [Chair: TS Hahm] 14:00-16:10, Sep. 22 [401]

CD-1-TP 40min	Sang-Jin Park(Seoul National University) Simulations for understanding Alfven Eigenmode Mitigation physics in KSTAR Experiment
CD-1-I1 20min	Chuanxu Zhao(International Joint Research Laboratory of Magnetic Confinement Fusion and Plasma Physics (IFPP), Huazhong University of Science and Technology) Investigation of the evolution and interaction of e-ITB and core MHD in J-TEXT
CD-1-I2 20min	Yi Zhang(Southwestern Institute of Physics) Impact of resonant magnetic perturbation on L-H transition dynamics in HL-2A and HL-3 tokamaks
CD-1-I3 20min	Wei Wang(Southwestern Institute of Physics) Dynamics of transport barriers formation in HL-3 experiment and gyro-kinetic simulations
CD-1-I4 20min	Garbet Xavier(NTU/CEA) Closure models for simulations of drift wave turbulence
CD-1-TP 40min	Sang-Jin Park(Seoul National University) Simulations for understanding Alfven Eigenmode Mitigation physics in KSTAR Experiment

CD-2 Impurities, Density Limit [Chair: X. Garbet] 16:30-18:40, Sep. 22 [401]

CD-2-TP 40min	Weixin Guo(Huazhong University of Science and Technology) Comprehensive study of the transport and kinetic source of helium ash from alpha particles
CD-2-I1 20min	Patrick Diamond(UC San Diego) Radiative Condensation ,Turbulence and the Power Scaling of the Density Limit
CD-2-I2 20min	Ting Wu(Southwestern Institute of Physics) Impact of edge turbulence spreading on broadening the heat flux width in plasma approaching the density limit
CD-2-I3 20min	Bin Ahn(Korea Advanced Institute of Science and Technology) Cross-field diffusion of magnetized low temperature plasmas near separatrix: A Particle-In-Cell simulation study
CD-2-I4 20min	Shanni Huang(Huazhong University of Science and Technology) Theory of impurity effects on electromagnetic instabilities and the associative transport in the tokamak pedestal

CD-2-O1 15min	Chuang Ren(University of Rochester) Ion-electron temperature equilibration in magnetized collisionless shocks
----------------------------------	--

CD-3 Magnetic islands, EP MHD [Chair: Ting Wu] 14:00-16:10, Sep. 23 [401]

CD-3-TP 40min	Akihiro Ishizawa(Graduate School of Energy Science, Kyoto University) Nonlinear interactions between toroidal Alfvén eigenmode and microturbulence
CD-3-I1 20min	Lizhe Guo(Institute of Physics, Chinese Academy of Sciences) Impacts of self-organized zonal fields on BAE nonlinear dynamics in phase space
CD-3-I2 20min	Min Jiang(Southwestern Institute of Physics) Interaction among magnetic island, flow and turbulence and its impact in plasma confinement
CD-3-I3 20min	Gyungjin Choi(Korea Advanced Institute of Science and Technology) Self-generated oscillations in a magnetic island
CD-3-I4 20min	Min Ki Jung(Seoul National University) Multi-scale interactions in KSTAR disruptive plasmas with forced magnetic islands: A global gyrokinetic analysis
CD-3-O1 15min	Chang Kai Chai(Nanyang Technological University) Transition from electrostatic to electromagnetic instabilities in magnetised plasmas

CD-4 Turbulence and Structures [Chair: Min Jiang] 16:30-18:40, Sep. 23 [401]

CD-4-TP 40min	Eisung Yoon(Ulsan National Institute of Science and Technology) Mode Decomposition Methods for Analyzing Phase Mixing and ITG Dynamics
CD-4-I1 20min	Michael Leconte(Korea Institute of Fusion Energy (KFE)) Interplay between nonlinear transport crossphase and zonal modes in two-field ITG turbulence
CD-4-I2 20min	Makoto Sasaki(Nihon University) Trapping and de-trapping bifurcation of drift wave turbulence by zonal flows based on a reduced fluid model
CD-4-I3 20min	Minjun Choi(Korea Institute of Fusion Energy) Mesoscopic transport in KSTAR, HL-3, and DIII-D tokamaks
CD-4-O1 15min	Lei Yao(Nagoya University) Turbulence localization in zonal flows in Hasegawa-Wakatani model

CD-5 Turbulence Spreading [Chair: P. Diamond] 14:00-16:10, Sep. 24 [401]

CD-5-TP 40min	Naoki Kenmochi(National Institute for Fusion Science) Experimental Identification of Local and Nonlocal Turbulence in Magnetically Confined Plasma
CD-5-I1 20min	Taik Soo Hahm(Seoul national University) Application of Momentum Theorem to magnetized Plasma
CD-5-I2 20min	Katsumi Ida(National Institute for Fusion Science) Non-local transport nature revealed by experiments in toroidal plasmas
CD-5-I3 20min	Yusuke Kosuga(Kyushu Univ.) Avalanches in magnetic fusion and their efficacy for the heat load problem
CD-5-I4 20min	Hijiri Sugiyama(Department of Physics, Nagoya University) Avalanche-like heat transport events related to microscopic turbulent vortex dynamics

CD-6 Helical and Twisted [Chair: K. Itoh] 16:30-18:40, Sep. 24 [401]

CD-6-TP 40min	Zhihong Lin(University of California, Irvine) Geometry effects on zonal flows and radial electric fields in optimized stellarators
CD-6-I1 20min	Won-Ha Ko(Korea Institute of Fusion Energy) Non-axisymmetric magnetic fields effect on rotation and turbulence in KSTAR
CD-6-I2 20min	Lai Wei(Dalian University of Technology) Effects of RMP on edge-core turbulence spreading and coupling in a tokamak plasma
CD-6-I3 20min	Yao Zhou(Shanghai Jiao Tong University) Benign saturation of ideal ballooning instability in a high-performance stellarator
CD-6-O1 15min	Yvonne Ban(Nanyang Technological University) Effect of helical perturbations on magnetic braking and neoclassical transport in tokamak plasmas

CD-7 MHD turbulence [Chair: WH Ko] 14:00-16:10, Sep. 25 [401]

CD-7-TP 40min	Rahul Pandit(Department of Physics, Indian Institute of Science) Large-scale multifractality and non-self-similar energy decay in one-dimensional (1D) Burgers and three-dimensional (3D) Navier-Stokes turbulence
CD-7-I2 20min	James Beattie(Princeton University and the Canadian Institute of Theoretical Astrophysics) Fundamental Results from the World's Largest Simulation of Compressible MHD Turbulence: Applications to Astrophysical and Space Plasmas
CD-7-I3 20min	Ameir Shaa Bin Akber Ali(NTU) Fast Hybrid Neural Interpolation of Nonlinear Dynamics
CD-7-I4 20min	David Garrido González(Aix-Marseille University) Modeling Nonlinear and Chaotic Dynamics with Interpretable Data-Driven Reduced Order Models

CD-8 Turbulence and Flows [Chair: WX Guo] 16:30-18:40, Sep. 25 [401]

CD-8-I1 20min	Kimitaka Itoh(Chubu University) On subcritical excitations of plasma turbulence
CD-8-I2 20min	Koki Ryono(Kyoto University) Mixing in a two-dimensional fluid and the curvature of the flow domain: how to drive the vorticity field evolve towards the statistical equilibrium
CD-8-I3 20min	Haomin Sun(Ecole Polytechnique Federale de Lausanne (EPFL), Swiss Plasma Center (SPC)) Reducing turbulent transport in tokamaks by combining intrinsic rotation and the low momentum diffusivity regime
CD-8-I4 20min	Justin Ball(Swiss Plasma Center, EPFL) Intrinsic momentum and current drive by almost-rational surfaces in tokamaks
CD-8-O1 15min	Huang Jingcheng(NTU) Extracting stochastic model for predator-prey dynamic of turbulence and zonal flow with limited data

CD-9 EP+AE+Turbulence [Chair: Z. Lin] 14:00-16:10, Sep. 26 [401]

CD-9-TP 40min	Alessandro Di Siena(Max Planck Institute for Plasma Physics, Garching) The Role of Alpha Particles in Turbulence Suppression and Confinement Enhancement in ITER and SPARC
CD-9-I1 20min	Kyle Callahan(Oak Ridge Institute for Science and Education) Investigation of Alfvén wave and Ion Temperature Gradient turbulence interaction under modified fast ion scattering conditions in DIII-D
CD-9-I3 20min	Younghoon Lee(Korea Institute of Fusion Energy) Impact of finite-orbit-width (FOW) effects on EGAM

Fundamental Sessions

F (Fundamental disciplines in plasma physics) Program Committee: Fulvio Zonca (Chair, IT/CN), Amita Das (Vice-Chair, IN), Zhiyong Qiu (Vice-Chair, CN), Yu Lin (Vice-Chair, US), Zensho Yoshida (JP), Sudeep Bhattacharjee (IN), Tara Ahmadi (JP), Matthew Hole (AU), Daniela Grasso (IT), Hogun Jhang (KR), Lu Wang (CN), Makoto Hirota (JP), Ruirui Ma (CN), Julia Stawarz (UK)

F-1 Reduced models and low-temperature plasmas [Chair: Tara Ahmadi] 12:00-14:05, Sep. 21 [414]

F-1-I1 20min	Giuseppina Nigro(Department of Physics at the University of Rome Tor Vergata) Convective Heat Transfer in Magnetic Field Reversals: Insights from a Low-Dimensional Dynamo Model
F-1-O1 15min	Syed Talha Rizwan(Government College University) EMIC Waves by Fitting the Observed Plasma Parameters using Cluster Observations
F-1-O4 15min	Hafiz Zeeshan Iqbal(Forman Christian College University) Mode-Locking, Single- and Double-Well Chaos in Periodically Forced Quantum Degenerate Plasmas: Ravelling Unexplored Regimes of the Burgers Paradigm
F-1-O6 15min	Lucky Saikia(Centre of Plasma Physics- Institute for Plasma Research) Discharge-Driven Neutron Generation: Exploration and Application

F-2 Turbulence and transport phenomena I [Chair: Tara Ahmadi] 14:05-16:10, Sep. 21 [414]

F-2-I1 20min	Ksenia Aleynikova(IPP Max Planck, Greifswald) Stability and transport in high-beta stellarators: the role of kinetic ballooning modes
F-2-O1 15min	Ningfei Chen(Max-Planck Institute for Plasma Physics) Drift wave soliton formation via zonal flow generation and implication on staircase formation
F-2-O2 15min	Koki Yoshikawa(Department of Physics, Nagoya University) Spatial structure of ETG turbulence-driven effective diffusion and its relations with the trapped electron mode instability
F-2-O3 15min	Masanori Nunami(National Institute for Fusion Science) A comprehensive map of micro-instabilities in multi-species plasmas
F-2-O4 15min	Aleksandra Dudkovskaia(Tokamak Energy Ltd) Novel approach to gyrokinetic-Maxwell eigenvalue problem
F-2-O5 15min	Xiaoyi Yang(Harbin Institute of Technology) Study on the coherent structure of drift wave turbulence by eigenmode method
F-2-O6 15min	Seiyo Kobayashi(University of Tokyo) 2D Thomson scattering measurement of electron temperature and density in merging spherical tokamak plasmas

F-3 Alfvén waves and turbulence [Chair: Yu Lin] 14:00-16:10, Sep. 22 [414]

F-3-I1 20min	Walter Gekelman(University of California, Los Angeles) Experiments on Shear Alfvén waves with large transverse wavenumbers
F-3-I2 20min	Jian Zhang(Tongji University) The wave characteristics of kinetic-scale slow solar wind and their impact on the turbulence spectra: PSP observations
F-3-I3 20min	Jiansen He(Peking University) Kinetic Alfvén Waves in the Primary Solar Wind: Shaping Our Understanding in the PSP and Solar Orbiter Era
F-3-I4 20min	Ling Chen(Purple Mountain Observatory, Chinese Academy of Sciences) Kinetic Alfvén Wave (KAW) in nonuniform magnetic plasma atmospheres and its applications
F-3-O1 15min	Kexun Shen(Institute for Fusion Theory and Simulation, School of Physics, Zhejiang University) Stationary Power-law Solutions of Weak Kinetic-Alfvénic Turbulence
F-3-O2 15min	Keizo Fujimoto(Beihang University) Waves and Turbulence in the Electron Diffusion Region to Drive Magnetic Reconnection

F-4 Experimental and numerical verifications [Chair: Walter Gekelman] 16:30-18:40, Sep. 22 [414]

F-4-I1 20min	Fabien Widmer(Max Planck Institute for Plasma Physics) First-Principle Gyrokinetic Simulations of Turbulence-Driven Magnetic Islands in Tokamaks
F-4-I2 20min	Alessandro Fassina(ENEA, Centro Ricerche Frascati, Via Enrico Fermi) PROTO-SPHERA, a MHD configuration formed and sustained by magnetic reconnections

F-4-I3 20min	Muni Zhou(Dartmouth College) Magnetogenesis in collisionless plasma
F-4-I4 20min	Chiara Marchetto(ISC-CNR and Politecnico di Torino) Magnetic reconnection in the presence of magnetic chaos: effects on secondary instability via 3D simulations
F-4-O1 15min	Cosmas Heiss(EPFL) Design of an advanced stabilizing shape controller on TCV using a rapid free-boundary simulator
F-4-O2 15min	Ritoku Horiuchi(National Institute for Fusion Science) Ion FLR effect in ion heating during the merging of two spherical-tokamak-type plasmoids
F-4-O3 15min	Hannah Bellenbaum(Helmholtz-Zentrum Dresden-Rossendorf) Estimating ionization states and continuum lowering from ab initio path integral Monte Carlo simulations for warm dense hydrogen

F-5 Turbulence and transport phenomena II [Chair: Ksenia Aleynikova] 14:00-16:10, Sep. 23 [414]

F-5-I1 20min	Ozgur Gurcan(CNRS, Laboratoire de Physique des Plasmas, Ecole Polytechnique) Phase transition from hydrodynamic turbulence to zonal flows and back
F-5-I2 20min	Francesco Pucci(National Research Council, Institute for Plasma Science and Technology) A wavelet-based model of magnetic turbulence in plasmas: features and applications
F-5-I4 20min	Adriana Settino(Space Research Institute (IWF), Austrian Academy of Sciences) Energy conversion pathways driven by Kelvin-Helmholtz instability
F-5-I5 20min	Volodymyr Mykhaylenko(Pusan National University) The nonmodal kinetic theory of the macroscale convective flows of magnetized plasma, generated by the inhomogeneous microturbulence
F-5-O1 15min	Hyun Zun Lee(Division of Semiconductor Engineering, Myongji University) Fitting Formulas for Perpendicular Closure Coefficients in High-Collisionality Deuterium–Carbon Plasmas
F-5-O2 15min	Navaira Izhar(Government College University, Lahore) Nonlinear Magnetosonic Waves with Modified Temperatures Based on Non-Extensive q-Distribution and Generalized (r,q) Distribution.

F-6 Theory and applications [Chair: Sudeep Bhattacharjee] 16:30-18:40, Sep. 23 [414]

F-6-I1 20min	Haotian Chen(Southwestern Institute of Physics) Validity of Gyrokinetic Theory in magnetized plasmas
F-6-I2 20min	Jungpyo Lee(Hanyang University) Impact of transport ordering breakdown on plasma currents and transports in a tokamak
F-6-I4 20min	Shinichiro Toda(National Institute for Fusion Science) Modeling of Turbulent Transport due to Dissipative Trapped Electron Modes in Tokamak Plasmas
F-6-I5 20min	Arash Tavassoli(Mathematical Sciences Institute, Australian National University) Applying ideal Ohm's law to relaxed MHD equilibrium in Hahn–Kulsrud–Taylor slab geometry
F-6-O1 15min	Philip Morrison(University of Texas at Austin) The metriplectic 4-bracket and the unified thermodynamic (UT) algorithm: applications and computations

F-7 Structure formation and nonlinear waves [Chair: Philip Morrison] 14:00-16:10, Sep. 24 [414]

F-7-I1 20min	Abhay Ram(Massachusetts Institute of Technology) Quantum computing approach to wave propagation in plasmas
F-7-I2 20min	Toseo Moritaka(National Institute for Fusion Science) Plasma structure formation in relativistic and non-relativistic beam interactions with magnetized plasma
F-7-I3 20min	Andreas Bierwage(QST) Long-lived density spikes in laser-driven Coulomb explosion folds
F-7-I4 20min	Chenxu Wang(National Institute for Fusion Science) Numerical Investigations on Propagation Characteristics of Millimeter-wave Vortex in Magnetized Plasma
F-7-I5 20min	Raffael Düll(M2P2, Aix-Marseille Université, CNRS) Electromagnetic turbulence simulations in edge plasma with the SOLEDGE3X code
F-7-O2 15min	Jawon Jo(Division of Semiconductor Engineering, Myongji University) MD simulations for oscillatory behavior of non-Maxwellian fluid moments in a magnetized plasma

F-8 Global simulations and kinetic modeling [Chair: Fulvio Zonca] 16:30-18:40, Sep. 24 [414]

F-8-I1 20min	Farah Atour(Max Planck Institute for Plasma Physics) Nonlinear dynamics of toroidal Alfvén eigenmodes driven by trapped energetic particles
F-8-I2 20min	Panith Adulsiriswad(National Institute for Quantum Science and Technology) Effects of Fusion-born Alpha Particles on Helical Core in ITER Hybrid Scenario
F-8-I3 20min	Zhiwen Cheng(Zhejiang University & National Institute for Fusion Science) Nonlinear saturation of toroidal Alfvén eigenmode via ion induced scattering in nonuniform plasmas
F-8-I4 20min	Wenjie Sun(Institute of Physics, Chinese Academy of Sciences) Global gyrokinetic particle simulation of kinetic ballooning modes with energetic ions
F-8-I5 20min	Jian Bao(Institute of Physics, Chinese Academy of Sciences) Global simulation of drift-Alfvén wave instability based on kinetic-MHD hybrid model in general geometry
F-8-O1 15min	Shrish Raj(Nanyang Technological University Singapore) Electromagnetic simulations of Toroidal Alfvén Eigenmode (TAE) using GYSELA
F-8-O2 15min	Shabbir Ahmad Khan(National Centre for Physics, QAU Campus) Kinetic modeling of vortex-type plasma modes carrying orbital angular momentum

F-10 Numerical simulations and modeling I [Chair: Ningfei Chen] 16:30-18:40, Sep. 25 [414]

F-10-I1 20min	Tara Ahmadi(University of Tokyo) Numerical study on Ion and Electron Dynamics and the Role of Electrostatic Potential on Particle Heating in Merging startup in TS-6 experiment
F-10-I2 20min	Tianchao Xu(Tsinghua University) Experimental Investigation of Inward Particle Transport Driven by Vorticity Flux in the PPT Device
F-10-I3 20min	Animesh Kuley(Indian Institute of Science Bangalore) Neural network-assisted electrostatic global gyrokinetic toroidal code using cylindrical coordinates
F-10-I4 20min	Jian Chen(Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-sen University) Observation of Three-dimensional Helical-rotating Plasma Structures in Beam-generated Partially Magnetized Plasmas
F-10-I5 20min	Chizhou Wang(EPFL) Prediction of runaway electron avalanche in ITER mitigated disruptions via 3D MHD modelling
F-10-O1 15min	Qihang Li(Peking University Physics College) Avalanche effect correction of runaway electrons
F-10-O2 15min	Yutaka Nakamura(The University of Osaka) Verification of fast electrons convergence effect by controlling the plasma density distribution

F-11 Numerical simulations and modeling II [Chair: Chiara Marchetto] 14:00-16:10, Sep. 26 [414]

F-11-I1 20min	Zhenyu Wang(Institute of Plasma Physics, Chinese Academy of Sciences) Full-f 6D particle-in-cell simulations of quasi-kinetic equilibrium and drift-wave instability under spatial inhomogeneity
F-11-I2 20min	Matthew Thomas(Australian National University) Shear Alfvén Waves in Chaotic Magnetic Fields.
F-11-I3 20min	Hengqian Liu(University of Science and Technology of China) Optimizing omnigenity like quasisymmetry for stellarators
F-11-O1 15min	Kooper De Lacy(The University of Western Australia) Convergence Rate of Multi-region Relaxed MHD Equilibria to Ideal MHD Equilibria
F-11-O2 15min	Masaru Furukawa(Tottori University) Helically symmetric equilibria of incompressible MHD in cylindrical geometry

Basic-1 Sessions

B1 (Plasma Simulation, Diagnostics and Data Science) Program Committee: T.-H. Watanabe (Chair, JP), Gunsu Yun (Vice-Chair, KR), Emi Narita (JP), T. Tokuzawa (JP), Weixing Wang (US), Seiji Zenitani (AT), Yong Xiao (CN), Yunfeng Liang (DE), Zhihong Lin (US), Lorenzo Zanisi (UK), Sandor Zoletnik (HU), R. Michael Churchill (US), Ling Zhang (CN)

B1-1 Diagnostics 1 [Chair: Haiqing Liu] 14:00-16:10, Sep. 22 [413]

B1-1-I1 20min	Naoki Tamura(Max-Planck Institute for Plasma Physics) Plasma Diagnostics and Control with Tracer Encapsulated Solid Pellet (TESPEL) in Magnetically Confined High-Temperature Plasmas
B1-1-I2 20min	Jia Han(University of California Los Angeles) X Ray Diagnostics for high energy electrons using Tungsten Pellets
B1-1-O1 15min	Jiankun Hua(International Joint Research Laboratory of Magnetic Confinement Fusion and Plasma Physics (IFPP), State Key Laboratory of Advanced Electromagnetic Engineering and Technology, School of Electrical and Electronic Engineering, Huazhong University of Science and Technology) The distribution of the parallel electron-current at the boundary of plasma on J-TEXT
B1-1-O2 15min	Shengyu Wang(Dept. Complexity Science and Engineering, Grad. School of Frontier Sciences , The University of Tokyo) Investigation of Hard X-Ray emission in Lower Hybrid Wave Experiments on the TST-2 Spherical Tokamak
B1-1-O3 15min	Seongmin Choi(Korea Advanced Institute of Science and Technology) Development of a Virtual FVC System and Forward Model for Shattered Pellet Injection Tracking in KSTAR
B1-1-O4 15min	Ying Hao Matthew Liang(Agency for Science, Technology and Research (A*STAR)) Conceptual design of a Doppler Backscattering diagnostic for the EXL-50U spherical tokamak
B1-1-O5 15min	Valerian Hall-Chen(FEAT SRTT, A*STAR) DBS measurements of turbulence spectra in Bouncing Ball DIII-D plasmas

B1-2 Simulation 1 [Chair: Tomo-Hiko Watanabe] 14:00-16:10, Sep. 22 [404]

B1-2-I1 20min	Masahiko Sato(National Institute for Fusion Science) Recent progress and future prospects of kinetic-magnetohydrodynamic hybrid simulations using the MEGA code
B1-2-I2 20min	Shiyang Liu(Zhejiang University) Development of the Gyrokinetic-MHD Hybrid Code cuGMEC and Its Nonlinear Simulations of Alpha Particle-driven Alfvén Eigenmodes in ITER
B1-2-I3 20min	Wei Zhang(Institute for Fusion Theory and Simulation, School of Physics, Zhejiang University) Strong toroidal electric field generation during sawtooth crashes
B1-2-O1 15min	Jun Kuang(Anhui University) Development of a static tokamak equilibrium solver and design of cloverleaf configuration
B1-2-O2 15min	Sumin Yi(Korea Institute of Fusion Energy) Turbulence simulation with a bounce-averaged kinetic electron model in general tokamak geometry
B1-2-O3 15min	Rui Costa(UKAEA) Towards visualizing multi-dimensional gyrokinetic simulation data
B1-2-O4 15min	Maho Matsukura(The University of Tokyo) Effect of ion mass on ExB Electron Drift Instability by 2D PIC simulation

B1-3 Diagnostics 2 [Chair: Naoki Tamura] 16:30-18:40, Sep. 22 [413]

B1-3-I2 20min	Naohiro Kasuya(RIAM, Kyushu Univ.) Synthetic diagnostics for fluctuation detection in toroidal plasmas
B1-3-I3 20min	Siriyaporn Sangaroon(Maharakham University) Recent progress in advanced diagnostics for Thailand Tokamak-1
B1-3-O2 15min	Eiichiroou Kawamori(Institute of Space and Plasma Sciences, National Cheng Kung University) Experimental Plan for Measuring Fluctuations in the Velocity Distribution Function of Relativistic Electrons Using Electron Cyclotron Emission Spectra in the Spherical Tokamak FIRST

B1-4 Simulation 2 [Chair: Takahiro Miyoshi] 16:30-18:40, Sep. 22 [404]

B1-4-I1 20min	Jie Huang(Southwestern Institute of Physics) Three-dimensional nonlinear modeling of tokamak plasmas with applied Magnetic Perturbations
B1-4-I2 20min	Hideaki Miura(National Institute for Fusion Science) Characterization of Hall MHD turbulence as wave turbulence
B1-4-I3 20min	Takashi Shiroto(Department of Physics, Nagoya University) Energy-consistent discontinuous Galerkin schemes for the visco-resistive magnetohydrodynamic equations
B1-4-O1 15min	Takayuki Umeda(Hokkaido University) New integrator for relativistic equations of motion for charged particles

B1-4-O2 15min	Yong Cao(Harbin Institute of Technology, Shenzhen) A Generalized External Circuit Model for high order Electrostatic IFE-PIC codes
----------------------------------	---

B1-5 Diagnostics 3 [Chair: Mikiro Yoshinuma] 14:00-16:10, Sep. 23 [413]

B1-5-I1 20min	Kenichiro Terasaka(Sojo University) Advanced Laser-Doppler Spectroscopy with Twisted Wavefront for Plasma Flow Measurements
B1-5-I2 20min	Nikolay Britun(Center for Low-temperature Plasma Sciences, Nagoya University) Emission and absorption-based plasma diagnostic techniques for number density detection: Basics and Examples
B1-5-I3 20min	Kentaro Sakai(National Institute for Fusion Science) Collective Thomson scattering for non-equilibrium plasma measurements
B1-5-I4 20min	Tsuyohito Ito(The University of Tokyo) Electric field measurements by coherent anti-Stokes Raman scattering in visible region
B1-5-O2 15min	Yuan-Yao Chang(Institute of Space and Plasma Sciences, National Cheng Kung University) Development of calibration method of electron cyclotron emission radiometer for optically-thin magnetized plasma
B1-5-O3 15min	Deepika Behmani(Indian Institute of Technology Kanpur) Flow field dynamics in an atmospheric pressure plasma jet: A tale of turbulence and transition

B1-6 Simulation 3 [Chair: Zhihong Lin] 14:00-16:10, Sep. 23 [404]

B1-6-I1 20min	Hanyang Lyu(CAS Key Laboratory of Frontier Physics in Controlled Nuclear Fusion, School of Nuclear Science and Technology, University of Science and Technology of China) The current driven by the electromagnetic Ion Temperature Gradient turbulence
B1-6-I2 20min	Lei Qi(Korea Institute of Fusion Energy) Global gyrokinetic simulations of isotope effects for future tokamak plasma core and pedestal
B1-6-I3 20min	Keiji Fujita(Nagoya university) Extension and application of the gyrokinetic code GKV to space plasmas
B1-6-O2 15min	Shimin Yu(School of Electrical and Electronic Engineering, Huazhong University of Science and Technology & Chair of Applied Electrodynamics and Plasma Technology, Ruhr University Bochum) Impedance matching of pulse modulated capacitively coupled plasmas
B1-6-O3 15min	Atsushi Komuro(National Institute of Advanced Industrial Science and Technology) Parameter Reduction in Streamer Discharge Chemistry via Data-Driven Analysis
B1-6-O4 15min	Swati Baruah(Department of Physics, Rabindranath Tagore University) Lane Dynamics in 3D Pair Ion Plasmas: Influence of external forces
B1-6-O5 15min	Seiji Zenitani(Space Research Institute, Austrian Academy of Sciences) High-accuracy particle integrators for particle-in-cell (PIC) simulation

B1-7 Diagnostics 4 [Chair: Gunsu Yun] 16:30-18:40, Sep. 23 [413]

B1-7-I1 20min	Dong-Joon Lee(Korea Research Institute of Standards and Science) Electro-optic sensing technique for electric field diagnostics of plasma electrodes
B1-7-I2 20min	Swapnali Khamaru(Kyoto Institute of Technology) Computational and experimental analysis of H-atom-assisted non-thermal conversion of methane-hydrogen plasma to acetylene
B1-7-I3 20min	Kunihiro Kamataki(Kyushu University) Evaluation method of fine particle charge and measurement of spatial electric field in Ar plasma using optical tweezers method
B1-7-I4 20min	Mikiro Yoshinuma(National Institute for Fusion Science) Development of hyperspectral camera for auroral imaging using Galvanometer-mirror-scanning optics
B1-7-O1 15min	Xiangming Liu(Laser Fusion Research Center, China Academy of Engineering Physics) Backscatter diagnostics at the 100-kJ laser facility for laser-driven hohlraum applications
B1-7-O2 15min	Pradoong Suanpoot(Maejo University Phrae Campus) Electron Temperature Investigation in Ar/N ₂ Mixture Gas in a Non-Thermal Downstream Plasma Jet Using a Plasma Propagation Speed Model
B1-7-O3 15min	Tomoyuki Murakami(Seikei University) Complex network analysis in plasma chemistry

B1-8 Data Science 1 [Chair: Emi Narita] 14:00-16:10, Sep. 24 [413]

B1-8-I2 20min	Sven Wiesen(DIFFER - Dutch Institute for Fundamental Energy Research) Data-driven models for fusion plasma exhaust: AI methods gaining maturity
B1-8-I3 20min	Nitesh Bhatia(United Kingdom Atomic Energy Authority) Visualising Fusion: Connecting Data, Design, and Discovery
B1-8-I4 20min	Adriano Agnello(UK Science and Technology Facilities Council) AI and data solutions for experiment design and control
B1-8-I5 20min	Samuel Jackson(UKAEA) Towards Open Machine Learning Datasets with AI Driven Annotation
B1-8-O2 15min	Riccardo Rossi(Università degli Studi di Roma "Tor Vergata") Integrating Deep Learning with Plasma Physics for Accurate and Reliable Multi-Diagnostic and Time-Constrained Inverse Problem Methodologies in Nuclear Fusion
B1-8-O3 15min	Yong Xiao(Zhejiang University) AI Surrogate Model for Turbulent Transport in Tokamak Plasmas Using Gyrokinetic Simulation Data and Machine Learning

B1-9 Data Science 2 [Chair: Yong Xiao] 16:30-18:40, Sep. 24 [413]

B1-9-I1 20min	Yuya Morishita(Department of Nuclear Engineering, Kyoto University) Adaptive model predictive control of fusion plasma based on data assimilation system ASTI
B1-9-I2 20min	Zongyu Yang(Southwestern Institute of Physics) FusionMAE: large-scale pretrained model to optimize and simplify diagnostic and control of fusion plasma
B1-9-I3 20min	Yue Yu(Institute of Plasma Physics, Chinese Academy of Sciences) Real-Time Detachment Forecaster: Decoding X-Point Radiation in Impurity-Seeded Plasmas
B1-9-O1 15min	Ryota Yoneda(NTT Space Environment and Energy Laboratories) Offline Reinforcement Learning by Decision Transformer for Tokamak Plasma Control
B1-9-O2 15min	Wenchong Yao(Institutes of Physical Science and Information Technology, Key Laboratory of Intelligent Computing and Signal Processing of the Ministry of Education, Anhui University) Multi-modal Data Fusion for Tearing Mode Parameter Prediction Based on Multi-task Contrastive Learning
B1-9-O3 15min	Runyu Luo(Huazhong University of Science and Technology) A Preliminary Investigation into the Prediction of Tearing Mode Evolution Using Deep Learning

B1-10 Data Science 3 [Chair: Lorenzo Zanisi] 14:00-16:10, Sep. 25 [413]

B1-10-I1 20min	Mitsuru Honda(Graduate School of Engineering, Kyoto University) Transport model surrogates via Gaussian process regression
B1-10-I2 20min	Aaro Järvinen(VTT) Towards scalable large-scale model validation with data science
B1-10-I3 20min	Shinya Maeyama(National Institute for Fusion Science) Improvement of turbulent transport model using multi-fidelity data fusion approach
B1-10-I4 20min	Alex Panera Alvarez(DIFFER) Pellet Fueling: AI-Enhanced Surrogate Modeling and Integrated Modelling
B1-10-O1 15min	Kotaro Fujii(Nagoya University) Causal relationship from multivariate time series and dominant scale for ITG turbulent transport
B1-10-O2 15min	Shan Wei(Shanghai Jiao Tong University) Three-dimensional Radiation Reconstruction Based on X-ray Imaging via Convolutional Neural Network

B1-12 Data Science 4 [Chair: Brendan C. Lyons] 14:00-16:10, Sep. 26 [413]

B1-12-I1 20min	Adam Kit(VTT, Technical Research Centre of Finland) On Physics-Data Generative Modeling for Core-Edge Integration in Tokamaks
B1-12-I2 20min	Satoru Tokuda(Kyushu University) Application and progress of Bayesian statistics in plasma physics
B1-12-O1 15min	Yu Zhong(Huazhong University of Science and Technology) Disruption Prediction for Different Operational Phase Based on Disruption Budget
B1-12-O2 15min	Chengshuo Shen(Huazhong University of Science and Technology) Transferable and interpretable disruption prediction based on physics-guided machine learning

B1-12-O3 15min	Sukma Wahyu Fitriani(Kyushu University) Predicting Plasma-Deposited Thin Film Properties Using Machine Learning based on Optical Emission Spectroscopy
-----------------------------------	---

Basic-2 Session

B2 (Quantum/Dusty plasma, Plasma Source, Basic Experiments, A&M) Program Committee: Yan Feng (Chair, CN), Sanat Kumar Tiwari (Vice-Chair, IN), Yuanhong Song (Vice-Chair, CN), Lin I (TW), Edward Thomas (US), Zhehui (Jeph) Wang (US), Lorin Matthews (US), Rajaraman Ganesh (IN), Chijie Xiao (CN), Chandra Prakash Dhard (DE), Tito Mendonca (PT), Izumi Murakami (JP), Job Beckers (NL), Takuma Yamada (JP), Hanno Kahlert (DE), Debaprasad Sahu (IN), Swarnima Singh (US), Hiroyuki Takahashi (JP)

B2-1 Dusty plasma I [Chair: Yan Feng] 14:00-16:10, Sep. 22 [504+505]

B2-1-I1 20min	Wei-Shuo Lo(National Central University) Coherent excitations in thermally excited dusty plasma crystals: observations of multi-scale vortical phonons and vortical phonon vortices
B2-1-I2 20min	Chen-Kang Huang(National Central University) Formation and microfilamentation of spiral density waves in plasmas induced by circularly polarized field ionization
B2-1-I3 20min	Surabhi Jaiswal(Indian Institute of Science Education and Research Pune) Studying complex plasma crystal and its dynamical behavior in different plasma systems
B2-1-I4 20min	Dong Huang(Soochow University) Isomorphic lines and isomorphic invariants in dusty plasmas and its applications
B2-1-I5 20min	Shaoyu Lu(Soochow University) Internal friction of grain boundaries in two-dimensional Yukawa solids

B2-2 Low temperature plasma I [Chair: Job Beckers] 16:30-18:40, Sep. 22 [504+505]

B2-2-I2 20min	Yong-Xin Liu(Dalian University of Technology) Equivalent circuit modeling for electrical parameter diagnostic of a pulse-modulated RF capacitively coupled plasma
B2-2-I3 20min	Yangyang Fu(Tsinghua University) Similarity laws and scaling networks for radio frequency plasmas
B2-2-O1 15min	Anisa Qamar(Department of Physics, University of Peshawar) Magnetosonic shock waves in degenerate electron-positron-ion plasma with distinct spin densities

B2-3 Dusty plasma II [Chair: Chen-Kang Huang] 14:00-16:10, Sep. 23 [504+505]

B2-3-I1 20min	Job Beckers(Eindhoven University of Technology) Complex Ionized Media and Contamination Control in Semiconductor Industry
B2-3-I4 20min	Chengran Du(Donghua University) Vortex formation in a phase-separated binary complex plasma under microgravity

B2-4 Plasma fundamental I [Chair: Chengxun Yuan] 16:30-18:40, Sep. 23 [504+505]

B2-4-I1 20min	Kazunori Takahashi(Tohoku University) Radiofrequency plasmas in a magnetic nozzle: fundamental physics and applications
B2-4-I2 20min	Zhuang Liu(Soochow University) Investigations of dust and impurities in EAST and HL-3 tokamaks
B2-4-I3 20min	Aohua Mao(Harbin Institute of Technology) Structure characteristics of three-dimensional asymmetric magnetic reconnection in SPERF-AREX experiments
B2-4-I4 20min	Kenichi Nagaoka(National Institute for Fusion Science) Negative-ion-meniscus response to RF perturbation in an injector-scale negative-ion source
B2-4-I5 20min	Akira Sasaki(QST) Atomic Processes in laser produced tin plasmas for application to extreme ultra-violet (EUV) lithography

B2-5 Plasma fundamental II [Chair: Yongxin Liu] 14:00-16:10, Sep. 24 [504+505]

B2-5-I1 20min	Takuma Yamada(Kyushu University) Observation of transitions in meso-scale structures formed in plasma turbulence
----------------------------------	---

B2-5-I2 20min	Taiki Kobayashi(Kyushu University) Tomographic observation of solitary wave deformation by nonlinear effects of background asymmetry
B2-5-I3 20min	Ramesh Narayanan(Indian Institute of Technology Delhi) Exploring the Potential of an ECR Source for Large-Area Hydrogen Negative Ion Production in Fusion Applications
B2-5-I4 20min	Zijia Chu(Harbin Institute of Technology) Dynamic characteristics and formation mechanism of the complex dynamics in subnormal glow discharge systems: Mixed-mode oscillations and period-adding bifurcation
B2-5-O1 15min	Donatella Fiorucci(ENEA, Research Center Frascati) Photo-neutralization-based NBI systems for Nuclear Fusion Power Plants

B2-6 Dusty plasma III [Chair: Edward Thomas] 16:30-18:40, Sep. 24 [504+505]

B2-6-I1 20min	Hanno Kaehlert(Kiel University) Dielectric response and collective modes of strongly coupled plasmas
B2-6-I2 20min	Chengxun Yuan(School of Physics, Harbin Institute of Technology) Measurement of Microwave Propagation in Periodically Structured Dusty Plasma
B2-6-I3 20min	Sanat Kumar Tiwari(Indian Institute of Technology Jammu) Turbulence characteristics in dusty plasma
B2-6-I4 20min	Chenyao Jin(Hefei Institutes of Physical Science, CAS) The frequency limits of plasma response to pulsed ion acoustic wave excitation in a multi-dipole confined hot cathode discharge

B2-7 Low temperature plasma II [Chair: Liang Xu] 14:00-16:10, Sep. 25 [504+505]

B2-7-I1 20min	Fumiaki Mitsugi(Kumamoto University) Application of optical wave microphone for plasma jets
B2-7-I2 20min	Simon P. H. Vincent(Ecole Polytechnique de Lausanne (EPLF), Swiss Plasma Center (SPC)) Helicon waves in toroidal geometry
B2-7-I3 20min	Daiki Nishimura(National Institute for Fusion Science) Rotational movement analysis for cylindrical plasma images obtained with tomography
B2-7-I4 20min	Atsushi Okamoto(Nagoya University) High temperature bubble phenomenon in ECR plasmas
B2-7-I5 20min	Akihito Ogawa(Kyoto Institute of Technology) Experimental analysis of the antisymmetric vorticity during convective vortex merging in electron plasma
B2-7-O1 15min	Geethika B R(Institute for Plasma Research) Analysis of Polarized Emission from Laser Produced Plasma

B2-9 Plasma fundamental III [Chair: Aohua Mao] 14:00-16:10, Sep. 26 [504+505]

B2-9-I1 20min	Liang Xu(Soochow University) Mathematical and computational modeling of the gas breakdown in the planar magnetron discharge
B2-9-I2 20min	Yuto Toda(Graduate Institute for Advanced Studies, SOKENDAI) Comparison of hydrogen atom and hydrogen ion injection onto a tungsten surface using time-dependent density functional theory
B2-9-I4 20min	Jingfeng Yao(Harbin Institute of Technology) Investigation of discharge characteristics of high-energy microwave plasma switches with different electrode spacings

Applied-1 Session

A1 (Plasma Materials and Processing) Program Committee: Se Youn Moon (Chair, KR), [plasma source, sensing and characterization] JJ Shi (CN), Shinjae You (KR), Chanho Moon (JP), Quan-Zhi Zhang (CN), Kai Zhao (CN), Seong Ling Yap (MY), [plasma etching/deposition process] HSIAO Shih-Nan (JP), Kyungnam Kim (KR), Ogawa Daisuke (JP), Hojun Kim (KR), Heeyeop Chae (KR), Duksun Han (KR), [plasma surface processing] Deepak Prasad Subedi (NP), Satyananda KAR (IN), Ana Sobota (NL), Tao Shao (CN), [plasma gas conversion] Xin Tu (UK), Dae Hoon Lee (KR), Sanghoo Park (KR), Somaiyeh

Allahyari (IR), Nicolas Boschern (LU), Annemie A.M.B.Bogaerts (BE), [thermal plasma/nanomaterial synthesis] Tony Murphy (AU), Sooseok Choi (KR), Taehee Kim (KR)

A1-1 Sputtering and bottom up process [Chairs: Chan Ho Moon, Hiroharu Kawasaki] 12:00-16:00, Sep. 21 [402+403]

A1-1-I1 20min	Makoto Kambara(The University of Osaka) Optimized nanoparticle formation during plasma spray for enhanced storage capabilities with transfer entropy evaluation
A1-1-I2 20min	Hiroshi Furuta(Kochi University of Technology) Shape Control of Carbon Nanotube Forests via Bottom-up Process of Catalyst Nanoparticles
A1-1-I3 20min	Hiroharu Kawasaki(National Institute of Technology, Sasebo College) Trial of elemental gradient functional thin films preparation by sputtering with mixed powder targets III
A1-1-I4 20min	Tamiko Ohshima(Nagasaki University) Single cathode combinatorial deposition using powder target by sputtering process
A1-1-I5 20min	Giichiro Uchida(Meijo University) High-pressure He sputtering for porous-film fabrication for Li-ion-battery anode
A1-1-I6 20min	Osamu Sakai(The University of Shiga Prefecture) Complex network in low-temperature plasma analyzed by Shannon entropy
A1-1-I7 20min	Mineo Hiramatsu(Meijo University) Plasma Synthesis of 3-Dimensional Graphene-Based Materials
A1-1-I8 20min	Masanori Shinohara(Fukuoka University) Direct graphene growth on Si surface with high power pulsed plasma
A1-1-I9 20min	Karol Hensel(Comenius University) Effect of pellet catalyst properties on gas cleaning process
A1-1-O1 15min	Arunsinh Bakulsinh Zala(NSSE, National Institute of Education, Nanyang Technological University) α -Alumina Synthesis at Room Temperature Using a Plasma Focus Device for Fusion Blankets

A1-2 Atmospheric pressure plasma technology [Chair: Heeyeop Chae] 14:00-16:20, Sep. 22 [402+403]

A1-2-I1 20min	Muhammad Shahid Rafique(University of Engineering and Technology) Material Fabrication/Modification using Atmospheric Pressure Plasma
A1-2-I2 20min	Kosuke Takenaka(The University of Osaka) Enhancement of bonding strength of metals /organic materials direct bonding via non-equilibrium atmospheric pressure plasma irradiation
A1-2-I3 20min	Naoki Shirai(Hokkaido University) Self-organized luminescent patterns observed in direct current glow discharge from low pressure to atmospheric pressure
A1-2-I4 20min	Hui Jiang(National Key Laboratory of Power Transmission Equipment Technology, School of Electrical Engineering, Chongqing University) Developments and Interactions of the Channels in Surface Dielectric Barrier Discharge
A1-2-I5 20min	Tatsuru Shirafuji(Osaka Metropolitan University) Surface-Launched Plasma Bullet and Its Application
A1-2-I6 20min	Chuansheng Zhang(Institute of Electrical Engineering, Chinese Academy of Sciences) Improving high-temperature capacitive energy storage of biaxially oriented polypropylene using atmospheric pressure plasma jet
A1-2-O1 15min	Yunkai Chen(chenyunkai@stu.cqu.edu.cn) Comparison of the energy transmission characteristics of Annular SDBD under AC and Nanosecond Pulsed Excitation

A1-3 Plasma processing and surface engineering [Chair: Qing Xiong] 16:20-18:50, Sep. 22 [402+403]

A1-3-I1 20min	Shazia Bashir(GC, Women University Sialkot) Laser -induced plasma as a reliable and versatile tool for material processing
A1-3-I2 20min	Naoto Yamashita(Kyushu University) Large area fabrication of electrically switchable magnetic garnet using a plasma process
A1-3-I3 20min	Naho Itagaki(Kyushu University) Nucleation-Controlled Sputtering Growth of Epitaxial and Non-Epitaxial Oxide Semiconducting Thin Films

A1-3-I4 20min	Heeyeop Chae(Sungkyunkwan University (SKKU)) Plasma-Based Atomic Layer Etching of Metals and Dielectric Materials
A1-3-I5 20min	Kwang-Ryeol Lee(Korea Institute of Science and Technology) Plasma Application for Manipulating Surface Properties by Diamond-like Carbon Coatings and Surface Modification
A1-3-O1 15min	Erik V Johnson(LPICM, CNRS, Ecole Polytechnique, Institut Polytechnique de Paris) Etching Uniformity and Profile Control in Patterned Plasma System for HJT-IBC Solar Cell Fabrication
A1-3-O2 15min	Yuan-Ming Chang(Ph.D. Program of Electrical and Communications Engineering, Feng Chia University) Residual Stress and Related Properties of TiO ₂ /TiN/TiC Thin Films Deposited by Ion Energy Modulated ALIS and Magnetron Sputtering Hybrid Process
A1-3-O3 15min	Jiayu Li(Chongqing University) Study on characteristics of droplet-covered annular surface dielectric barrier discharge excited by microsecond pulse
A1-3-O4 15min	Yujiao Gao(School of Electrical Engineering, Chongqing University) Research on the aerodynamic characteristics of sawtooth annular surface dielectric barrier discharge actuator under AC excitation

A1-4 plasma processing and simulation/diagnostics [Chair: Bocong Zheng] 14:00-16:20, Sep. 23 [402+403]

A1-4-I1 20min	Shota Nunomura(National Institute of Advanced Industrial Science and Technology) Radical, ion, and photon's effects on material damage in plasma etching
A1-4-I2 20min	Keiichiro Urabe(Kyoto University) Monitoring of low-temperature plasma processes by in-situ impedance spectroscopy
A1-4-I3 20min	Takayoshi Tsutsumi(Nagoya University) Transport mechanism of active species in high-aspect-ratio hole during plasma etching
A1-4-I4 20min	Kentaro Tomita(Hokkaido University) Studies of EUV light source plasmas based on measurements of electron temperature and electron density
A1-4-I5 20min	Qing Xiong(Xi'an Jiaotong University) High frequency generation mechanism of DC arc and its detection approach

A1-5 Plasma surface modification [Chair: Xiaolei Fan] 16:20-18:50, Sep. 23 [402+403]

A1-5-I1 20min	Long Chen(Dalian Maritime University) Study on plasma instabilities in Hall thrusters: mechanisms and mitigation strategies
A1-5-I2 20min	Deepak Prasad Subedi(Dept. of Physics, School of Science, Kathmandu University) Atmospheric Pressure Plasma and its Application for Surface Treatment of Materials
A1-5-I3 20min	Takayuki Watanabe(Kyushu University) Multiphase AC Arc: Fundamentals and Applications
A1-5-I4 20min	Nan Jiang(Dalian University) The modification of EP/AlN Composites by Rotating DBD
A1-5-I5 20min	Haw Jiunn Woo(Universiti Malaya) LOW POWER 50 HZ ARGON GLOW DISCHARGE FOR SURFACE MODIFICATION OF POLYSTYRENE AND POLYTETRAFLUOROETHYLENE
A1-5-I6 20min	Ruixue Wang(Beijing University of Chemical Technology) Atmospheric-Pressure Low-Temperature Plasma for Thin Film Deposition on Metallic Substrates

A1-6 plasma processing and simulation/diagnostics [Chair: Peter Bruggeman] 14:00-16:20, Sep. 24 [402+403]

A1-6-I1 20min	Kai Zhao(Dalian university of technology) Parameter dependences of charged particle dynamics and electron power absorption mode in dual-frequency capacitively coupled argon discharges
A1-6-I2 20min	Bocong Zheng(Beijing Institute of Technology) Transport analysis in capacitively coupled plasmas
A1-6-I3 20min	Masaya Shigeta(Tohoku University) The Difficulty and Charm of Computational Plasma Fluid Mechanics
A1-6-I4 20min	Ho Jun Kim(Hanyang University) Analysis of stagnation point flow within an inductively coupled plasma reactor for the enhancement of deposition methodologies

A1-6-15 20min	Sanghoo Park(Korea Advanced Institute of Science and Technology (KAIST)) Practical issues in tomographic reconstruction of semiconductor processing plasmas
A1-6-16 20min	Haruka Suzuki(Nagoya University) Reconstruction of three-dimensional structure of plasma emission using multi-directional imaging

A1-7 Plasma catalyst/surface interaction [Chair: Ho Jun Kim] 16:20-18:50, Sep. 24 [402+403]

A1-7-11 20min	Sirui Li(Eindhoven University of Technology) Integrated Process for Carbon Valorization Using Plasma-Sorbent Systems
A1-7-12 20min	Peter Bruggeman(University of Minnesota) Plasma Interactions at the Interface with Liquids, Nanoparticles and Catalytic Surfaces
A1-7-13 20min	Liguang Dou(Institute of Electrical Engineering, Chinese Academy of Sciences) Synergistic promotion of vibrant H radicals and targeted Cu/MgAlO interface for CO ₂ hydrogenation by non-thermal plasma
A1-7-14 20min	Zheng Yang(School of Physics, Dalian University of Technology) High efficiency NO _x synthesis and regulation using dielectric barrier discharge in the needle array packed bed reactor
A1-7-O1 15min	Pedro Viegas(Instituto Superior Técnico - Universidade de Lisboa) Oxygen loss frequency and recombination probability in oxygen-containing plasmas
A1-7-O2 15min	Monika Verma(Delhi Technological University) Effect of Plasma Process Parameters on the Electrical Characteristics of Dual-Gate Graphene Field-Effect Transistors
A1-7-O3 15min	Abhijit Mishra(Indian Institute of Technology Jodhpur) Variations in Discharge Characteristics of Bipolar Pulsed Cold Atmospheric Plasma Jets Induced by Liquid Conductivity

A1-9 Plasma catalyst/Liquid interaction [Chair: Yangyang Fu] 16:20-18:50, Sep. 25 [402+403]

A1-9-11 20min	Hang Wang(Institute of Electrical Engineering Chinese Academy of Sciences) Microsecond pulse discharge in oil: electrohydraulic effect, gas generation and mechanics
A1-9-12 20min	Quan-Zhi Zhang(Dalian University of Technology) Plasma streamer propagation dynamics in gas phase DBD, catalyst pores and SDBD
A1-9-13 20min	Nikola Skoro(Institute of Physics Belgrade) Measurement of reactive species in atmospheric pressure plasma systems used for creation of plasma activated liquids
A1-9-14 20min	Susumu Toko(University of Osaka) Sorption enhanced methanation with plasma catalysis using various types of zeolites
A1-9-15 20min	Keigo Takeda(Meijo University) Surface reactions of reactive species in low temperature plasma
A1-9-O1 15min	Shikha Pandey(Indian Institute of Technology Jodhpur) Environmental Friendly Wastewater Treatment through Non-Thermal Plasma: Mechanistic Insights into Dye Degradation
A1-9-O2 15min	Chun Li(Beijing University of Chemical Technology) Atmospheric Pressure Air Plasma for Efficient Degradation of Aging-related Body Odors

A1-10 Thermal plasma/Nano-energy material [Chair: Sanghoo Park] 16:20-18:50, Sep. 25 [404]

A1-10-11 20min	Xiaolei Fan(The University of Manchester) On the role of sheath layer in nonthermal plasma catalysis
A1-10-12 20min	Tzu-Ying Lin(Department of Materials Science and Engineering, National Tsing Hua University) Plasma-Assisted Surface Modification on TiNb ₂ O ₇ Anode for High-Rate Lithium-Ion Battery
A1-10-13 20min	Feng Liang(Kunming University of Science and Technology) Multi-scales Modification of Energy Materials by Nonthermal Plasma
A1-10-14 20min	Rajdeep Singh Rawat(Natural Sciences and Science Education, Nanyang Technological University, Singapore) Nanostructured Carbon Technologies via Cold/Hot Plasmas for Energy and Media Applications
A1-10-15 20min	Manabu Tanaka(Department of Chemical Engineering, Kyushu University) Innovative Thermal Plasma Generation and Its System for Materials Processing

A1-10-I6 20min	Suresh C. Sharma(Department of Applied Physics, Delhi Technological University, Delhi) Modeling and Simulation of Plasma-Assisted Graphene Field Effect Transistor for Biosensing Applications
A1-10-I7 20min	Yasunori Tanaka(Kanazawa University) Highly-Controlled Thermofluid Fields in Tandem Modulated Induction Thermal Plasmas for High-Rate Nanoparticle Synthesis
A1-10-O1 15min	Soon Han Bryan Teo(Australian National University) Impact of alloying and exposure temperature on He retention and He thermal dynamics in W-based materials

A1-11 Plasma application/interaction [Chair: Suresh C. Sharma] 14:00-16:10, Sep. 26 [402+403]

A1-11-I1 20min	Koichi Sasaki(Hokkaido University) Mechanism of droplet ejection from liquid metals interacting with hydrogen plasmas
A1-11-I2 20min	Hitoshi Muneoka(Tohoku University) Gas-Liquid Transition and Influence of Density Fluctuations in Supercritical Fluid Plasmas
A1-11-I3 20min	Takayuki Ohta(Meijo university) Low temperature deposition of metal oxide semiconductor material by high-power impulse magnetron sputtering
A1-11-I4 20min	Toru Sasaki(Nagaoka University of Technology) Curing Process of Electrically Conductive Adhesives and Formation of Resistant Coatings using Atmospheric Pressure Plasma
A1-11-I5 20min	Atsushi Ito(National Institute for Fusion Science, National Institutes of Natural Sciences) Ehrenfest Molecular Dynamics for Quantum Process under Ion Injection onto Solid Surfaces and Seed Coats

Applied-2 Session

A2 (Plasma Life Science) Program Committee: Masafumi Jinno (Chair, JP), Nevena Puac (Vice-Chair, RS), Zhitong Chen (CN), Eun Ha Choi (KR), Hirofumi Kurita (JP), Dingxin Liu (CN), Muhammad Nur (ID), Suresh C. Sharma (IN), Deepak Prasad Subedi (NP), Douyan Wang (JP), Seong Ling Yap (MY), Maksudbek Yusupov (UZ)

A2-1 Plasma Agriculture 1 (Review, Yield Enhance) [Chair: Kazunori Koga] 12:15-13:55, Sep. 21 [405+406]

A2-1-I1 20min	Kazunori Koga(Kyushu University) Transport of reactive species generated by nonthermal plasma through rice seed husk
A2-1-I2 20min	Kasuo Tsugane(National Institute for Basic Biology) Elucidation of the molecular mechanism of low-temperature plasma treatment for transposon activation
A2-1-I3 20min	Hiroshi Hashizume(Nagoya Univ.) Effectiveness of cold plasma for rice cultivation at various growth stages
A2-1-O1 15min	Sushma Jangra(Phd Scholar, Indian Institute of Technology Jodhpur) Optimization of Cold Atmospheric Pressure Plasma for Enhanced Nitrogen Species Generation in Soil to Improve Fertility and Wheat Crop Yield

A2-2 Plasma Agriculture 2 (Mechanism) [Chair: Yuki Yanagawa] 14:05-16:05, Sep. 21 [405+406]

A2-2-I1 20min	Koichi Takaki(Iwate University) Function of high-voltage stimulation on fruiting body formation of Basidiomycota
A2-2-I2 20min	Rasa Zukiene(Vytautas Magnus University) Phytohormone response to cold plasma in seeds, leaves, and flowers
A2-2-I3 20min	Takamasa Okumura(Kyushu University) Cutting-edge research into induction of plant responses by irradiation of atmospheric pressure plasma
A2-2-I4 20min	Yoko Otsubo(The University of Tokyo) Molecular mechanisms underlying cellular responses to plasma irradiation in fission yeast

A2-3 Plasma Agriculture 3 (Stimulation and Sterilisation) [Chair: Katsuhisa Kitano] 14:00-16:10, Sep. 22 [405+406]

A2-3-I1 20min	Hiroshi Ehara(Nagoya University) Phenotypic changes induced by the application of low-temperature plasma treatments in various crop species
A2-3-I2 20min	Yoshihisa Ikeda(Ehime-University) Microplasma Stimuli for Efficient Molecular Introduction and Physiological Activation in Plants

A2-3-I3 20min	Kazuya Ishikawa(Ritsumeikan University) Elucidation of adaptation mechanism of rice to environmental stress through cold plasma treatment
A2-3-O1 15min	Ritesh Mishra(Indian Institute of Technology Jodhpur) Cold Plasma-Assisted Pectin Extraction from Dragon Fruit Peels: A Novel Approach to Enhance Film Mechanical Properties
A2-3-O2 15min	Ahmed Khacef(GREMI, CNRS-Université d'Orléans) Cold Plasma Technology for the Prevention of Postharvest Grain Losses

A2-4 Plasma Agriculture 4 (Germination and Growth) [Chair: Hiroshi Ehara] 16:30-18:40, Sep. 22 [405+406]

A2-4-I2 20min	Nobuyuki Uozumi(Tohoku University) Nitrogen gas fertilization via plasma technology to promote plant growth
A2-4-I4 20min	Yuki Yanagawa(Chiba University) Atmospheric-pressure plasma promoted germination and growth in Sorghum bicolor
A2-4-I5 20min	Shoko Tsuboyama(Utsunomiya University) Establishment of experimental systems to analyze the effects of low-temperature plasma on plant growth and the initial intracellular responses using Marchantia polymorpha
A2-4-O1 15min	Santosh Dhungana(Tribhuvan University) Plasma-activated water (PAW) from a customized power system: generation, analysis, and plant growth enhancement
A2-4-O2 15min	Quoc An Ha Than(Institute of Advanced Technology, Vietnam Academy of Science and Technology) The Impact of Plasma Activated Seawater on Postharvest Sea Grapes Caulerpa lentillifera

A2-5 Bio Applications 1 [Chair: Ruonan Ma] 14:00-16:10, Sep. 23 [405+406]

A2-5-I1 20min	Katsuhisa Kitano(The University of Osaka) Identification of key chemical species in plasma-treated water for effective and safe disinfection
A2-5-I2 20min	Miran Mozetic(Jozef Stefan Institute) Cold plasma within a stable supercavitation bubble - a breakthrough technology for efficient inactivation of viruses in water
A2-5-I4 20min	Michihiko Nakano(Kyushu University) Novel biological indicator using DNA-labeled microbeads for evaluating nonthermal plasma sterilization
A2-5-I5 20min	Nagendra Kumar Kaushik(Plasma Bioscience Research Center, Department of Electronic and Biological Physics, Kwangwoon University) Plasma-Generated Nitric Oxide Water for Biological Applications: Infection Control and Cosmetic Innovations
A2-5-O1 15min	Raju Bhai Tyata(Khwopa College of Engineering) Electrical and Optical Characterization of Dielectric Barrier Discharge and its Application in Water Treatment

A2-6 Bio Applications 2 [Chair: Miran Mozetic] 16:30-18:40, Sep. 23 [405+406]

A2-6-I1 20min	Alexander Fridman(Drexel University, Nyheim Plasma Institute) Non-Thermal Plasma in Liquids: from Chemical and Biological Water Cleaning to Synthesis of New Materials in Liquid Nitrogen
A2-6-I2 20min	Hiromasa Tanaka(Nagoya University) Unraveling the Biological Effects of Plasma-Activated Solutions: From Basic Science to Applications
A2-6-I3 20min	Romolo Laurita(Alma Mater Studiorum-Università di Bologna) Production and chemical composition of Plasma Activated Water (PAW) used for food and packaging treatment
A2-6-I4 20min	Ruonan Ma(Zhengzhou University) Plasma-activated water as potential green adjuvant to enhance the insecticidal activity of pesticides against cotton aphids
A2-6-I5 20min	Yuzuru Ikehara(Chiba University) Plasma application will open the research to analyze life activity directly observed using an optical microscope by electron microscope.
A2-6-O1 15min	Duc Ba Nguyen(Duy Tan University) Role of liquid dielectric and its application for developing a dielectric barrier discharge configuration for cold plasma jet generation
A2-6-O2 15min	Alam Md Jahangir(Shizuoka University) Drug Delivery in Brain Endothelial Cells by Cold Atmospheric Microplasma

A2-7 Bio Applications 3 [Chair: Hajime Sakakita] 14:00-16:20, Sep. 24 [405+406]

A2-7-I1 20min	Seong Ling Yap(Universiti Malaya) Scalable and Gas-Free Plasma Systems for Extreme Biofilm Eradication
A2-7-I2 20min	Shinya Kumagai(Meijo University) A micro perfusion system for promoted cell growth using plasma exposure through micro air-liquid interface
A2-7-I3 20min	Ram Prakash(Indian Institute of Technology Jodhpur) Non-equilibrium Cold Plasma Technologies for Health and Environmental Applications
A2-7-O1 15min	Jaroslav Kristof(Shizuoka University) Reactive oxygen species influence on plasma-treated HL-60 cells
A2-7-O2 15min	Hirofumi Kurita(Toyohashi University of Technology) Enhancement of cell death by combination of cold atmospheric plasma irradiation and pulsed electric field application
A2-7-O4 15min	Bhargavi Sharma(Department of Biotechnology, Delhi Technological University) Dielectric Modulated Triple Metal- Plasma Assisted - Carbon Nanotube Field Effect Transistor (TM-PA-CNTFET) Biosensor for Detection of Various Biomolecules

A2-8 Medical Applications [Chair: Seong Ling Yap] 16:30-18:40, Sep. 24 [405+406]

A2-8-I1 20min	Hideo Fukuhara(Kochi medical school) Immune response induced by atmospheric pressure low-temperature plasma for bladder cancer
A2-8-I2 20min	Jamoliddin Razzokov(Institute of Fundamental and Applied Research, National Research University TIAME) Cold Atmospheric Plasma as a Modulator of Immune Checkpoints: Targeting PD-1 and PD-L1/PD-L2 interaction via Molecular Dynamics
A2-8-I3 20min	Zhitong Chen(Shenzhen Institute of Advanced Technology, Chinese Academy of Sciences) Plasma delivery systems for cancer treatment
A2-8-I4 20min	Hajime Sakakita(Meijo University) International Standard for Commercialization as Regulatory Science
A2-8-O1 15min	Jalaj Jain(Comisión Chilena de Energía Nuclear) Ultra high-dose rate X-ray pulses emitted from a kilojoule plasma focus device induce larger cancer cell deaths than the conventional X-ray irradiation: Preliminary single dose and fractionation studies
A2-8-O2 15min	Kazuo Shimizu(Shizuoka University) Application of Atmospheric Microplasma for Nose to Brain Drug Delivery

A2-9 FUNDAMENTAL [Chair: Kathrina Lois] 16:30-18:40, Sep. 25 [405+406]

A2-9-I1 20min	Toshiyuki Kawasaki(Nishinippon Institute of Technology) Control of liquid flows generated by plasma-liquid interactions
A2-9-I2 20min	Takehiko Sato(Tohoku University) High-speed nanodroplets for innovation in water utilization
A2-9-I3 20min	Yoko Yamanishi(Kyushu University) Emergent Functions of Plasma-induced Bubble
A2-9-I4 20min	Shota Sasaki(Tohoku University) Controlled generation of air plasma-derived reactive nitrogen species and its agricultural applications
A2-9-I5 20min	Nozomi Takeuchi(Institute of Science Tokyo) Plasma-ozone combination process for decomposition of persistent organic compounds with efficient generation of hydrogen peroxide
A2-9-O1 15min	Lixi Zhang(National Key Laboratory of Power Transmission Equipment Technology, School of Electrical Engineering, Chongqing University) Simulation Study of Plasma Ablation Discharge under Dual Time Scales

A2-10 Chemistry in Plasma Life Science [Chair: Shota Sasaki] 14:00-15:40, Sep. 26 [405+406]

A2-10-I1 20min	Kathrina Lois Taaca(University of the Philippines Diliman) Impact of Sterilization and Bioactivity of Plasma-activated Hybrid Hydrogels
A2-10-I3 20min	Pankaj Attri(Kyushu University) Computational Investigation of Plasma-Induced Oxidative Modifications on Heat Shock Protein Structure

A2-10-I4 20min	Akiyo Tanaka(Kyushu University) Assessment of the health effects of indium compounds in experimental animals
A2-10-I5 20min	Vikas Rathore(Walailak University) Green Fertilizers (urea and ammonium nitrate) Synthesis via Plasma-Liquid Interaction

L1 Sessions

L1 (ICF, HEDS, Laboratory Astro Physics): Yasuhiko Sentoku (Chair, JP), Sudip Sen Gupta (Vice-Chair, IN), Natsumi Iwata (Vice-Chair, JP), Zheng-Ming Sheng (CN), Takayoshi Sano (JP), Alexey Arefiev (US), Hui Chen (US), Tomoyuki Johzaki (JP), Hiroshi Sawada (US), Mamiko Nishiuchi (JP), Dimitri Batani (FR)

L1-1 LabA/HighF/Z-pinch [Chair: S. Bulanov] 14:00-16:10, Sep. 22 [411]

L1-1-I1 20min	Huibo Tang(Harbin Institute of Technology) Laboratory observation of ion drift acceleration of laser-produced magnetized collisionless shocks
L1-1-I2 20min	Jin Matsumoto(Fukuoka University) Magnetic field amplification in chiral magnetohydrodynamic simulation
L1-1-I3 20min	Mickael Grech(LULI, CNRS, Ecole Polytechnique) Electron-Positron-Photon Cascades in Strong Electromagnetic Fields and Matter: A Path Toward Laboratory Pair Plasma Production
L1-1-I4 20min	Shinji Koide(Kumamoto University) Instability of current sheet in low-density plasma around the anchor region of relativistic jets of AGNs
L1-1-I5 20min	Keita Seto(Japan Atomic Energy Agency) Plasma kinetic model of nonlinear scalar QED particles in high-intensity laser pulse
L1-1-O1 15min	Yuki Amano(ISAS/JAXA) A Laboratory plasma experiment for application to X-ray astronomy using a compact electron beam ion trap (EBIT)
L1-1-O2 15min	Po-Yu Chang(Institute of Space and Plasma Sciences, National Cheng Kung University) Experimental Study of the Criteria for Rod Explosion in Pulsed Power Discharges

L1-2 Laser Plasma Interaction 1 [Chair: A. Arefiev] 16:30-18:40, Sep. 22 [411]

L1-2-I1 20min	Chengzhuo Xiao(Hunan University) Spatial distributions of laser-plasma instability in the beam overlapping region
L1-2-I2 20min	Matthew Edwards(Stanford University) Diffractive Plasma Optics for Compact Ultra-High-Power Femtosecond Lasers
L1-2-I3 20min	Byoung-Ick Cho(Gwangju Institute of Science and Technology) Frustrated Brunel Heating by Relativistic Gyromagnetic Effects in Ultraintense Laser-Matter Interactions
L1-2-I4 20min	Mario Manuel(General Atomics) Integration and testing of advanced algorithms for controlling high-energy-density-physics experiments
L1-2-I5 20min	Yin Shi(University of Science and Technology of China) Generation of 10 kT axial magnetic fields using multiple conventional laser beams: A sensitivity study for kJ PW-class laser facilities
L1-2-O1 15min	Devdigvijay Singh(Stanford University) Light-Structuring Plasma Holograms
L1-2-O2 15min	Taranjot Singh(Dav University) Second harmonic generation of high power Cosh-gaussian laser beam in Cold Quantum Plasma

L1-4 Mima Memorial [Chair: Y. Sentoku] 16:30-18:40, Sep. 23 [411]

L1-4-I1 20min	Yasuaki Kishimoto(Kyoto University) Professor Mima's Achievements in Nonlinear Plasma Physics and Future Prospects
L1-4-I2 20min	Sergey Bulanov(ELI-ERIC, ELI-Beamlines) Journey Through the World of Nonlinear Waves
L1-4-I3 20min	Hiroshi Azechi(Institute of Laser Engineering, University of Osaka) Final Work: Integral Model of Hydrodynamic Instabilities in Inertial Fusion Implosions

L1-4-I4 20min	Natsumi Iwata(Institute of Laser Engineering, The University of Osaka) Laser plasma physics from particle motion to macroscopic transport
L1-4-I5 20min	Alexey Arefiev(UC San Diego) In the spirit of Professor Mima's vision for US–Japan collaboration: Discovery of a self-organized gamma-gamma collider
L1-4-I6 20min	Kimataka Itoh(Chubu University) In memory of Prof. Mima - Fusion Science in His Days -

L1-5 EPS-AAPPS session [Chair: D. Batani] 14:00-16:10, Sep. 24 [411]

L1-5-I2 20min	Gabriele Cristoforetti(Intense Laser Irradiation Laboratory, INO-CNR) Experimental investigations of laser-plasma instabilities and of mitigation strategies at Shock Ignition laser intensities
L1-5-I3 20min	Chiharu Nakatsuji(Institute of Laser Engineering, The University of Osaka) Effects of density scale-length on laser–plasma instabilities and hot-electron generation for shock-ignition laser fusion
L1-5-I4 20min	Michael Lavell(University of Rochester) Kinetic simulations of fusion burn propagation
L1-5-I5 20min	Jieru Ren(Xi'an Jiaotong University) A robust method to generate brilliant electrons through laser interaction with NCD plasma converted from hohlraum radiation of foam target

L1-6 ICF/IFE [Chair: Bin Qiao] 16:30-18:40, Sep. 24 [411]

L1-6-I1 20min	Clément Goyon(Lawrence Livermore National Laboratory) A cohesive U.S. strategy to achieving Inertial Fusion Energy
L1-6-I2 20min	Neil Alexander(General Atomics) Target Fabrication for Inertial Fusion Energy
L1-6-I3 20min	Mayuko Koga(Graduate School of Engineering, University of Hyogo) Development of Fuel Target Injection Systems for Fast Ignition
L1-6-O1 15min	Aurélia Maïolo(CELIA, University of Bordeaux-CNRS-CEA) Design of ICF Targets for Energy Production - TARANIS Project
L1-6-O2 15min	Qianlei Du(dql_2021@sjtu.edu.cn) Machine Learning Optimization of Room-Temperature Target for Laser Inertial Fusion Energy

L1-7 IFE alternative [Chair: N. Iwata] 14:00-16:10, Sep. 25 [411]

L1-7-I1 20min	Takashi Kikuchi(Nagaoka University of Technology) Study on Peripheral System and Issues for Heavy–Ion Inertial Fusion Reactor
L1-7-I3 20min	Wei-Min Wang(Department of Physics, Renmin University of China) Laser parameter design for DCI laser fusion
L1-7-I4 20min	Naoki Okuda(The University of Osaka) High-density plasma heating with non-local electrons accelerated at a steepened plasma surface formed by PW relativistic laser
L1-7-I5 20min	Tomoyuki Johzaki(Hiroshima University) Neutronic effects on ignition and burn dynamics in fast ignition laser fusion
L1-7-O1 15min	Yasuhiko Sentoku(Institute of Laser Engineering, The University of Osaka) Fast heatwave ignition in laser fusion

L1-8 Laser Plasma Interaction 2 [Chair: Y. Sentoku] 16:30-18:40, Sep. 25 [411]

L1-8-I1 20min	Nicholas Dover(Imperial College London) Developing a novel platform for investigating intense near-critical-density laser plasma interactions
L1-8-I2 20min	Hayato Yanagawa(The University of Osaka) Study on propagation characteristics of relativistic laser light in overcritical density plasma
L1-8-I3 20min	David Blackman(ELI ERIC Beamlines Facility) Laser beam smoothing techniques including the use of broadband width signals and their effect on high energy density plasmas

L1-8-I4 20min	Yuji Takagi(ILE, Osaka Univ.) Relativistic electron production by stochastic laser-plasma interaction in sub-relativistic intensity regime
L1-8-O1 15min	Nathan Smith(University of York, York Plasma Institute) Surrogate modelling of X-Ray emission and Positron production in Laser-Plasma interactions
L1-8-O2 15min	Zi-Yu Chen(Sichuan University) Extreme field generation and high-quality proton acceleration driven by Bessel-Gaussian lasers
L1-8-O3 15min	Edna Rebeca Toro Garza(Stanford University) Observing the influence of atomic and nanoscale structure on the DC conductivity of warm dense matter

L1-9 IFE/LPI [Chair: T. Johzaki] 14:00-16:10, Sep. 26 [411]

L1-9-I1 20min	Siegfried Glenzer (Presented By W.M. Martin)(SLAC National Accelerator Laboratory) The Dawn of Inertial Fusion Energy Research
L1-9-I2 20min	G. Elijah Kemp(Lawrence Livermore National Laboratory) First demonstration of a layered direct-drive inertial confinement fusion target on the National Ignition Facility
L1-9-I3 20min	Chao Tian(Laser Fusion Research Center, China Academy of Engineering Physics) Interface slit-induced implosion asymmetry in double-shell targets: Time-resolved high-energy X-ray radiography with 10- μ m spatial resolution
L1-9-O2 15min	Wei Liu(Laser Fusion Research Center, China Academy of Engineering Physics) Diagnostics of the electron temperature distribution of hot spot using a four-color quasi-monochromatic X-ray Kirkpatrick-Baez microscope

L2 Sessions

L2 (LWFA/PWFA, Photon beam Science) Program Committee: Min Chen (Chair, CN), M. Krishnamurthy (Vice-Chair, IN), Hyyong Suk (Vice-Chair, KR), Tomonao HOSOKAI (Vice-Chair, JP), Chang Hee Nam (KR), G. Ravindra Kumar (IN), Zheng-Ming Sheng (CN), Jens Osterhoff (US), Robert Bingham (UK), Sergei Bulanov (CZ), Stefan Weber (CZ), Masakatsu Murakami (JP), Yang Wan (CN), Yueyue Chen (CN), Amita Das (IN), Chen Lin (CN), Yutong Li (CN), Masaki Kando (JP)

L2-1 Wakefield acceleration I [Chair: HT Kim] 14:00-16:10, Sep. 22 [412]

L2-1-I1 20min	John Farmer(Max-Planck-Institute for Physics) AWAKE: harnessing plasma instabilities for high-gradient acceleration
L2-1-I2 20min	Hyyong Suk(GIST) Recent progress in the laser pulse compression experiment using a plasma with a density gradient
L2-1-I4 20min	Feng Zhang(National Key Laboratory of Plasma Physics, Laser Fusion Research Center (LFRC), China Academy of Engineering Physics (CAEP)) Muon Production and Acceleration with Ultrashort High Intensity laser
L2-1-I5 20min	Mathieu Dumergue(Laboratoire pour l'Utilisation des Lasers Intenses) The APOLLON laser facility: Current status and scientific outcomes at multi-PW level

L2-2 X-ray and Radiation [Chair: John Farmer] 16:30-18:40, Sep. 22 [412]

L2-2-I1 20min	Jorge Vieira(Instituto Superior Técnico) Superradiant light sources based on plasma accelerators in the nonlinear blowout regime
L2-2-I2 20min	Zhan Jin(SANKEN, Osaka University) Advancing Laser Wakefield Acceleration: Toward a Compact Tabletop XUV Free-Electron Laser
L2-2-I3 20min	Taiwu Huang(Shenzhen Technology University) Control of laser-driven relativistic electron beams and its application in generating compact radiation sources
L2-2-I4 20min	Alexander Pirozhkov(KPSI QST) Burst Intensification by Singularity Emitting Radiation: Towards Terawatt compact coherent x-ray source
L2-2-I5 20min	Dominika Maslarova(Chalmers University of Technology) Batch Bayesian optimization of attosecond betatron pulses from laser wakefield acceleration
L2-2-O1 15min	Amar Pal(Indian Institute of Technology Hyderabad) High Harmonic Generation using Plasma Wedge Target

L2-4 QED and radiation [Chair: Y Kuramitsu] 16:30-18:40, Sep. 23 [412]

L2-4-I1 20min	Hyung Taek Kim(Gwangju Institute of Science and Technology) Recent Advances in Electron Acceleration and Gamma-Ray Generation with 4 PW laser at CoReLS
L2-4-I2 20min	Mohammad Mirzaie(Center for Relativistic Laser Science, Institute for Basic Science) Pursuing Strong-Field QED Studies with multi PW lasers
L2-4-I4 20min	Ke Jiang(Shenzhen Technology University) Porous Foam: Bridging High-Energy-Density Physics and Complex System Sciences
L2-4-I5 20min	Xing-Long Zhu(Zhejiang University) Efficient generation of extremely dense gamma-rays and polarized lepton beams in plasmas
L2-4-O1 15min	Ming-Wei Lin(National Tsing Hua University) Enhanced intensity of betatron radiation from few-TW LWFA with an asymmetric density profile in a sub-mm gas jet
L2-4-O2 15min	Shih-Chi Kao(National Central University) Comprehensive Diagnosis of Laser-Plasma Interaction in Capillary Waveguides for High-Harmonic Generation

L2-5 Wakefield acceleration II [Chair: JH Kim] 14:00-16:10, Sep. 24 [412]

L2-5-I2 20min	Ming Zeng(Institute of High Energy Physics, Chinese Academy of Sciences) Production of small energy spread and high charge beams in laser wakefield accelerators
L2-5-I3 20min	Nadezda Bobrova(Czech Technical University in Prague) Capillary discharge plasma channels for laser pulse guiding and active lensing charged particle beams
L2-5-I4 20min	Xinzhe Zhu(School of Physics and Astronomy, Shanghai Jiao Tong University) High energy electron acceleration and mid-infrared radiation in curved plasma channel
L2-5-I5 20min	Gabriele Maria Grittani(ELI Beamlines Facility, The Extreme Light Infrastructure ERIC) High energy High repetition rate electron beams at ELI Beamlines
L2-5-O1 15min	Yan-Jun Gu(Osaka University) Generation of Highly Stable Electron Beam in LWFA via Shock Injection

L2-6 Chandrasekhar session [Chair: James Rosenzweig] 16:30-18:40, Sep. 24 [412]

L2-6-I1 20min	Pisin Chen(National Taiwan University) Laser cosmology- a brief review and a few examples
L2-6-I2 20min	Bernhard Hidding (Presented by James Rosenberg)(Heinrich Heine University Düsseldorf) Hybrid Laser-Plasma Wakefield Acceleration: Harnessing the Best of Both Worlds
L2-6-I3 20min	Lance Labun(University of Texas, Austin) Particle production and vacuum structure in QED
L2-6-I4 20min	Zhengming Sheng (Presented by Min Chen)(Shanghai Jiao Tong University) Brilliant gamma-ray emission driven by laser and electron beams in plasma
L2-6-I5 20min	Yasuhiro Kuramitsu(Osaka University) Model experiments of cosmic ray acceleration using intense lasers
L2-6-I6 20min	Spencer Gessner(SLAC National Accelerator Laboratory) Review of Beam-Driven Plasma Wakefield Experiments at SLAC

L2-7 HHG and THz [Chair: Zhan Jin] 14:00-16:10, Sep. 25 [412]

L2-7-I1 20min	Tsuneyuki Ozaki(INRS-EMT) High-order harmonics generation and attosecond dynamics in laser-produced plasma
L2-7-I2 20min	Yao-Li Liu(Institute of Space and Plasma Sciences, National Cheng Kung University) Tomographic Measurement and Quasi-Phase Matching of High-Order Harmonic Generation via the Selected-Zoning Method
L2-7-I3 20min	Aurélien Houard(Laboratoire d'Optique Appliquée, CNRS, ENSTA, Ecole polytechnique) Steering laser-produced THz radiation in air with superluminal ionization fronts
L2-7-I4 20min	Seong Hee Park(Korea University Sejong campus) R&Ds of Compact, hybrid-type sub-THz Wakefield Accelerator
L2-7-I5 20min	Linzhen Wang(Shanghai Jiao Tong University) Terahertz Vortices with Tunable Topological Charges from a Laser-Plasma Channel

L2-8 Nuclear and Ion [Chair: MS Hur] 16:30-18:40, Sep. 25 [412]

L2-8-I1 20min	Dong Wu(Shanghai Jiao-Tong University) Mechanisms behind the surprising observation of supra-thermal ions in fusion burning plasmas
L2-8-I2 20min	Zheng Gong(Institute of Theoretical Physics, Chinese Academy of Sciences) Laser wakefield acceleration of ions with a transverse flying focus
L2-8-I3 20min	Wenpeng Wang(Shanghai Institute of Optics and Fine Mechanics (SIOM), Chinese Academy of Sciences (CAS)) Isolated Attosecond γ -Ray Pulse Generation with Transverse Orbital Angular Momentum Using Intense Spatiotemporal Optical Vortex Lasers
L2-8-O1 15min	Hui Zhang(Shanghai Institute of Optics and Fine Mechanics, Chinese Academy of Sciences) PW femtosecond lasers driven high-quality proton acceleration
L2-8-O2 15min	Clément Lacoste(INRS) Optimization and application of helical coil target with varying geometry and screen tube

L2-9 Application [Chair: Z. Gong] 14:00-16:10, Sep. 26 [412]

L2-9-I2 20min	Minsup Hur(UNIST) Plasma Photonics for Generation of Exawatt to Zettawatt Laser Pulses
L2-9-I3 20min	Jaehoon Kim(Korea Electrotechnology Research Institute) Current Research Status of Laser Wakefield Accelerator for Cancer Treatment
L2-9-O1 15min	Baris Emre Bingol(University of Strathclyde) LWFA-Driven Photonuclear and Photo-Spallation Reactions for Production of Medical Radionuclides

SG Session

SG (Space plasma & Geomagnetism): Yoshiharu Omura (Chair, JP), Linghua Wang (Vice-Chair, CN), Peter Yoon (Vice-Chair, US), QuanMing Lu (CN), Abraham Chian (BR), Lin-Ni Hau (TW), Kyung Sun Park (KR), Gurbax Lakhina (IN), Nazish Rubab (PK), Tohru Hada (JP), Yasuhito Narita (DE), Kanako Seki (JP), Wai Leong The(MY)

SG-1 Reconnection [Chair: Kyungsun Park] 14:00-16:10, Sep. 22 [503]

SG-1-I1 20min	Shan Wang(Peking University) New insights on the high reconnection rate and diminishment of ion outflow in reconnection
SG-1-I2 20min	Kai Huang(Harbin Institute of Technology) Secondary reconnection between interlinked flux tubes driven by magnetic reconnection with a short x-line
SG-1-I3 20min	Xianglei He(Harbin Institute of Technology) Numerical analysis of three-dimensional magnetopause-like reconnection properties by iPIC3D simulation for SPERF-AREX
SG-1-I4 20min	Kui Jiang(School of Earth and Space Science and Technology, Wuhan University) Interactions between dipolarization front and magnetic reconnection: MMS observations
SG-1-I5 20min	Qiyang Xiong(Wuhan University) Guide Field Dependence of Energy Conversion and Magnetic Topologies in Reconnection Turbulent Outflow
SG-1-O1 15min	Johan Sharma(Indian Institute Of Technology Hyderabad) Electron scale current sheets in kinetic Alfvén wave turbulence

SG-2 Shocks and Wave Generation [Chair: Tohru Hada] 16:30-18:40, Sep. 22 [503]

SG-2-I1 20min	Fumiko Otsuka(Kyushu University) Time series analysis of electron acceleration in quasi-perpendicular shock transition regions
SG-2-I2 20min	Shuichi Matsukiyo(Kyushu University) Power laser experiment of magnetized shock: Reflected ions and nonstationarity
SG-2-O1 15min	Tomo-Hiko Watanabe(Department of Physics, Nagoya University) Gyrokinetic simulation of auroral arc growth in a dipole field
SG-2-O2 15min	Ruolin Wang(the University of Tokyo) High-Frequency Wave Generation at Earth's Bow Shock: Insights from Shock-Driven Electron Acceleration

SG-2-O3 15min	Sebastián Saldivia(University of Chile) The effect of plasma expansion on the dispersion properties of MHD waves
SG-2-O4 15min	Yoshiharu Omura(Research Institute for Sustainable Humanosphere, Kyoto University) Nonlinear Wave Growth of Whistler-mode Hiss Emissions in the Plasmasphere

SG-3 Wave-Particle Interactions I [Chair: Peter Yoon] 14:00-16:10, Sep. 23 [503]

SG-3-I1 20min	Muhammad Nouman Sarwar Qureshi(Department of Physics, Government College University) Cluster Observations of Whistler Waves and Associated Non-Maxwellian Velocity Distributions
SG-3-I2 20min	Jinsong Zhao(Purple Mountain Observatory) Resonant and nonresonant wave-particle interactions in the mirror and firehose instabilities
SG-3-I3 20min	Satoshi Kurita(Research Institute for Sustainable Humanosphere, Kyoto University) Activity of plasmaspheric hiss waves during the May 2024 Gannon storm observed by the Arase satellite
SG-3-I4 20min	Jinghuan Li(Swedish Institute of Space Physics (IRF), Uppsala) Direct observations of cross-scale wave-particle energy transfer in space plasmas
SG-3-O1 15min	Li Li(China University of Geosciences (Beijing)) Modulation of Lower Hybrid and ECH Waves by Ultra-low Frequency (ULF) Waves in the Earth's Magnetosphere
SG-3-O2 15min	Kuldeep Singh(Khalifa University of Science & Technology, Abu Dhabi) Nonlinear waves in planetary magnetospheres

SG-4 Wave-Particle Interactions II [Chair: Li Li] 16:30-18:40, Sep. 23 [503]

SG-4-I1 20min	Bofeng Tang(State Key Laboratory of Solar Activity and Space Weather, National Space Science Center, Chinese Academy of Sciences) Effect of evolving turbulence on the diffusion coefficients of wave-particle interaction associated with whistler model wave
SG-4-I2 20min	Yuto Katoh(Graduate School of Science, Tohoku University) CubeSat project PCUBE for probing, controlling, and understanding of radiation belt environments
SG-4-I3 20min	Si Liu(Changsha University of Science and Technology) Nonlinear Interactions Between Chorus and ECH Waves in the Inner Magnetosphere
SG-4-I4 20min	Tsubasa Kotani(Data Analysis Center for Geomagnetism and Space Magnetism, Graduate School of Science, Kyoto University) Harmonic structure of lower hybrid and upper hybrid waves driven by energetic particles
SG-4-I5 20min	Ammarah Sheikh(Government Jinnah Islamia Graduate College Sialkot) Revisiting the analytical and numerical analysis of Bump on tail Instability by reduced Cairns distribution
SG-4-O1 15min	Peter Yoon(University of Maryland College Park) Magnetospheric radio and plasma wave emissions: Quasilinear analysis of Juno spacecraft data

SG-5 Sun, Planets, Spacecraft [Chair: Kunhan Lee] 14:00-16:10, Sep. 24 [503]

SG-5-I1 20min	Ryo Kono(Interdisciplinary Graduate School of Engineering Sciences, Kyushu University) Plasma two-fluid simulation using Physics-Informed Neural Networks
SG-5-I3 20min	Ryoya Sakata(Research Center for Advanced Science and Technology, The University of Tokyo) Effects of a planetary magnetic field on ion escape from ancient Mars based on 3D global multifluid MHD simulations
SG-5-I4 20min	Gang Li(Macau University of Science and Technology) Effect of Forbush Decrease on Global Electric Circuit
SG-5-I5 20min	Saba Gondal(University of Engineering and Technology Lahore) Relaxed magnetic structures in the Saturn's ring
SG-5-O1 15min	Andrea Larosa(ISTP-CNR) Wavelet-based modeling of the heliospheric turbulent magnetic field

SG-7 Ionosphere [Chair: Yoshiharu Omura] 14:00-16:10, Sep. 25 [503]

SG-7-I1 20min	Jing Jiao(NSSC,CAS) Equatorward wind driven significant upwelling of Ca ⁺ layer over middle latitude during the November 2023 strong geomagnetic storm
----------------------------------	--

SG-7-12 20min	Binzheng Zhang(The University of Hong Kong) Transition from a Dungey convection- to rotation-dominated magnetosphere: Implications of magnetic topology and auroral morphology
SG-7-13 20min	Hyuckjin Kwon(Korea Polar Research Institute) Sun-aligned arc motion driven by magnetic reconnection under northward IMF
SG-7-14 20min	Laila Zafar Kahlon(Forman Christian College (a Chartered University), Lahore) Damped KP equation for magnetosonic waves in a dissipative ionospheric F Layer OH plasma
SG-7-15 20min	Jesus Perez(University of California, Los Angeles) Direct Comparison of Whistler Mode Radiation Between an Electric Dipole and Loop Antenna in a Laboratory Plasma
SG-7-01 15min	Kshama Tiwari(Banaras Hindu University) Multi-instrument study on the Great American Solar Eclipse

SG-8 Solar-Wind and Nonlinear Processes [Chair: Linghua Wang] 16:30-18:40, Sep. 25 [503]

SG-8-11 20min	Junyi Ren(CAS Center for Excellence in Comparative Planetology/CAS Key Lab of Geospace Environment, University of Science and Technology of China) Hybrid simulations of the formation and evolution of magnetosheath jets
SG-8-12 20min	Fang Shen(National Space Science Center (NSSC), Chinese Academy of Science (CAS)) Simulation of Solar Energetic Particles Propagation under Stream Interaction Regions
SG-8-13 20min	Kun-Han Lee(National Center for High-performance Computing, NIAR) Generation of Kinetic Alfvén Waves and Parallel Ion Cyclotron Waves Triggered by Ion Beam Modes in the Solar Wind
SG-8-14 20min	Yasuhiro Narita(Institute of Theoretical Physics, Technical University of Braunschweig) Electromotive field - The missing puzzle piece of space plasma turbulence
SG-8-15 20min	San Lu(University of Science and Technology of China) Three-dimensional global hybrid simulations of plasma transport and energy conversion during solar wind-magnetosphere interactions
SG-8-01 15min	Saba Khalid(Government College University Lahore) KdV Modeling of Field-Aligned Potentials in Alfvénic Double Layers by using (r, q) distribution function
SG-8-03 15min	Abhay Kumar Singh(Department of Physics, Institute of Science, Banaras Hindu University) Multi-instrument study of the response of intense solar flares during the descending period of the 24th solar cycle

SG-9 Space Weather [Chair: Yasuhiro Narita] 14:00-16:10, Sep. 26 [503]

SG-9-11 20min	Vipin Kumar Yadav(SPL / VSSC / ISRO) Observations of Extreme Solar Transient Events by MAG Payload onboard Aditya-L1 Spacecraft around L1 Point
SG-9-12 20min	Yixin Sun(Peking University) Violation of the Impenetrable Barrier: MSS-1 and Arase Observations of MeV Electrons in the Inner Radiation Belt During the May 2024 Geomagnetic Storm
SG-9-13 20min	Kirollos Girgis(International Research Center for Space and Planetary Environmental Science (i-SPES), Kyushu University) Numerical Modeling of Particle Dynamics during Dipolarization Events in Substorm Time
SG-9-14 20min	Xuzhi Zhou(Peking University) Transient Distortions of the South Atlantic Anomaly Radiation Environments Driven by Large-Scale Electric Fields
SG-9-15 20min	Yusuke Ebihara(Kyoto University) Generation, propagation and consequence of field-aligned currents during substorm expansion
SG-9-16 20min	Shuo Yao(China University of Geosciences) Features and Source Current of the Ground Induced Geoelectric Field During Magnetic Storms
SG-9-01 15min	Victor Munoz(Departamento de Física, Facultad de Ciencias, Universidad de Chile) Community Structure Of Earth's Magnetic Field Measurements

SA Sessions

SA (Solar & Astro plasma): Peng-Fei Chen (Chair, CN), Ryoji Matsumoto (Vice-Chair, JP), Jungyeon Cho (Vice-Chair, KR), Yuhong Fan (US), J. L. Han (US), Kyungsuk Cho (KR), Patrick Antolin (UK), Schmieder Brigitte (FR), Piyali Chatterjee (IN), Shu-ichiro Inutsuka (JP), Hui Li (US), Takaaki Yokoyama (JP), Takeru Suzuki (JP), Lou Lee (TW), Fulai Guo (CN), Rony Keppens (BE), David Pontin (AU), Nami Machida (JP)

SA-1 Solar methodology [Chair: Qingmin Zhang] 14:00-16:10, Sep. 22 [502]

SA-1-I1 20min	Qi Hao(Nanjing University) Developing Automated Detection, Tracking and Analysis Methods for Solar Activities via Machine Learning
SA-1-I2 20min	Lei Lu(Purple Mountain Observatory, Chinese Academy of Sciences) Application of Radio Observations in the Study of Solar Eruptions
SA-1-I4 20min	Ayu Ramada Sukarmadji(Institut de Recherche en Astrophysique et Planétologie) Deciphering the nanojet phenomenon through observations and numerical simulations
SA-1-O1 15min	Mehdi Yousefzadeh(Shandong University) Kinetic Modeling of Coherent Emission in Coronal Loops: An Innovative Three-Step Numerical Approach
SA-1-O2 15min	Zihao Yang(High Altitude Observatory, NCAR) Observing the evolution of the Sun's global coronal magnetic field over 8 months
SA-1-O3 15min	Shuting Li(Purple Mountain Observatory) Unveiling the heating source inside an erupting prominence as observed by Solar Orbiter/Metis and ASO-S/LST
SA-1-O4 15min	Feng Chen(Nanjing University) Data-driven Radiative Magnetohydrodynamics Simulations with the MURaM code

SA-2 Magnetic field [Chair: Jin-Han Guo] 16:30-18:40, Sep. 22 [502]

SA-2-I1 20min	Shuhong Yang(National Astronomical Observatories, Chinese Academy of Sciences) Magnetic field and meridional flow in the solar polar regions
SA-2-I3 20min	Istvan Pusztai(Chalmers University of Technology) From Weibel seed generation to saturated dynamo in collisionless plasmas with finite mass ratio
SA-2-I4 20min	Nobumitsu Yokoi(University of Tokyo) Novel effects of kinetic and cross helicities in solar- and astro-physics
SA-2-O2 15min	Yihua Li(Nanjing University) Data-constrained MHD simulation of solar corona including solar wind effects

SA-3 Disk & ISM [Chair: Yunwei Yu] 14:00-16:10, Sep. 23 [502]

SA-3-I1 20min	Tetsuo Taki(The University of Tokyo) New framework for dust diffusion in partially ionized plasma with high dust-to-gas ratio: an application to a gap created by a protoplanet in a protoplanetary disk
SA-3-I2 20min	Daisei Abe(Tohoku University) Growth of Massive Molecular Filament by Accretion Flows: New mechanism to Support a Supercritical Filament against Radial Collapse
SA-3-I3 20min	Yoshiaki Misugi(National Astronomical Observatory of Japan) Physical Properties of Molecular Cloud Cores Formed in Strongly Magnetized Molecular Filaments
SA-3-I4 20min	Sadiq Usman(University of Wah) Magnetorotational Instability in differentially rotating degenerate astrophysical electron-positron-ion plasma
SA-3-O1 15min	Masanori Iwamoto(Kyoto University) Stimulated Scattering of Strong Waves in Pair Plasmas
SA-3-O2 15min	Shota Yokoyama(Chiba University) Cosmic-ray Driven Resistive Heating of the Intergalactic Medium in the Early Universe and Its Implications for 21-cm Line Observations

SA-4 Small-scale phenomena/CME/Stellar CME [Chair: Xiaoping Zhang] 16:30-18:40, Sep. 23 [502]

SA-4-I1 20min	Rony Keppens(CmPA, KU Leuven) Mathematics for coronal rain: the hydrodynamic thermal continuum
SA-4-I2 20min	Tinatin Baratashvili(KU Leuven) From Sun to Earth: Exploring the strengths and challenges of the global 3D MHD time-accurate modelling

SA-4-I3 20min	Jeffersson Agudelo Rueda(Northumbria University) Characterising Sub-Grid-Scale Effects on Plasma Turbulence in the Earth's Magnetosheath: Contribution to Generalised Ohm's Law
SA-4-I4 20min	Liping Yang(National Space Science Center, Chinese Academy of Sciences) Three-part Structure Formation & Interplanetary Rotation of Mars-Directed Coronal Mass Ejection on 2021 December 4
SA-4-I5 20min	Hong-Peng Lu(Guizhou University) Detecting Stellar CMEs Using Time-Domain Spectroscopy from LAMOST
SA-4-O1 15min	Kamlesh Bora(Max Planck Institute for Solar System Research) Quasi-Separatrix-Layers Channel Solar Wind Outflows in Coronal Hole

SA-5 Protoplanets and compact objects [Chair: N. Yokoi] 14:00-16:10, Sep. 24 [502]

SA-5-I1 20min	Masahiro Machida(Kyushu University) Disk Formation and Magnetic Interchange Instability in Weakly Ionized Star-Forming Clouds
SA-5-I2 20min	Yun-Wei Yu(Central China Normal University) Eclipsed X-ray Bursts and Fast Radio Burst Activity of Magnetar SGR J1935+2154
SA-5-I3 20min	Ashley Bransgrove(Princeton University) Extreme Plasma Physics of Neutron Stars
SA-5-I4 20min	Shigeo Kimura(Tohoku University) Non-thermal Phenomena in Strongly Magnetized Accretion Flows around Black Holes
SA-5-I5 20min	Akihiro Inoue(University of Tokyo) Three-Dimensional General Relativistic Radiation Magnetohydrodynamic Simulations of Supercritical Accretion onto a Magnetized Neutron Star
SA-5-O1 15min	Kanta Kitajima(Nagoya University) Particle-Based Analysis of Relativistic Jet

SA-7 CMEs [Chair: Qi Hao] 14:00-16:10, Sep. 25 [502]

SA-7-I1 20min	Ayumi Asai(Astronomical Observatory, Kyoto University) Advancing Solar Observations with DST and SMART, Hida Observatory, Kyoto University
SA-7-I2 20min	Qingmin Zhang(Purple Mountain Observatory) Investigating the early evolutions of non-radial solar eruptions
SA-7-I3 20min	Xiaozhou Zhao(Yunnan Observatories, CAS) Flux rope eruptions and shocks: 2.5D numerical modeling
SA-7-I4 20min	Jinhan Guo(Nanjing University) Numerical MHD Modelings of Failed Solar Eruptions: Constraints and Observational Manifestations
SA-7-I5 20min	Chen Xing(Nanjing University) Unveiling the Initiation Route of Coronal Mass Ejections through Their Slow Rise Phase
SA-7-I6 20min	Stephen Vincena(University of California, Los Angeles) Three-wave coupling between shear Alfvén waves and kink-unstable magnetic flux ropes

SA-8 Solar flares [Chair: M. Hoshino] 16:30-18:40, Sep. 25 [502]

SA-8-I1 20min	Yulei Wang(Nanjing University) Three-dimensional Magnetic Reconnection within Strongly Turbulent Solar Flare Current Sheets
SA-8-I2 20min	Xiaoping Zhang(Macau University of Science and Technology) Unveiling mass transfer in solar flares: Insights from elemental abundance evolutions observed in Chang'E-2 and MSS missions
SA-8-I3 20min	Bhuwan Joshi(Udaipur Solar Observatory) Energy Release and Coronal Dynamics in Solar Flares: Insights from 2D and 3D Magnetic Reconnection Models
SA-8-I4 20min	Xiangliang Kong(Shandong University) Modeling the Acceleration and Transport of Energetic Particles in Solar Flares Based on Macroscopic MHD Simulations
SA-8-O1 15min	Zekun Lu(Nanjing University) Heating the Hot and Super-hot Corona in Solar Active Regions: Insights from MURaM

SA-8-O2 15min	Philippe-A. Bourdin(University of Graz) Electromotive force measurements in the context of magnetic reconnection
----------------------------------	---

SA-9 Dust, ISM & Shock [Chair: R. Matsumoto] 14:00-16:10, Sep. 26 [502]

SA-9-I1 20min	Yusuke Tsukamoto(Kagoshima University) Co-evolution of dust grains and protoplanetary disks
SA-9-I2 20min	Shogo Isayama(Kyushu University) Relativistic resonant and trailing-field acceleration induced by large amplitude Alfvén waves in a strong magnetic field
SA-9-I3 20min	Hassan Shah(Forman Christian College, Lahore) Chaotic Evolution of Shock Waves, Solitons, and Solitary Shocks in a Degenerate Quantum Plasma
SA-9-I4 20min	Shoma Kamijima(Yukawa Institute for Theoretical Physics, Kyoto University) Cosmic ray acceleration and maximum energy in core-collapse supernova remnants
SA-9-O1 15min	Masahiro Hoshino(The University of Tokyo) Electron-ion temperature ratio in mildly relativistic parallel shocks
SA-9-O3 15min	Kanji Morikawa(The University of Tokyo) Magnetic turbulence by the interaction between a special relativistic shock and an inhomogeneous medium
SA-9-O4 15min	Subham Ghosh(Asia Pacific Center for Theoretical Physics) Magnetic Reconnection: An Alternative Explanation of Radio Emission in Galaxy Clusters

MF1 Sessions

MF1 (Magnetic Fusion plasma : Core): Zheng-Xiong Wang (Chair, CN), Won-Ha Ko (Vice-Chair, KR), Mitsutaka Isobe (JP), Xiang Jian (CN), Alberto Marinani (IT), Shijie Liu (DE), George McKee (US), Dongmei Fan (CN), Miura Yukitoshi (JP), Kishimoto Yasuaki (JP), Jaehyun Lee (KR), Valentin Igoshine (DE), Joelle Mailloux (UK)

MF1-1 Stellarator Physics [Chair: Wei Zheng] 14:00-16:20, Sep. 22 [409]

MF1-1-I1 20min	Heng Lan(Southwest Jiaotong University) Experimental study of the electromagnetic fluctuations and energy confinement in the quasi-axisymmetric stellarator CFQS-T plasmas
MF1-1-I2 20min	Jian Zhang(Huazhong University of Science and Technology) Numerical solutions of resistive finite-pressure magnetohydrodynamic equilibria for quasiaxisymmetric stellarator CFQS and non-axisymmetric toroidal plasmas
MF1-1-I3 20min	Xianyi Nie(University of Science and Technology of China) FOCUS-HTS: A New Stellarator Coil Design Code for Three-dimensional High-Temperature Superconducting Magnets
MF1-1-I4 20min	Yangbo Li(IFPP, Huazhong University of Science and Technology) Experimental results of Tokamak-Stellarator hybrid configuration by external rotational transform on J-TEXT
MF1-1-I5 20min	Alejandro Banon Navarro(Max-Planck-Institute for Plasma Physics) Exploring Turbulence in Stellarators: Advances in Global Gyrokinetic Simulations
MF1-1-I6 20min	Hongxuan Zhu(Zhejiang University) Global eigenmode structure of linear drift-wave instabilities on flux surfaces in stellarators
MF1-1-I7 20min	Jacobo Varela Rodriuez(Institute for Fusion Studies, Department of Physics, University of Texas at Austin) Bursting activity in LHD plasma induced by multiple EP populations

MF1-2 Stellarator Physics& Tokamak Disruption [Chair: G. Pucella] 16:20-18:40, Sep. 22 [409]

MF1-2-I1 20min	Yiming Zu(University of Science and Technology of China) Hall MHD Simulations of MARFE Dynamics in Limiter and Divertor Configurations
MF1-2-I2 20min	Wei Xia(Institute of Plasma Physics, Chinese Academy of Science; University of science and technology of China) Characteristic of Thermal Quench and its Interpretive JOREK Simulation in EAST Disruptions
MF1-2-I3 20min	Chang Liu(Peking University) Analysis and Simulation of Effective Runaway Electron Mitigation Using a Passive Coil in J-TEXT Tokamak

MF1-2-I4 20min	Wei Zheng(Huazhong University of Science and Technology) Disruption Prediction for Future Tokamak Reactors from Different Perspectives and with Different Methods
MF1-2-O1 15min	Zhe Chen(University of Science and Technology) Nonlinear excitation of energetic particle-induced geodesic acoustic mode via resonance overlap with Alfvén instability in CFQS
MF1-2-O2 15min	Hiroyuki Yamaguchi(National Institute for Fusion Science, National Institutes of Natural Sciences) An Innovative Stellarator: Variable Symmetry Torus
MF1-2-O3 15min	Akihiro Shimizu(National Institute for Fusion Science) Construction and experiment of quasi-axisymmetric stellarator CFQS-T
MF1-2-O4 15min	Shuhei Sumida(National Institutes for Quantum Science and Technology) Observation of runaway electrons with neutron flux monitors in the initial operation phase of JT-60SA

MF1-3 MHD Physics [Chair: Liu Chang] 14:00-16:20, Sep. 23 [409]

MF1-3-I2 20min	Yinan Zhou(University of Science and Technology of China) The Poloidal Particle Dynamic during Sawtooth Collapse on J-TEXT
MF1-3-I3 20min	Yihang Chen(Southwestern Institute of Physics) Preliminary experimental study of sawtooth pacing control in strong neutral beam heated plasmas on the HL-3 tokamak
MF1-3-I4 20min	Oleg Samoylov(Max Planck Institute for Plasma Physics) Magnetic reconnection rate during sawtooth crashes in ASDEX Upgrade and EAST
MF1-3-I5 20min	Xu Yang(Chongqing Technology and Business University) Optimized RMP spectrum design towards robust ELM control
MF1-3-O1 15min	Yiming Ma(Huazhong University of Science and Technology) MHD simulation of tilt instability during the dynamic FRC magnetic compression process
MF1-3-O2 15min	Haijun Ren(University of Science and Technology of China) MHD analysis of electromagnetic GAMs in up-down asymmetric tokamaks
MF1-3-O3 15min	Yeongsun Lee(Seoul National University) Binary Nature of Collisions Facilitates Runaway Electron Generation in Weakly Ionized Plasmas

MF1-10 Plasma Heating [Chair: A. Nielsen] 14:00-16:10, Sep. 23 [412]

MF1-10-I1 20min	Masaki Uchida(Kyoto University) Non-inductive startup of overdense spherical tokamak by electron Bernstein waves with reduced trapped electrons
MF1-10-I2 20min	Jian Liu(Shandong University) Canonical Hamiltonian Theory and Symplectic Algorithms of Guiding Center Dynamics
MF1-10-I3 20min	Kristel Crombe(Laboratory for Plasma Physics, Royal Military Academy, Brussels) Advancements in Commissioning the ICRH System for Wendelstein 7-X
MF1-10-I4 20min	Hiroshi Tanabe(Graduate school of frontier sciences, university of Tokyo) Application of reconnection heating for solenoid-free plasma startup in TS-6 and ST40
MF1-10-I5 20min	Chio Zong Cheng(University of Tokyo) Physics of magnetic reconnection with low and high guide fields
MF1-10-O1 15min	Zhuo Qi Liu(Dalian University of Technology) ICRF wave heating simulation integrating with SOL plasma based on FEM
MF1-10-O2 15min	Atsushi Fukuyama(Kyoto University) Kinetic full wave analysis in inhomogeneous plasmas using integral form of dielectric tensor

MF1-4 Integrated Modelling [Chair: K. Crombe] 16:20-19:00, Sep. 23 [409]

MF1-4-I1 20min	Teobaldo Luda Di Cortemiglia(Max-Planck-Institut fuer Plasmaphysik) Full-radius integrated modelling of the H-mode confinement dependence on plasma size and aspect ratio and predictions of ITER and DEMO
MF1-4-I2 20min	Luca Garzotti(UKAEA) Integrated scenario modelling in support of fusion experiments

MF1-4-I3 20min	Stefano Gabriellini(UK Atomic Energy Authority (UKAEA), Culham Campus) Core transport simulations of plasma scenarios for JET and JT-60SA tokamaks: validation and predictions for future JT-60SA experiments
MF1-4-I4 20min	Kai Li(College of Physics, Qingdao University) Optimized H-mode pedestal predictive model for coupled core-pedestal simulations on EAST
MF1-4-I5 20min	Jie Zhang(University of Science and Technology of China) Evaluation of pellet fueling depth and its impact on fusion performances in fusion reactors
MF1-4-I6 20min	Shinichiro Kado(Kyoto University) Dynamic Evolution of Pellet Fueling from Ablation Cloud to Reheat Mode in Heliotron J
MF1-4-I7 20min	Tokihiko Tokuzawa(National Institute for Fusion Science) Review of radio plasma physics for fusion science
MF1-4-I8 20min	Ahmed Diallo(Princeton Plasma Physics Laboratory) Spin-Polarized Fuel for Enhanced Tritium Self-Sufficiency and Electric Power Output

MF1-5 Micrinstabilities and Confinement [Chair: T. Kobayashi] 14:00-16:35, Sep. 24 [409]

MF1-5-I1 20min	Anders Henry Nielsen(technical University of Denmark) Simulating Edge Transport in MAST-U Using the FELTOR Code
MF1-5-I2 20min	Chao Li(Peking University) Numerical Extraction of Nearest Canonical Equilibrium Distribution via Natural Gradient Descent method
MF1-5-I3 20min	Dongmei Fan(Southwestern Institute of Physics) Impact of Resonant Magnetic Perturbations on ELM Mitigation and Impurity Transport in HL-3 H-mode Plasmas
MF1-5-I5 20min	Akihide Fujisawa(Kyushu University) Review and Prospect of Plasma Turbulence Observatory
MF1-5-I6 20min	Gabriele Merlo(Max Planck institute for Plasma Physics) Global gyrokinetic multiscale pedestal simulations with the GENE code
MF1-5-I7 20min	Feng Wang(Dalian University of Technology) Application of Particle Orbit Tracking Model in Tokamak Buring Plasmas
MF1-5-O1 15min	Trivesh Kant(Institute for Plasma Research) Axisymmetric studies of Avalanche generation and Termination mechanisms for Runaway Electrons in ITER

MF1-6 Energetic Particle Physics & Micro-instabilitte [Chair: Luca Garzotti] 16:40-19:10, Sep. 24 [409]

MF1-6-I1 20min	Francesco Porcelli(Polytechnic University of Turin) Vertical Displacement Oscillatory Modes driven by Fast Ions in Tokamak Plasmas
MF1-6-I2 20min	Yang Li(Southwestern Institute of Physics) Kinetic research on energetical particle modes in burning fusion plasmas
MF1-6-I3 20min	Liming Yu(Southwestern Institute of Physics) Experiment and simulation results of interactions between energetic ions and tearing modes on HL-2A tokamak
MF1-6-O1 15min	Juan Ruiz Ruiz(University of Oxford) Assessing the effect of energetic-particle-driven modes on fusion power gain in burning plasmas
MF1-6-O2 15min	Xiangfeng Wu(Dalian University of Technology) Simulations of fusion reactions under thermal and non-thermal equilibrium distributions in tokamaks
MF1-6-O3 15min	Kensho Takenaka(Graduate School of Energy Science, Kyoto University) Analysis of Beta Dependence of Microinstabilities in Realistic Configurations Using Global Gyrokinetic Simulations
MF1-6-O4 15min	Oleg Krutkin(EPFL-SPC) Gyrokinetic simulations of core turbulence in a reference JT-60SA scenario
MF1-6-O5 15min	Sagar Choudhary(Institute for Plasma Research) Density gradient driven transport in LTX-like plasma due to Ubiquitous Mode
MF1-6-O6 15min	Chien-Chung Hsu(National Central University) An improved analytical theory of ion temperature gradient instability in tokamak plasmas

MF1-7 High-Performance Plasmas [Chair: Hiroyuki Yamaguchi] 14:00-16:20, Sep. 25 [409]

MF1-7-I1 20min	Juan Huang(ASIPP) Recent Progress of Long-pulse High-confinement Plasma on EAST
MF1-7-I3 20min	Toshiki Kinoshita(Kyushu university) Advances in Turbulence-Driven Transport Control for improved Plasma Confinement
MF1-7-I4 20min	Nengchao Wang(Huazhong University of Science and Technology) Electron internal transport barrier induced by NTM in the ECRH plasma on J-TEXT
MF1-7-I5 20min	Gianluca Pucella(ENEA, C.R. Frascati) Hybrid scenario at high beta with mild MHD activity on MAST-U
MF1-7-I6 20min	Chiara Piron(Consorzio RFX, ENEA) Advances toward high-beta long-pulse operation in the WPTE tokamaks
MF1-7-I7 20min	Akira Ejiri(The University of Tokyo) Parameter surveys for a fusion energy systems integration test facility FAST

MF1-8 Tokamak Operation and Z pinch [Chair: Wang Feng] 16:20-18:45, Sep. 25 [409]

MF1-8-I1 20min	Pedro Andres Molina Cabrera(Swiss Plasma Center - EPFL) Fast electron generation during tokamak startup: experiments and simulations in the TCV tokamak
MF1-8-I2 20min	Adriano Mele(Swiss Plasma Center EPFL) Plasma integrated control: a perspective and outlook on the recent advancements at the TCV tokamak
MF1-8-I3 20min	John Berkery(Princeton Plasma Physics Laboratory) Research Advancing the Physics of Spherical Tokamaks in Preparation for Operation of NSTX-U
MF1-8-I4 20min	Makoto Hasegawa(RIAM, Kyushu University) Development of Divertor Configuration Control in QUEST with Experiments and AI-Based Identification
MF1-8-I5 20min	Tatsuya Kobayashi(National Institute for Fusion Science) Modeling of charge exchange recombination spectroscopy and inverse problem analysis using Bayesian approach
MF1-8-O1 15min	Nicola Amorisco(UK Atomic Energy Authority) FreeGSNKE: an open source pure-Python predictive evolutive equilibrium code for control design and validation
MF1-8-O2 15min	Brad Dumpsie(University of Saskatchewan) Extended Stability and Plasma Shock Behavior in a Flow Through Z-pinch
MF1-8-O3 15min	Kajal Shah(Princeton Plasma Physics Laboratory) Study of radiated power asymmetries in the Spherical Tokamak Advanced Reactor (STAR)

MF1-9 Multi-scale Physics [Chair: T. Kobayashi] 14:00-16:20, Sep. 26 [409]

MF1-9-I2 20min	Pan Li(Institute of Plasma Physics, Hefei Institutes of Physical Science, Chinese Academy of Sciences) Dynamics between energetic particles driven instabilities, lower frequency flow and turbulence on EAST
MF1-9-I3 20min	Xiaoxi Zhang(School of Science, China University of Geosciences (Beijing)) Effects of Trapped Energetic ions on the 2/1 Tearing Mode and Fishbone-like Mode
MF1-9-O1 15min	Kunihiro Ogawa(National Institute for Fusion Science) Experimental study of MHD instability effect on MeV ion confinement in KSTAR
MF1-9-O2 15min	Tomoya Kawazu(Department of Fundamental Energy, Graduate School of Energy Science, Kyoto University) Effects of magnetic field geometry and beta dependence on trapped electron mode turbulent transport in tokamak plasmas.
MF1-9-O4 15min	Masato Matsuoka(Nagoya University) Experimental observation of local reduction of gradient in energy spectrum of energetic particles interacting with MHD bursts
MF1-9-O5 15min	Helen Kaang(Korea Institute of Fusion Energy (KFE)) The effects of magnetic shear and plasma temperature gradients on intrinsic rotation generation via parity changes in global electromagnetic ITG modes

MF2 Sessions

MF2 (Magnetic Fusion plasma : Edge): Young-chul GHIM (Chair, KR), Eun-Nam BANG (Vice-Chair, KR), Rui Ding (Vice-Chair, CN), Soo-hyun Son (KR), Hyungho LEE (KR), Choongki SUNG (KR), Chi-shung YIP (CN), Byron Peterson(JP), Kobayashi Masahiro (JP), George Wilkie(US), Didier Mazon (FR), Ting Long (CN), Kazuaki Hanada (JP)

MF2-1 Overview and highlights on edge plasmas from various devices [Chair: Young-chul Ghim] 14:00-16:10, Sep. 22 [410]

MF2-1-I1 20min	Jonathan Gaspar(IUSTI Laboratory) Overview of long pulse, high fluence and high heat flux operation in WEST full tungsten environment
MF2-1-I2 20min	Jack Lovell(Oak Ridge National Laboratory) Highlights from the third experiment campaign of MAST Upgrade
MF2-1-I3 20min	Dorothea Gradic(Max-Planck-Institut für Plasmaphysik) Development of long-pulse detached plasmas in the Wendelstein 7-X stellarator
MF2-1-I4 20min	Sebastijan Brezinsek(Forschungszentrum Jülich) Plasma-Wall Interactions Studies in support of the new ITER baseline
MF2-1-I5 20min	Qingquan Yang(Institute of Plasma Physics, Chinese Academy of Sciences) Recent Advances in Small ELM Regimes: Highlights from EAST Tokamak
MF2-1-O1 15min	Florian Koechl(ITER Organization) Integrated time-dependent core-edge-SOL modelling of ITER SRO plasma scenarios

MF2-2 Modelling on edge plasma [Chair: Jack Lovell] 16:30-18:40, Sep. 22 [410]

MF2-2-I1 20min	Dieter Boeyaert(University of Wisconsin-Madison) Particle exhaust studies in non-resonant divertors using EMC3-EIRENE
MF2-2-I2 20min	Sales De Oliveira Diego(IRFM - CEA Cadarache) 3D numerical modeling of power exhaust and W migration in WEST plasma taking into account the impact of realistic wall and magnetic geometry
MF2-2-I3 20min	Manuel Scotto D'Abusco(Princeton Plasma Physics Laboratory (PPPL)) Predicting 3D heat fluxes of non-axisymmetric plasmas in SPARC tokamak with the HEAT code
MF2-2-I4 20min	Makoto Oya(Kyushu university) Evaluation study of fuel retention in plasma-facing walls of JA DEMO reactor
MF2-2-I5 20min	Chaofeng Sang(Dalian University of Technology) Simulation of first wall erosion and high-Z impurity transport in EAST tokamak Boundary
MF2-2-O1 15min	Alexander Knieps(Forschungszentrum Juelich GmbH) Exploring improved PFC heat load distributions on Wendelstein 7-X using multi-objective optimization
MF2-2-O2 15min	Chase Hargrove(The Pennsylvania State University) The Synergistic Effects of Plasma and Heat Loads on Dispersion-Strengthened Tungsten in DIII-D

MF2-3 Effects of neutrals and impurities on edge plasmas [Chair: Dmitry Rudakov] 14:00-16:10, Sep. 23 [410]

MF2-3-I1 20min	George Wilkie(Princeton Plasma Physics Laboratory) Neutral recycling studies with advanced tooling
MF2-3-I2 20min	Yulin Zhou(Southwestern Institute of Physics) Study of neutrals and impurity transport effects on divertor detachment
MF2-3-I3 20min	Santanu Banerjee(Princeton Plasma Physics Laboratory) Role of edge neutrals in the low-recycling regime in achieving steady state flat temperature profiles and exciting tearing mode activity in LTX-β
MF2-3-I4 20min	Thomas Bosman(DIFFER) X-point radiator control and its dynamics in ASDEX Upgrade and JET deuterium–tritium discharges
MF2-3-O1 15min	Jingchun Li(Shenzhen University) Coupling of Geodesic Acoustic Modes and Resonant Magnetic Perturbations in Fusion Plasmas
MF2-3-O2 15min	Yiren Zhu(Southwestern Institute of Physics) Exploring the pathway to the Super H-mode on HL-3

MF2-4 Physics of edge plasmas [Chair: George Wilkie] 16:30-18:40, Sep. 23 [410]

MF2-4-I1 20min	Wei Xu(Institute of Energy, Hefei Comprehensive National Science Center) The effects of powder real-time injection for achieving long-pulse H-mode discharges in EAST
MF2-4-I2 20min	Dmitry Rudakov(University of California, San Diego) Quantification of runaway electron impact in the lower divertor of DIII-D tokamak using an instrumented sacrificial probe
MF2-4-I3 20min	Jinheng Zhao(Institute of Plasma Physics, Chinese Academy of Sciences) Interpretive modeling of Grassy ELM transport in the scrape-off layer and the influence on divertor tungsten erosion
MF2-4-I4 20min	Kyungtak Lim(Nanyang Technological University (NTU)) Effects of negative triangularity on SOL plasma turbulence
MF2-4-I5 20min	Jaehyun Lee(Korea Institute of Fusion Energy (KFE)) Characterization of Pedestal Turbulence and Its Role in ELM Dynamics in KSTAR Plasmas
MF2-4-O1 15min	Zikai Huang(Tsinghua University) Energy Transfer and Spectral Evolution Induced by Parametric Decay Instability During the Injection of Lower Hybrid Waves

MF2-10 Alternative divertors [Chair: Thomas Bosman] 16:30-18:40, Sep. 23 [404]

MF2-10-I1 20min	Bob Kool(DIFFER) Alternative Divertor Configurations improve power exhaust control
MF2-10-I2 20min	Massimo Carpita(SPC - EPFL) Assessment of alternative divertor configurations in TCV via experiments and interpretative SOLPS-ITER modelling
MF2-10-I3 20min	Ryuya Ikezoe(Research Institute for Applied Mechanics, Kyushu University) A new approach to solve divertor heat and particle issues – RF plugging using a toroidally localized electrodes –
MF2-10-I4 20min	Dennis Boyle(Princeton Plasma Physics Laboratory) Key steps toward low-recycling, liquid lithium fusion devices in LTX- β
MF2-10-O1 20min	Fabio Federici(ORNL) Effect of inner leg configuration on detachment in MAST-U

MF2-5 MHD and RMP effects on edge plasmas [Chair: Kyungtak LIM] 14:00-16:10, Sep. 24 [410]

MF2-5-I1 20min	Jekil Lee(Korea Institute of Fusion Energy) Title: Observation of symmetry-breaking by RMP-induced edge kink-like modes in KSTAR and their effects on density pump-out
MF2-5-I2 20min	Neng Zhang(Southwestern Institute of Physics) Linear and quasi-linear toroidal modeling of resonant magnetic perturbations during ELM mitigation in HL-3 tokamak
MF2-5-I3 20min	Jian Xu(Dalian University of Technology) Deep learning based plasma response models to 3D external magnetic field perturbations in EAST
MF2-5-I4 20min	Xinliang Xu(Southwest institutes of Physics) Advancing Pedestal Stability Prediction Through Integrated Equilibrium and ReSISTIVE MHD Modeling
MF2-5-I5 20min	Guoliang Xiao(southwestern institute of physics) Advancements in SMBI Technology for Fusion Reactor Fueling Framework: AI - Driven Innovations and Physical Insights
MF2-5-O1 15min	Shengbo Zhao(Institute of Plasma Physics, Chinese Academy of Sciences) Plasma Disruption Mitigation Features Using MGI and SPI on the EAST Device
MF2-5-O2 15min	Li Li(Chinese Academy of Sciences Institute of Plasma Physics) Effects on characteristics of plasma disruption mitigation using shattered pellet injection on EAST

MF2-7 Wall conditioning [Chair: Nicola Lonigro] 14:00-16:10, Sep. 25 [410]

MF2-7-I1 20min	Jeongwon Lee(Korea Institute of Fusion Energy) Poloidal field configuration effect to electron cyclotron wall cleaning in KSTAR
MF2-7-I2 20min	Karl Krieger(Max-Planck-Institute for Plasma Physics) Efficiency of glow discharge boronisation in ASDEX Upgrade and WEST
MF2-7-I3	Florian Effenberg(Princeton Plasma Physics Laboratory)

20min	Real-time boron injection for plasma-facing component conditioning, tungsten source control, and implications for ITER
MF2-7-I4 20min	Shota Abe(Princeton Plasma Physics Laboratory) Deuterium retention and removal of boron powder to estimate tritium inventory in advanced fusion reactors

MF2-8 PWI and power exhaustion [Chair: Byron Peterson] 16:30-18:40, Sep. 25 [410]

MF2-8-I1 20min	Leonid Zakharov(LiWFusion) From tokamaks to toga device with lithium plasma environment and eliminated PSI
MF2-8-I2 20min	Qinghu Yang(Huazhong University of Science and Technology) The construction and experiment results of high-field-side divertor target biasing system (HDTB) on J-TEXT
MF2-8-I3 20min	Choongki Sung(Korea Advanced Institute of Science and Technology) Development of a Scrape Off Layer Plasma Simulator using a magnetic mirror device in KAIST (KAIMIR)
MF2-8-I4 20min	Jonathan Menard(Princeton Plasma Physics Laboratory) Physics design of a Spherical Tokamak Advanced Reactor (STAR)
MF2-8-I5 20min	Nicola Lonigro(United Kingdom Atomic Energy Authority) Improving exhaust performance with total flux expansion and the strongly baffled X-point target divertor on MAST-U
MF2-8-I6 20min	Andres Cathey(Max Planck IPP Garching) Fully integrated 3D nonlinear time-dependent modelling of pedestal and scrape-off layer in the JOEREK code

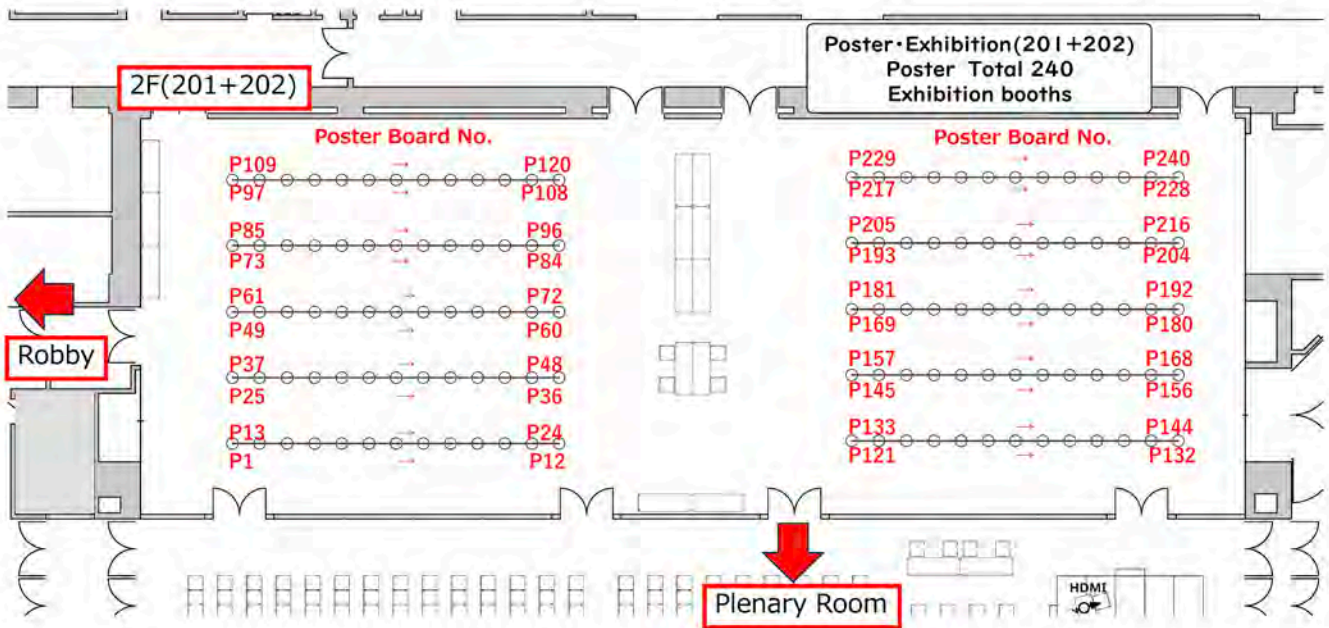
MF2-9 Diagnostics on edge regions [Chair: Choongkin Sung] 14:00-16:10, Sep. 26 [410]

MF2-9-I1 20min	Yoshihiko Nagashima(RIAM, Kyushu University) Development of a Limiter-like Langmuir Probe System for the QUEST All-Metal Device
MF2-9-I2 20min	Seungmin Bong(KAIST) Newly designed Langmuir probe system at the tungsten lower divertors in KSTAR
MF2-9-O1 15min	Chen Zhang(Dalian University of Technology) Simulation and experimental study of separatrix reconstruction by visible light in EAST
MF2-9-O2 15min	Zhan-Hong Lin(Dalian University of Technology, China & Institute of Plasma Physics, Chinese Academy of Sciences) Synthetic diagnostic of INPA passive signal in EAST
MF2-9-O3 15min	Johan Buermans(LPP-ERM/KMS) Cross-diagnostic calibration of the density measurements in TOMAS

[Poster Session]

Poster Session will be held on Sep. 22 (Monday) afternoon to Sep. 25 (Thursday) afternoon 14:00-18:40 at the room 201&202 (2nd floor) beside plenary session room. Poster board size is 841mm(width) x 1189mm(vertical). We will prepare push pins or velcro tape to set your posters on the poster board. Please set your poster during lunch break and keep it till 18:40 at the poster board with your poster number, and remove the poster before 19:00. Presenter should be in front of poster during core time in principle. Poster-only presenters should display their posters for whole 4 days. Additional poster presenters (oral + poster) can display their posters on days indicated by ○.

Poster Board Layout : Please check your poster number (ex. CD-P1) and Poster Board No.(P-49) in the poster program, and display your poster on the appropriate board.



Poster prize will be selected among pure posters (~136) and oral+poster (~88) [Total: 224]. Posters from Plenary+poster and Invited+poster will be excluded from the selection, this time. Chair of poster prize selection committee is Prof. Linghua Wang (PKU) and she will form selection committee and select winner slightly more than 10%. All winners will receive certificates. Springer will donate 19 books as gift to winners. Committee will decide who will get.

Elsevier student poster prize will be given to two winners among nominated candidates. Chair and vice chair of selection committee are Peter Yoon and Francesco Porcelli. Winner will receive certificate and cash prize of 500USD.

CD-P CD poster core time 16:30-18:40, Sep. 24 [201+202]		22	23	24	25	Poster Board No.
CD-P1	Riki Matsui(Kyushu University) Development of a numerical code for analyzing the propagation characteristics of fluctuations in fusion edge plasmas	○	○	○	○	P49
CD-P2	Chuang Ren(University of Rochester) Ion-electron temperature equilibration in magnetized collisionless shocks	-	-	○	-	P98
CD-P3	Chang Kai Chai(School of Physical and Mathematical Sciences, Nanyang Technological University) Transition from electrostatic to electromagnetic instabilities in magnetised plasmas	-	-	○	-	P99
CD-P6	Huang Jingcheng(NTU) Extracting stochastic model for predator-prey dynamic of turbulence and zonal flow with limited data	-	-	○	-	P102
CD-P7	Yi Zhang(Southwestern Institute of Physics) Impact of resonant magnetic perturbation on L-H transition dynamics in HL-2A and HL-3 tokamaks	-	-	○	-	P103
CD-P15	Haomin Sun(Ecole Polytechnique Federale de Lausanne (EPFL), Swiss Plasma Center (SPC)) Reducing turbulent transport in tokamaks by combining intrinsic rotation and the low momentum diffusivity regime	-	-	○	-	P109

CD-P16	Justin Ball(Swiss Plasma Center, EPFL) Intrinsic momentum and current drive by almost-rational surfaces in tokamaks	-	-	○	-	P110
------------------------	--	---	---	---	---	------

F-P F Poster core time 14:00-16:10, Sep. 25 [201+202]		22	23	24	25	Poster Board No.
F-P2	Shusen Gao(Hiroshima University) Spatiotemporal Emission Spectra from Laser-Produced Tin Plasma in a Hydrogen gas Atmosphere	○	○	○	○	P121
F-P3	Ab Rauoof Wani(Indian Institute of Technology Jammu) Viscoelastic turbulence in strongly coupled plasmas	○	○	○	○	P122
F-P4	Mitsuyoshi Yagyu(Notre Dame Seishin University) On the effect of the magnetic compressibility in microtearing turbulence	○	○	○	○	P123
F-P5	Mizuki Tanaka(the University of Tokyo) Experimental Study of the Influence of External Inflow Drive on Energy Conversion Rate in Guide Field Reconnection	○	○	○	○	P124
F-P6	Shohgo Okazaki(The University of Tokyo) Primary Results of Multi-filter Soft X-Ray Tomography during Counter-Helicity Spheromak Merging	○	○	○	○	P125
F-P7	Jun-Zhong Wen(Department of Physics and Center for Complex Systems, National Central University) Percolation of defect and hopping clusters in the melting transition of two-dimensional Yukawa solids	○	○	○	○	P126
F-P9	Chang Liu(Harbin Institute of Technology) Study on the coherent structure of drift wave turbulence by eigenmode method	○	○	○	○	P128
F-P10	Shinjiro Takeda(The University of Tokyo) High Energy Electron Measurement in Tokamak Merging Experiments	○	○	○	○	P129
F-P12	Shota Ito(University of Tokyo) PIC Simulation Study of Relaxation Phenomena in Counter-helicity Merging	○	○	○	○	P131
F-P13	Shabbir Ahmad Khan(National Centre for Physics, QAU Campus) Kinetic full wave analysis of EC wave mode conversion by integral operator method	○	○	○	○	P132
F-P14	Minglun Tian(School of Physics, Huazhong University of Science and Technology) Two-dimensional PIC/MCC modeling of inductively coupled plasma: a benchmark study in the GEC configuration	○	○	○	○	P133
F-P15	Koji Kikuchi(Institute of Science Tokyo) Reconsideration of unified electron temperature scale via power-law scaling using nonextensive statistical mechanics	○	○	○	○	P134
F-P16	Yuto Ikeda(Kyushu University) Analysis of plasma turbulence transition phenomena using multipoint correlation analysis	○	○	○	○	P135
F-P17	Riku Ureshino(Kyushu University) Investigation of Nonlinear Dynamics Between Density Gradient and Low Frequency Fluctuation in a Linear Magnetized Plasma	○	○	○	○	P136
F-P18	Seungho Lee(Seoul National University) Investigation of Radial Electric Field Effects on Global Neoclassical Transport and Neoclassical Viscosity Torque in Three-Dimensional Magnetic fields	○	○	○	○	P137
F-P19	Takamasa Ogata(Department of Interdisciplinary Engineering, School of Engineering, Kyushu University) Comparative Study of Ion and Electron saturation Currents for Density Fluctuation Measurements in Linear Magnetized Plasmas	○	○	○	○	P138
F-P20	Gengxian Li(Max Planck Institute for Plasma Physics, Garching) Gyrokinetic electromagnetic simulation of single poloidal harmonic instability	○	○	○	○	P139
F-P23	Ningfei Chen(Max-Planck Institute for Plasma Physics) Drift wave soliton formation via zonal flow generation and implication on staircase formation	-	-	-	○	P39
F-P24	Koki Yoshikawa(Department of Physics, Nagoya University) Spatial structure of ETG turbulence-driven effective diffusion and its relations with the trapped electron mode instability	-	-	-	○	P40
F-P25	Masanori Nunami(National Institute for Fusion Science) A comprehensive map of micro-instabilities in multi-species plasmas	-	-	-	○	P41
F-P26	Jawon Jo(Division of Semiconductor Engineering, Myongji University) MD simulations for oscillatory behavior of non-Maxwellian fluid moments in a magnetized plasma	-	-	-	○	P42
F-P29	Muni Zhou(Dartmouth College) Magnetogenesis in collisionless plasma	-	-	-	○	P61

E-P30	Chiara Marchetto(ISC-CNR and Politecnico di Torino) Magnetic reconnection in the presence of magnetic chaos: effects on secondary instability via 3D simulations	-	-	-	○	P62
E-P34	Andreas Bierwage(QST) Long-lived density spikes in laser-driven Coulomb explosion folds	-	-	-	○	P66
E-P35	Raffael Düll(M2P2, Aix-Marseille Université) Electromagnetic turbulence simulations in edge plasma with the SOLEDGE3X code	-	-	-	○	P67
E-P36	Fabien Widmer(Max Planck Institute for Plasma Physics) First-Principle Gyrokinetic Simulations of Turbulence-Driven Magnetic Islands in Tokamaks	-	-	-	○	P68
PL-P2	Mahendra Verma(Indian Institute of Technology Kanpur) Kolmogorov-like turbulence phenomenology in magnetohydrodynamics	-	-	-	○	P72

B1-P B1 poster core time 16:30-18:40, Sep. 25 [201+202]		22	23	24	25	Poster Board No.
B1-P1	Tatsushi Yano(Osaka Metropolitan University) Unsteady evaluation method of heat flux on plasma-irradiated targets from long-discharge plasmas and accurate consideration of cooling effects	○	○	○	○	P140
B1-P2	Yao Wang(Harbin Institute of Technology) Research of plasma multi-color imaging diagnosis based on metasurface	○	○	○	○	P141
B1-P3	Hayato Kawazome(National Institute of Technology (KOSEN), Kagawa college) Numerical study of He I 1s1S-2p1P radiation trapping in high-ambient gas pressure thermal arc plasma	○	○	○	○	P142
B1-P4	Tomohide Suetsugu(Kyushu University) Measurement of spatial structures of fluctuations during the startup of tokamak plasmas in the PLATO tokamak by HIBP	○	○	○	○	P143
B1-P5	Ryusuke Hamada(Hiroshima University) Self-absorption of He resonance line outside of the plasma	○	○	○	○	P144
B1-P7	Hong Wang(school of Physics, Anshan Normal University) Simulation of device in low density plasma: From spacecraft to dust particle	○	○	○	○	P145
B1-P8	Woongil Ji(Korea Advanced Institute of Science and Technology) Electrostatic PIC simulation of low temperature plasma in cusp-shaped magnetic field for deuterium ion source	○	○	○	○	P146
B1-P9	Harune Sekido(Institute for Space-Earth Environmental Research, Nagoya University) Correction of Numerical Errors at Current Sources in Explicit Finite-Difference Time-Domain Method for Plasma Kinetic Simulations	○	○	○	○	P147
B1-P10	Xinyu Ge(ISEE) Suppressing numerical errors in higher-order Finite-Difference Time-Domain methods	○	○	○	○	P148
B1-P12	Jin Wook Kang(KAIST) Calculation of two-dimensional electromagnetic fields in a Cylindrical Inductively Coupled Plasma	○	○	○	○	P150
B1-P13	Emi Narita(Kyoto University) Empirical transport modeling for the edge region of H-mode plasmas for integrated simulations	○	○	○	○	P151
B1-P14	Yuita Shirasawa(NTT Space Environment and Energy Laboratories) Identification of reduced-order models by sparse regression with oracle property	○	○	○	○	P152
B1-P15	Kun-Han Lee(National Center for High-performance Computing, NIAR) Development of Digital Twin for Taiwan's First Spherical Tokamak (FIRST): Simulation, Diagnostics, and Integration Framework	○	○	○	○	P153
B1-P16	Suho Kim(Department of Physics and Photon Science, GIST) Correction of Beam Deflection Effects in Interferometry for Near-critical Density Plasma Diagnostics	○	○	○	○	P154
B1-P17	Pengze Xiao(Huazhong University of Science and Technology) Numerical Simulation of Thermally Sustained Micro Discharge at Atmospheric Pressure by PIC/MCC-DSMC Coupled Method	○	○	○	○	P155
B1-P18	Hua-Sheng Xie(ENN Science and Technology Development Co., Ltd) Efficient Approaches to Solve Plasma Dispersion Relations with Arbitrary Distributions	○	○	○	○	P156
B1-P19	Zijie Liu(Institute of Energy, Hefei Comprehensive National Science Center) Plasma electron density profile tomography for EAST based on integrated data analysis	○	○	○	○	P189
B1-P21	Donato Di Matteo(KYUSHU UNIVERSITY) Heat and particle fluxes estimation method involving measurements of radial electric field by using ball-pen probe array in linear magnetized plasmas	○	○	○	○	P190
B1-P22	Alexandre Bambina(Seikei University) Application of graph theory for argon plasma chemistry with excited level transitions.	○	○	○	○	P191

B1-P23	Yen-Lin Chen(National Tsing Hua University Department of Engineering and System Science) Development of Ka-band Reflectometer and Integrated Circuit using GaN process for plasma diagnostics	○	○	○	○	P192
B1-P24	Wataru Kikuchi(Institute of Science Tokyo) Spectroscopic Measurement of Atmospheric-pressure Non-equilibrium Ar Plasma Based on Line Spectra under Constraints of Undetected Level Densities	○	○	○	○	P193
B1-P25	Shui Hu(National Yang Ming Chiao Tung University) Broadband MMIC designs for millimeter-wave plasma diagnostics	○	○	○	○	P194
B1-P26	Andrea Loreti(United Kingdom Atomic Energy Authority (UKAEA)) Foundation Models for Structured Knowledge and Predictive Modelling in Nuclear Fusion Research	○	○	○	○	P195
B1-P27	Xingpeng Wang(School of Physics, Huazhong University of Science and Technology) Two-Dimensional PIC/MCC Simulation of EUV-Induced Argon Plasma: Cumulative Effects under Repetitive Pulsed Irradiation	○	○	○	○	P196
B1-P28	Seongbin Hong(Pohang University of Science and Technology) Ion Cyclotron Emission Driven by Helium Beam Injection as a Surrogate for Alpha Particle Diagnostics in LHD	○	○	○	○	P197
B1-P29	Sunjung Kim(Department of Astronomy and Space Science, Kyung Hee University) GPU-Accelerated, Energy-Conserving Full and Hybrid PIC Simulations for Space and Astrophysical Plasmas	○	○	○	○	P198
B1-P30	Ryu Ichikawa(Kyoto University) Data-Assimilation-Based Tokamak Plasma Prediction System	○	○	○	○	P199
B1-P31	Lorenzo Zanisi(UKAEA) Neural surrogates of core turbulent transport	○	○	○	○	P200
B1-P32	Longyong Liao(The Graduate University for Advanced Studies, SOKENDAI) A study of deuterium-deuterium fusion-born triton burnup in various plasma currents at EAST tokamak	○	○	○	○	P201
B1-P33	Tzu-Chi Liu(Institute of Space and Plasma Sciences, National Cheng Kung University) Development of Electron Cyclotron/Bernstein Emission Radiometer for FIRST Spherical Tokamak	○	○	○	○	P202
B1-P34	Shengyu Wang(The University of Tokyo) Investigation of Hard X-Ray emission in Lower Hybrid Wave Experiments on the TST-2 Spherical Tokamak	-	-	-	○	P82
B1-P35	Seongmin Choi(Korea Advanced Institute of Science and Technology) Development of a Virtual FVC System and Forward Model for Shattered Pellet Injection Tracking in KSTAR	-	-	-	○	P83
B1-P36	Ying Hao Matthew Liang(Agency for Science, Technology and Research (A*STAR)) Conceptual design of a Doppler Backscattering diagnostic for the EXL-50U spherical tokamak	-	-	-	○	P84
B1-P37	Valerian Hall-Chen(FEAT SRTT, A*STAR) DBS measurements of turbulence spectra in Bouncing Ball DIII-D plasmas	-	-	-	○	P85
B1-P38	Sumin Yi(Korea Institute of Fusion Energy) Turbulence simulation with a bounce-averaged kinetic electron model in general tokamak geometry	-	-	-	○	P86
B1-P39	Rui Costa(UKAEA) Towards visualizing multi-dimensional gyrokinetic simulation data	-	-	-	○	P87
B1-P45	Yuan-Yao Chang(Institute of Space and Plasma Sciences, National Cheng Kung University) Development of calibration method of electron cyclotron emission radiometer for optically-thin magnetized plasma	-	-	-	○	P91
B1-P46	Deepika Behmani(Indian Institute of Technology Kanpur) Flow field dynamics in an atmospheric pressure plasma jet: A tale of turbulence and transition	-	-	-	○	P92
B1-P48	Shimin Yu(Huazhong University of Science and Technology & Ruhr University Bochum) Impedance matching of pulse modulated capacitively coupled plasmas	-	-	-	○	P94
B1-P50	Kotaro Fujii(Nagoya University) Causal relationship from multivariate time series and dominant scale for ITG turbulent transport	-	-	-	○	P96
B1-P52	Chengshuo Shen(Huazhong University of Science and Technology) Transferable and interpretable disruption prediction based on physics-guided machine learning	-	-	-	○	P98
B1-P54	Seiji Zenitani(Space Research Institute, Austrian Academy of Sciences) High-accuracy particle integrators for particle-in-cell (PIC) simulation	-	-	-	○	P100
B1-P55	Naoki Tamura(Max-Planck Institute for Plasma Physics) Plasma Diagnostics and Control with Tracer Encapsulated Solid Pellet (TESPEL) in Magnetically Confined High-Temperature Plasmas	-	-	-	○	P101
B1-P56	Jia Han(University of California Los Angeles) X Ray Diagnostics for high energy electrons using Tungsten Pellets	-	-	-	○	P102
B1-P57	Shiyang Liu(Zhejiang University) Development of the Gyrokinetic-MHD Hybrid Code cuGMEC and Its Nonlinear Simulations of Alpha Particle-driven Alfvén Eigenmodes in ITER	-	-	-	○	P103
B1-P59	Nikolay Britun(Center for Low-temperature plasma sciences) Emission and absorption-based plasma diagnostic techniques for number density detection: Basics and Examples	-	-	-	○	P105

B1-P60	Nitesh Bhatia(United Kingdom Atomic Energy Authority) Visualising Fusion: Connecting Data, Design, and Discovery	-	-	-	○	P106
B1-P63	Aaro Järvinen(VTT) Towards scalable large-scale model validation with data science	-	-	-	○	P109
B1-P64	Adam Kit(VTT, Technical Research Centre of Finland) On Physics-Data Generative Modeling for Core-Edge Integration in Tokamaks	-	-	-	○	P110
B1-P65	Daniel Zuhayra(Christian-Albrechts-University Kiel DE) A combination sensor for the diagnostic of particle and energy fluxes in process plasmas	○	○	○	○	P203
PL-P6	Brendan Lyons(General Atomics) Pulse Design and Digital Twin Capabilities of the FUSE Integrated-Modeling Framework	-	-	-	○	P111

B2-P B2 poster core time 16:30-18:40, Sep. 25 [201+202]		22	23	24	25	Poster Board No.
B2-P1	Yu Takehiro(Hiroshima university) Amplitude of spontaneous emission of 112-nm Al ³⁺ ion 3s-3p transition in neon-like aluminum laser plasma	○	○	○	○	P204
B2-P2	Kiyoyuki Yambe(Niigata University) Multi-Layer Flow Structure Formed by Interaction of Plasma and Neutral Gas	○	○	○	○	P205
B2-P3	Yuto Kambara(Hiroshima University) Development of plasma window for electron beam welding in atmosphere	○	○	○	○	P206
B2-P4	Kosei Iguchi(Kyushu University) Evaluation of Charge of Microparticles in Plasma Using Optical Tweezers	○	○	○	○	P207
B2-P5	Rupali Paul(Centre of Plasma Physics, Institute for Plasma Research) Stochastic dust charging in multicomponent plasmas: Impact of energetic electron populations on charge fluctuations	○	○	○	○	P208
B2-P6	Niranjan Gogoi(Department of Physics, Tezpur University) Theoretical Study of Dust Correlation Effects on Dust Density Waves in Presence of Streaming Magnetized Background Ions	○	○	○	○	P209
B2-P7	Sumit Singha(Centre of Plasma Physics Institute for Plasma Research) Investigation of helium plasma stream dynamics across transverse magnetic field in Pulsed Plasma Accelerator	○	○	○	○	P210
B2-P8	Pragya Joshi(Indian Institute of Technology Delhi) Influence of a Floating Chamber Wall on Plasma Diffusion in a Filament-Heated DC Discharge	○	○	○	○	P211
B2-P9	Huiwon Chung(Seoul National University) Experimental Measurement of Nonlinear Energy Transfer in PANTA	○	○	○	○	P212
B2-P11	Donatella Fiorucci(ENEA, Research Center Frascati) Photo-neutralization-based NBI systems for Nuclear Fusion Power Plants	-	-	-	○	P114
B2-P12	Wei-Shuo Lo(Department of Physics, National Central University) Dynamical behaviors of topological defects of thermal phonons in 2D dusty plasma crystals	○	○	○	○	P213
B2-P13	Aohua Mao(Harbin Institute of Technology) Structure characteristics of three-dimensional asymmetric magnetic reconnection in SPERF-AREX experiments	-	-	-	○	P115
B2-P14	Kenichi Nagaoka(National Institute for Fusion Science) Negative-ion-meniscus response to RF perturbation in an injector-scale negative-ion source	-	-	-	○	P116
B2-P15	Ramesh Narayanan(Indian Institute of Technology Delhi) Exploring the Potential of an ECR Source for Large-Area Hydrogen Negative Ion Production in Fusion Applications	-	-	-	○	P117
B2-P16	Sanat Kumar Tiwari(Indian Institute of Technology Jammu) Turbulence characteristics in dusty plasma	-	-	-	○	P118
B2-P17	Daiki Nishimura(National Institute for Fusion Science) Rotational movement analysis for cylindrical plasma images obtained with tomography	-	-	-	○	P119
PL-P4	Edward Thomas(Auburn University) Magnetization of electrons and ions and their influence on dusty plasmas	-	-	-	○	P120

A1-P Poster core time 14:00-16:10, Sep. 25 [201+202]		22	23	24	25	Poster Board No.
A1-P1	Masaharu Shiratani(Kyushu University) Kyushu University's Latest Initiatives in EUV Light Source Development for Semiconductor Technology	○	○	○	○	P214

A1-P2	Kazuaki Shimpo(Department of Physics and Electronics, Osaka Metropolitan University) Numerical Simulation of Methylene Blue Decomposition using a Microplasma Contactor	○	○	○	○	P215
A1-P3	Yuto Yonehara(department of electrical and electronic Engineering, meijo university) Effect of substrate on growth of nitrogen doped diamond film with plasma enhanced chemical vapor deposition	○	○	○	○	P216
A1-P4	Shumpei Ohara(Kyushu University) Effects of Precursor Gas Molecules on the Deposition Properties of Hydrogenated Amorphous Carbon Films by Plasma Chemical Vapor Deposition	○	○	○	○	P217
A1-P5	Kazuki Nagamine(Kyushu University) Effects on Film Properties Caused by He addition to Ar/C ₂ H ₂ PECVD	○	○	○	○	P218
A1-P6	Koji Kuroda(Department of Physics and Electronics, Osaka Metropolitan University) dV/dt Dependence of Characteristics of Surface-Launched Plasma Bullet - A Study up to 356 kV/μs using SiC MOS FETs-	○	○	○	○	P219
A1-P7	Shinjiro Ono(Kyushu University) Suppression of Compressive Stress in Hydrogenated Amorphous Carbon Films Using Carbon Nanoparticle-Embedded Sandwich Structures	○	○	○	○	P220
A1-P8	Manato Eri(Kyushu University) Analysis of hydrocarbon dissociation processes in CXHY+Ar plasma by quadrupole mass spectrometry	○	○	○	○	P221
A1-P9	Hyunil Benjamin Kim(Gwangju Institute of Science and Technology(GIST)) Enhancement of radical uniformity in CCP using a Rogowski electrode and spatial analysis via OES	○	○	○	○	P222
A1-P10	Wei Jiang(Huazhong Univeristy of Science and Technology) Multi-Solution Impedance Matching in Capacitively Coupled Plasma	○	○	○	○	P223
A1-P11	Heng Liu(Beihang University) Mechanism of constriction in a high frequency pulsed welding arc plasma	○	○	○	○	P224
A1-P12	Shakhzod Tojiev(Institute of Material Sciences, Academy of Sciences) Enhancement of Photocatalytic Activity of ZnO Nanoparticles via Non-Thermal Plasma	○	○	○	○	P225
A1-P13	Si Li(School of Physics, Dalian University of Technology) Vibration and rotation temperature distributions optimization of microwave plasma jet in atmospheric pressure	○	○	○	○	P226
A1-P14	Duksun Han(Korea Institute of fusion energy) Lithium isotopes abundance analysis in liquid phase by laser-produced vapor for laser-induced breakdown spectroscopy	○	○	○	○	P227
A1-P15	Hakseung Lee(SKKU (Sungkyunkwan University)) Low Temperature Etching of Silicon Oxide and Silicon Nitride using Ar/CF ₄ Plasma	○	○	○	○	P228
A1-P16	Kanata Okamoto(Department of Electrical and Electronic Engineering, Meijo University) Plasma reduction of iron phthalocyanine-supported graphene oxide	○	○	○	○	P229
A1-P17	Takeo Nagata(Department of Electrical and Electronic Engineering, Meijo University) Low-temperature deposition of IGZO using high-power impulse magnetron sputtering	○	○	○	○	P230
A1-P18	Tomoki Iwata(Department of Electrical and Electrical Engineering, Meijo University) Incorporation of nitrogen to gallium oxide film on mist chemical vapor deposition	○	○	○	○	P231
A1-P19	Tsukasa Irie(Department of Electrical and Electronic Engineering, Meijo University) Effect of plasma treatment on iron azaphthalocyanine-supported carbon materials	○	○	○	○	P232
A1-P20	Daiki Horikawa(Meijo University) Formation of high electron mobility indium oxide film by high-power impulse magnetron sputtering	○	○	○	○	P233
A1-P21	Arunsinh Bakulsinh Zala(NSSE, National Institute of Education, Nanyang Technological University) α-Alumina Synthesis at Room Temperature Using a Plasma Focus Device for Fusion Blankets	-	-	-	○	P161
A1-P22	Monika Verma(Delhi Technological University) Effect of Plasma Process Parameters on the Electrical Characteristics of Dual-Gate Graphene Field-Effect Transistors	-	-	-	○	P162
A1-P23	Abhijit Mishra(Indian Institute of Technology Jodhpur) Variations in Discharge Characteristics of Bipolar Pulsed Cold Atmospheric Plasma Jets Induced by Liquid Conductivity	-	-	-	○	P163
A1-P24	Shikha Pandey(Indian Institute of Technology Jodhpur) Environmental Friendly Wastewater Treatment through Non-Thermal Plasma: Mechanistic Insights into Dye Degradation	-	-	-	○	P164
A1-P25	Soon Han Bryan Teo(Australian National University) Impact of alloying and exposure temperature on He retention and He thermal dynamics in W-based materials	-	-	-	○	P165
A1-P26	Hiroharu Kawasaki(National Institute of Technology, Sasebo College) Trial of elemental gradient functional thin films preparation by sputtering with mixed powder targets III	-	-	-	○	P166
A1-P27	Tamiko Ohshima(Nagasaki University)	-	-	-	○	P167

	Single cathode combinatorial deposition using powder target by sputtering process					
A1-P29	Masanori Shinohara(Fukuoka University) Direct graphene growth on Si surface with high power pulsed plasma	-	-	-	○	P169
A1-P31	Deepak Prasad Subedi(Dept. of Physics, School of Science, Kathmandu University) Atmospheric Pressure Plasma and its Application for Surface Treatment of Materials	-	-	-	○	P171
A1-P33	Tzu-Ying Lin(Department of Materials Science and Engineering, National Tsing Hua University) Plasma-Assisted Surface Modification on TiNb2O7 Anode for High-Rate Lithium-Ion Battery	-	-	-	○	P173
A1-P34	Toru Sasaki(Nagaoka University of Technology) Curing Process of Electrically Conductive Adhesives and Formation of Resistant Coatings using Atmospheric Pressure Plasma	-	-	-	○	P174
PL-P5	Ramses Snoeckx(Empa, Swiss Federal Laboratories for Materials Science and Technology) Electrons, kinetics, and entropy: unlocking the full potential of plasma-based gas conversion	-	-	-	○	P175

A2-P A2 poster core time 14:00-16:10, Sep. 25 [201+202]		22	23	24	25	Poster Board No.
A2-P1	Syon Bhattacharjee(Delhi Public School Kalyanpur, Kanpur) Cold atmospheric pressure micro-plasma jet in a transverse magnetic field : effect of field induced plasma water activation on seedling growth	○	○	○	○	P234
A2-P2	Heping Shi(Kyushu University) Visualization of Two-Dimensional Colorimetric Reactions of Reactive Oxygen Species Using KI-Starch Reagent	○	○	○	○	P235
A2-P3	Zita Nauciene(Vytautas Magnus University) The effects of different gas phase composition low-pressure plasma treatment of red clover (Trifolium pratense) seeds on seed germination and morphological parameters of seedlings	○	○	○	○	P236
A2-P5	Yang Xiao(School of Physics, Dalian University of Technology) Research on Plasma Modified Fluoroether based Anesthesia Exhaust Gas Adsorption Materials	○	○	○	○	P238
A2-P6	Hibiki Otake(Kyushu University) Development of a Method for CO Production from Air Using Ionic Liquids and Low-Temperature Plasma	○	○	○	○	P239
A2-P7	So Takamine(Kyushu University) Evaluation of rice seed coat penetration characteristics of plasma-generated long-lived reactive oxygen species using the KI Starch method	○	○	○	○	P240
A2-P8	Sushma Jangra(Phd Scholar, Indian Institute of Technology Jodhpur) Optimization of Cold Atmospheric Pressure Plasma for Enhanced Nitrogen Species Generation in Soil to Improve Fertility and Wheat Crop Yield	-	-	-	○	P176
A2-P9	Ritesh Mishra(Indian Institute of Technology Jodhpur) Cold Plasma-Assisted Pectin Extraction from Dragon Fruit Peels: A Novel Approach to Enhance Film Mechanical Properties	-	-	-	○	P177
A2-P11	Santosh Dhungana(Tribhuvan University) Plasma-activated water (PAW) from a customized power system: generation, analysis, and plant growth enhancement	-	-	-	○	P179
A2-P13	Duc Ba Nguyen(Duy Tan University) Role of liquid dielectric and its application for developing a dielectric barrier discharge configuration for cold plasma jet generation	-	-	-	○	P181
A2-P14	Hirofumi Kurita(Toyohashi University of Technology) Enhancement of cell death by combination of cold atmospheric plasma irradiation and pulsed electric field application	-	-	-	○	P182
A2-P15	Masafumi Jinno(Ehime University) Electrical Equivalent Circuit Network-Based Study of Programmed Cell Death Induced by Plasma-Injected Electric Energy	-	-	-	○	P183
A2-P16	Bhargavi Sharma(Department of Biotechnology, Delhi Technological University) Dielectric Modulated Triple Metal- Plasma Assisted - Carbon Nanotube Field Effect Transistor (TM-PA-CNTFET) Biosensor for Detection of Various Biomolecules	-	-	-	○	P184
A2-P17	Jalaj Jain(Comisión Chilena de Energía Nuclear) Ultra high-dose rate X-ray pulses emitted from a kilojoule plasma focus device induce larger cancer cell deaths than the conventional X-ray irradiation: Preliminary single dose and fractionation studies	-	-	-	○	P185
A2-P18	Kazuo Shimizu(Shizuoka University) Application of Atmospheric Microplasma for Nose to Brain Drug Delivery	-	-	-	○	P186
A2-P19	Yoshihisa Ikeda(Ehime-University) Microplasma Stimuli for Efficient Molecular Introduction and Physiological Activation in Plants	-	-	-	○	P187

L1-P L1 poster core time 14:00-16:10, Sep. 23 [201+202]		22	23	24	25	Poster Board No.
L1-P1	Yuka Doke(The University of Tokyo) Experimental Study of Solar Flare Mechanism by Use of Torus Plasma Merging	○	○	○	○	P13
L1-P3	Zuolin Ma(School of Physics and Astronomy, Beijing Normal University) Impact Pressure Shaping Plasma Jets and Affected by High-metallicity	○	○	○	○	P15
L1-P4	Tatiana Pikuz(Osaka University) Investigation of the role of radial extrusion on the formation of high-aspect ratio nanocavities in condensed matter by XFEL	○	○	○	○	P16
L1-P5	Yuki Amano(ISAS/JAXA) A Laboratory plasma experiment for application to X-ray astronomy using a compact electron beam ion trap (EBIT)	○	○	-	-	P1
L1-P6	Po-Yu Chang(Institute of Space and Plasma Sciences, National Cheng Kung University) Experimental Study of the Criteria for Rod Explosion in Pulsed Power Discharges	○	○	-	-	P2
L1-P7	Taranjot Singh(Dav University) Second harmonic generation of high power Cosh-gaussian laser beam in Cold Quantum Plasma	○	○	-	-	P3
L1-P8	Qianlei Du(Key Laboratory for Laser Plasmas (MOE) and School of Physics and Astronomy, Shanghai Jiao Tong University) Machine Learning Optimization of Room-Temperature Target for Laser Inertial Fusion Energy	○	○	-	-	P4
L1-P9	Edna Rebeca Toro Garza(Stanford University) Observing the influence of atomic and nanoscale structure on the DC conductivity of warm dense matter	○	○	-	-	P5
L1-P10	Wei Liu(Laser Fusion Research Center, China Academy of Engineering Physics) Diagnostics of the electron temperature distribution of hot spot using a four-color quasi-monochromatic X-ray Kirkpatrick-Baez microscope	○	○	-	-	P6
L1-P11	Chiharu Nakatsuji(Institute of Laser Engineering, The University of Osaka) Effects of density scale-length on laser-plasma instabilities and hot-electron generation for shock-ignition laser fusion	○	○	-	-	P7
L1-P12	Mayuko Koga(Graduate School of Engineering, University of Hyogo) Development of Fuel Target Injection Systems for Fast Ignition	○	○	-	-	P8
L1-P13	Naoki Okuda(The University of Osaka) High-density plasma heating with non-local electrons accelerated at a steepened plasma surface formed by PW relativistic laser	○	○	-	-	P9
L1-P14	Hayato Yanagawa(The University of Osaka) Study on propagation characteristics of relativistic laser light in overcritical density plasma	○	○	-	-	P10
L1-P15	Yuji Takagi(ILE, Osaka Univ.) Relativistic electron production by stochastic laser-plasma interaction in sub-relativistic intensity regime	○	○	-	-	P11
L1-P17	Jieru Ren(Xi'an Jiaotong University) A robust method to generate brilliant electrons through laser interaction with NCD plasma converted from hohlraum radiation of foam target	○	○	-	-	P37

L2-P Poster core time 14:00-16:10, Sep. 23 [201+202]		22	23	24	25	Poster Board No.
L2-P1	Amany Gouda(Plasma Physics Department, Egyptian Atomic Energy Authority) The Density Variation Effect on Increasing the Acceleration Rate of the Charged Particle in the Plasma Physics	○	○	○	○	P17
L2-P3	Fengyu Sun(Shanghai Institute of Optics and Fine Mechanics) Acceleration of an isolated Attosecond Electron and Generation of Radiation Source driven by an ultraintense Spatiotemporal Vortex Laser	○	○	○	○	P19
L2-P4	Seongjin Jeon(Gwangju Institute of Science and Technology) Improved Terahertz Detection Based on Terahertz Field-Induced Second Harmonic Generation	○	○	○	○	P20
L2-P5	Shih-Chi Kao(National Central University) Comprehensive Diagnosis of Laser-Plasma Interaction in Capillary Waveguides for High-Harmonic Generation	○	○	-	-	P38
L2-P6	Amar Pal(Indian Institute of Technology Hyderabad) High Harmonic Generation using Plasma Wedge Target	○	○	-	-	P39
L2-P8	John Farmer(Max-Planck-Institute for Physics) AWAKE: harnessing plasma instabilities for high-gradient acceleration	○	○	-	-	P40
L2-P11	Ming Zeng(Institute of High Energy Physics, Chinese Academy of Sciences) Production of small energy spread and high charge beams in laser wakefield accelerators	○	○	-	-	P42
L2-P12	Xinzhe Zhu(School of Physics and Astronomy, Shanghai Jiao Tong University) High energy electron acceleration and mid-infrared radiation in curved plasma channel	○	○	-	-	P43

SG-P Poster core time 16:30-18:40, Sep. 24 [201+202]		22	23	24	25	Poster BoardNo.
SG-P1	Kyung Sun Park(CBNU) Global MHD simulation of magnetospheric dynamics: comparison between the terrestrial and Jovian planets	☐	☐	☐	☐	P21
SG-P2	Masatomi Iizawa(Technische Universität Braunschweig) Magnetic helicity observations in the inner heliosphere	☐	☐	☐	☐	P22
SG-P3	Tohru Shimizu(RCSCE, Ehime University) Linear Theory of Tearing Instability with the improved WKB approximation	☐	☐	☐	☐	P23
SG-P5	Mengmeng Sun(Harbin Institute of Technology) Acceleration and Phase-space Structure Formation of Cold Ions in Collisionless Reconnection	☐	☐	☐	☐	P25
SG-P6	Hui Zhang(Shandong University) Dayside Transient Phenomena and Their Impact on the Magnetosphere and Ionosphere	☐	☐	☐	☐	P26
SG-P7	Johan Sharma(Indian Institute Of Technology Hyderabad) Electron scale current sheets in kinetic Alfvén wave turbulence	-	☐	☐	-	P61
SG-P8	Tomo-Hiko Watanabe(Department of Physics, Nagoya University) Gyrokinetic simulation of auroral arc growth in a dipole field	-	☐	☐	-	P62
SG-P9	Ruolin Wang(the University of Tokyo) High-Frequency Wave Generation at Earth's Bow Shock: Insights from Shock-Driven Electron Acceleration	-	☐	☐	-	P63
SG-P10	Sebastián Saldivia(University of Chile) The effect of plasma expansion on the dispersion properties of MHD waves	-	☐	☐	-	P64
SG-P11	Yoshiharu Omura(Research Institute for Sustainable Humanosphere, Kyoto University) Nonlinear Wave Growth of Whistler-mode Hiss Emissions in the Plasmasphere	-	☐	☐	-	P65
SG-P12	Li Li(China University of Geosciences (Beijing)) Modulation of Lower Hybrid and ECH Waves by Ultra-low Frequency (ULF) Waves in the Earth's Magnetosphere	-	☐	☐	-	P66
SG-P16	Kshama Tiwari(Banaras Hindu University) Multi-instrument study on the Great American Solar Eclipse	-	☐	☐	-	P70
SG-P17	Fumiko Otsuka(Kyushu University) Time series analysis of electron acceleration in quasi-perpendicular shock transition regions	-	☐	☐	-	P71
SG-P18	Jinghuan Li(Swedish Institute of Space Physics) Direct Evidence of Nonlinear Cyclotron Resonance in the Solar Wind	-	☐	☐	-	P72
SG-P19	Tsubasa Kotani(Kyoto University) Harmonic structure of lower hybrid and upper hybrid waves driven by energetic particles	-	☐	☐	-	P82
SG-P20	Ryoya Sakata(Research Center for Advanced Science and Technology, The University of Tokyo) Effects of a planetary magnetic field on ion escape from ancient Mars based on 3D global multifluid MHD simulations	-	☐	☐	-	P83
SG-P21	Saba Gondal(University of Engineering and Technology Lahore) Relaxed magnetic structures in the Saturn's ring	-	☐	☐	-	P84

SA-P Poster core time 16:30-18:40, Sep. 24 [201+202]		22	23	24	25	Poster Board No.
SA-P2	Pallab Boro(School Of Physical Sciences, Jawaharlal Nehru University, New Delhi) Magnetohydrodynamic (MHD) waves driven by cosmic rays in magnetized self-gravitating dusty molecular clouds	☐	☐	☐	☐	P27
SA-P3	Ravinder Ravinder Bhambhu(School of Physical Sciences, Jawaharlal Nehru University) Wave modes and Gravitational instability in Degenerate Quantum Plasmas including Radiation Pressure and Viscoelastic Effects	☐	☐	☐	☐	P28
SA-P4	Jyoti Turi(Visva-Bharati University) Dynamics and modulation of cosmic ray modified magnetosonic waves in a galactic gaseous rotating plasma	☐	☐	☐	☐	P29
SA-P5	Hayato Saguchi(Department of Geophysics, Graduate School of Science, Tohoku University) The radial evolution of parametric decay instability incorporating temperature anisotropy in the near-sun solar wind	☐	☐	☐	☐	P30
SA-P6	Daichi Kashizaki(Tohoku University) Expanding MRI Heating Models for Stratified Accretion Disks to Include Parker Instability	☐	☐	☐	☐	P31
SA-P7	Alejandro Zamorano (presented by Munoz)(Universidad de Chile) SOLAR FLARE MODEL OVER A REWIRED MAGNETIC FIELD NETWORK	☐	☐	☐	☐	P32
SA-P9	Shunshun Cao(Peking University) Insights into Pulsar Magnetospheres Using FAST Single Pulses	☐	☐	☐	☐	P33
SA-P10	Jun Dai(Kyoto University) End-view Observations of Large-amplitude Longitudinal Oscillations of a Quiescent Prominence	☐	☐	☐	☐	P34

SA-P11	Ayu Ramada Sukarmadji(Institut de Recherche en Astrophysique et Planétologie) A comparative study of coronal microjet numerical modelling under the influence of p-modes	○	○	○	○	P35
SA-P12	Xiaowei Zhou(Purple Mountain Observatory, Chinese Academy of Sciences) Small-scale Inhomogeneity Effects on Coherent Solar Radio Emission	○	○	○	○	P36
SA-P13	Mehdi Yousefzadeh(Shandong University) Kinetic Modeling of Coherent Emission in Coronal Loops: An Innovative Three-Step Numerical Approach	-	○	○	-	P86
SA-P18	Shota Yokoyama(Chiba University) Cosmic-ray Driven Resistive Heating of the Intergalactic Medium in the Early Universe and Its Implications for 21-cm Line Observations	-	○	○	-	P91
SA-P21	Nobumitsu Yokoi(University of Tokyo) Novel effects of kinetic and cross helicities in solar- and astro-physics	-	○	○	-	P92
SA-P23	Jeffersson Agudelo Rueda(Northumbria University) Characterising Sub-Grid-Scale Effects on Plasma Turbulence in the Earth's Magnetosheath: Contribution to Generalised Ohm's Law	-	○	○	-	P94

MF1-P Poster core time 16:30-18:40, Sep. 24 [201+202]		22	23	24	25	Poster Board No.
MF1-P1	Zhongyong Chen(Huazhong University of Science and Technology) Optimization of Electromagnetic Pellet Injector for disruption mitigation on J-TEXT tokamak	○	○	○	○	P50
MF1-P2	Muto Takahashi(Department of Quantum Science and Energy Engineering, Tohoku University) Numerical Exploration into Feasibility of Current Drive by Synchrotron Radiation in Tokamaks	○	○	○	○	P51
MF1-P3	Jingang Chen(Kyushu University Interdisciplinary Graduate School of Engineering Sciences) Evaluation of a Diagnostic Neutral Beam Injector in the spherical tokamak QUEST	○	○	○	○	P52
MF1-P4	Keiichiro Egashira(Department of Applied Quantum Physics and Nuclear Engineering, Kyushu University) Observation of knock-on tail formation using neutral particle analyzer in LHD deuterium plasma	○	○	○	○	P53
MF1-P5	Tetsutarou Oishi(Tohoku University) X-ray spectroscopy of tungsten impurity ions in magnetically confined high-temperature plasmas and its application to ion and electron temperature measurements	○	○	○	○	P54
MF1-P6	Shin Nishimura(National Institute for Fusion Science) Non-ambipolar Radial Transport of NB-produced Fast Ions including Charge Exchange Loss	○	○	○	○	P55
MF1-P7	Zhoujun Yang(Huazhong University of Science and Technology) Development of Enhanced Scattering diagnostic on J-TEXT	○	○	○	○	P56
MF1-P8	Kazutoshi Yasui(Nagoya University) Determination of multi-variable control gain based on response characteristics and control tests in JA-DEMO plasma	○	○	○	○	P57
MF1-P9	Taiyo Sakai(Nagoya University) Effects of magnetic field geometry on microinstabilities in an advanced stellarator	○	○	○	○	P58
MF1-P11	Tong Liu(Dalian University of Technology) Facilitation of NTM control via ECCD due to current condensation effect in RMS tokamak plasmas	○	○	○	○	P60
MF1-P12	Man Li(School of physics, Harbin Institute of Technology) Simulation study of tearing mode instabilities after pellet injection in Tokamak device	○	○	○	○	P73
MF1-P13	Jiangyue Han(The University of Tokyo) Kinetic effects of thermal ions on internal kink modes in tokamak plasmas	○	○	○	○	P74
MF1-P14	Kosuke Tahara(Department of Nuclear Engineering, Kyoto University) Influence of Electrostatic and Magnetic Fluctuations on ECH Supra-Thermal Electron Transport and Toroidal Torque in Tokamak Plasma	○	○	○	○	P75
MF1-P16	Atsushi Fukuyama(Kyoto University) Kinetic full wave analysis in inhomogeneous plasmas using integral form of dielectric tensor	-	○	○	-	P114
MF1-P17	Trivesh Kant(Institute for Plasma Research) Axisymmetric studies of Avalanche generation and Termination mechanisms for Runaway Electrons in ITER	-	○	○	-	P115
MF1-P18	Kensho Takenaka(Graduate School of Energy Science, Kyoto University) Analysis of Beta Dependence of Microinstabilities in Realistic Configurations Using Global Gyrokinetic Simulations	-	○	○	-	P116
MF1-P19	Tomoya Kawazu(Graduate School of Energy Science, Kyoto University) Effects of magnetic field geometry and beta dependence on trapped electron mode turbulent transport in tokamak plasmas.	-	○	○	-	P117
MF1-P21	Masato Matsuoka(Nagoya University) Experimental observation of local reduction of gradient in energy spectrum of energetic particles interacting with MHD bursts	-	○	○	-	P118

MF1-P22	Helen Kaang(Korea Institute of Fusion Energy (KFE)) The effects of magnetic shear and plasma temperature gradients on intrinsic rotation generation via parity changes in global electromagnetic ITG modes	-	○	○	-	P119
MF1-P23	Alejandro Banon Navarro(Max-Planck-Institute for Plasma Physics) Exploring Turbulence in Stellarators: Advances in Global Gyrokinetic Simulations	-	○	○	-	P157
MF1-P24	Hongxuan Zhu(Zhejiang University) Global eigenmode structure of linear drift-wave instabilities on flux surfaces in stellarators	-	○	○	-	P158
MF1-P25	Xu Yang(Chongqing Technology and Business University) Optimized RMP spectrum design towards robust ELM control	-	○	○	-	P159
MF1-P26	Feng Wang(Dalian University of Technology) Application of Particle Orbit Tracking Model in Tokamak Buring Plasmas	-	○	○	-	P160
MF1-P27	Hiroshi Tanabe(Graduate school of frontier sciences, university of Tokyo) Application of reconnection heating for solenoid-free plasma startup in TS-6 and ST40	-	○	○	-	P161
MF1-P28	Stefano Gabriellini(UK Atomic Energy Authority (UKAEA), Culham Campus) Core transport simulations of plasma scenarios for JET and JT-60SA tokamaks: validation and predictions for future JT-60SA experiments	-	○	○	-	P162
MF1-P29	Shinichiro Kado(Kyoto University) Dynamic Evolution of Pellet Fueling from Ablation Cloud to Reheat Mode in Heliotron J	-	○	○	-	P163
MF1-P30	Ahmed Diallo(Princeton Plasma Physics Laboratory) Spin-Polarized Fuel for Enhanced Tritium Self-Sufficiency and Electric Power Output	-	○	○	-	P164
MF1-P31	Gabriele Merlo(Max Planck institute for Plasma Physics) Global gyrokinetic multiscale pedestal simulations with the GENE code	-	○	○	-	P165
MF1-P32	Toshiki Kinoshita(Kyushu university) Advances in Turbulence-Driven Transport Control for improved Plasma Confinement	-	○	○	-	P166
MF1-P33	Nengchao Wang(Huazhong University of Science and Technology) Electron internal transport barrier induced by NTM in the ECRH plasma on J-TEXT	-	○	○	-	P167
MF1-P34	Gianluca Pucella(ENEA, C.R. Frascati) Hybrid scenario at high beta with mild MHD activity on MAST-U	-	○	○	-	P168
MF1-P35	John Berkery(Princeton Plasma Physics Laboratory) Research Advancing the Physics of Spherical Tokamaks in Preparation for Operation of NSTX-U	-	○	○	-	P169
MF1-P36	Pan Li(Institute of Plasma Physics, Hefei Institutes of Physical Science, Chinese Academy of Sciences) Dynamics between energetic particles driven instabilities, lower frequency flow and turbulence on EAST	-	○	○	-	P170
PL-P1	Yasushi Ono(University of Tokyo) Magnetic Reconnection for Fusion Plasma Ignition and Current Drive	-	○	○	^	P171
PL-P3	Colin M Roach(UKAEA) Recent Progress in our Understanding of Electromagnetic Turbulence in a Conceptual Spherical Tokamak FPP (STEP)	-	○	○	-	P172

MF2-P Poster core time 16:30-18:40, Sep. 24 [201+202]		22	23	24	25	Poster Board No.
MF2-P1	Hao Man(Huazhong University of Science and Technology/ Kyoto University) First Detection of Electron Temperature Perturbation Caused by Beta-induced Alfvén Eigenmodes Associated with Locked Magnetic Islands	○	○	○	○	P76
MF2-P2	Kiwoo Lee(Korea institute of Fusion Energy, University of Science and Technology) Influence of Electron Temperature on Tungsten Impurity Behavior	○	○	○	○	P77
MF2-P3	Hisato Kizu(Nagoya University) Design and assembly of internal-coil divertor experimental device SOLEIL	○	○	○	○	P78
MF2-P4	Shiming Liu(Key Laboratory of Materials Modification by Laser, Ion, and Electron Beams (Ministry of Education), School of Physics, Dalian University of Technology) Depth profiling and thickness diagnosis of multilayer deposited samples using LPIR-LIBS technology	○	○	○	○	P79
MF2-P6	Florian Effenberg(Princeton Plasma Physics Laboratory) High-Z Wall Transition on DIII-D to Enable Fusion Pilot Plant-Relevant Research	○	○	○	○	P80
MF2-P7	Fabio Federici(ORNL) Effect of inner leg configuration on detachment in MAST-U	-	○	○	-	P173
MF2-P8	Florian Koechl(ITER Organization) Integrated time-dependent core-edge-SOL modelling of ITER SRO plasma scenarios	-	○	○	-	P174

MF2-P9	Zikai Huang(Tsinghua University) Energy Transfer and Spectral Evolution Induced by Parametric Decay Instability During the Injection of Lower Hybrid Waves	-	○	○	-	P175
MF2-P11	Santanu Banerjee(Princeton Plasma Physics Laboratory) Role of edge neutrals in the low-recycling regime in achieving steady state flat temperature profiles and exciting tearing mode activity in LTX-β	-	○	○	-	P176
MF2-P12	Thomas Bosman(DIFFER) X-point radiator control and its dynamics in ASDEX Upgrade and JET deuterium–tritium discharges	-	○	○	-	P177
MF2-P13	Jonathan Gaspar(IUSTI Laboratory) Overview of long pulse, high fluence and high heat flux operation in WEST full tungsten environment	-	○	○	-	P178
MF2-P14	Dieter Boeyaert(University of Wisconsin-Madison) Particle exhaust studies in non-resonant divertors using EMC3-EIRENE	-	○	○	-	P179
MF2-P15	Makoto Oya(Kyushu university) Evaluation study of fuel retention in plasma-facing walls of JA DEMO reactor	-	○	○	-	P180
MF2-P16	George Wilkie(Princeton Plasma Physics Laboratory) Neutral recycling studies with advanced tooling	-	○	○	-	P181
MF2-P17	Massimo Carpita(SPC - EPFL) Assessment of alternative divertor configurations in TCV via experiments and interpretative SOLPS-ITER modelling	-	○	○	-	P182
MF2-P18	Dennis Boyle(Princeton Plasma Physics Laboratory) Key steps toward low-recycling, liquid lithium fusion devices in LTX-β	-	○	○	-	P183
MF2-P19	Shota Abe(Princeton Plasma Physics Laboratory) An impurity powder dropper for boron wall conditioning and a material sampling probe for conditioning evaluation in the SMART tokamak	-	○	○	-	P184
MF2-P20	Leonid Zakharov(LiWFFusion) From tokamaks to toga device with lithium plasma environment and eliminated PSI	-	○	○	-	P185
MF2-P21	Qinghu Yang(Huazhong University of Science and Technology) The construction and experiment results of high-field-side divertor target biasing system (HDTB) on J-TEXT	-	○	○	-	P186
MF2-P22	Andres Cathey(Max Planck IPP Garching) Fully integrated 3D nonlinear time-dependent modelling of pedestal and scrape-off layer in the JOEKE code	-	○	○	-	P187
PL-P7	Felix Parra(Princeton Plasma Physics Laboratory) Finite gyro-radius and mean-free-path layers on tokamak walls	-	○	○	-	P188

[Satellite Meeting]

[1] Akira Hasegawa memorial symposium

Our distinguished professor Akira Hasegawa passed away on 22th June. Zensho Yoshida (The University of Tokyo) is organizing memorial symposium to celebrate his scientific achievements such as Kinetic Alfvén wave, Hasegawa-Mima equation, Dipole plasma confinement, Self-organization and formation of thermal barrier (Hasegawa-Wakatani equation), Optical Soliton.

AK-1 Kinetic AlfvénWave and Dipole [Chair: Zensho Yoshida] 9:30-12:00, Sep. 21 [410]

AK-1-I1 25min	Liu Chen(University of California, Irvine) Physics of Kinetic Alfvén Wave: History and Progresses
AK-1-I2 25min	Fulvio Zonca(Center for Nonlinear Plasma Science and ENEA C.R. Frascati) The role of kinetic Alfvén waves in burning plasma self-organization
AK-1-I3 25min	Troy Carter(Oak Ridge National Laboratory) Parametric Instabilities of Alfvén Waves in the Laboratory: Connecting Theory and Experiment on LAPD
AK-1-I4 25min	Zensho Yoshida(University of Tokyo) Dipole Confinement
AK-1-I5 25min	Mikhael Mauel(Columbia University) Remembering Akira Hasegawa at Columbia University: Building Dipoles for Physics and Fusion
AK-1-I6 25min	Alex Simpson(OpenStar Technologies) Tahi: Dipole confinement of fusion-relevant plasmas

AK-2 HM/HW equations, Zonal flow, simulation, Optical soliton [Chair: Liu Chen] 14:30-16:35, Sep. 21 [410]

AK-2-I1 25min	Zhihong Lin(University of California, Irvine) Zonal flows: from Hasegawa-Mima equation to gyrokinetic simulation
AK-2-I2 25min	Michio Yamada(Kyoto university) Hasegawa-Mima equations and Rossby waves in Geophysical Fluid Dynamics
AK-2-I3 25min	Jan Weiland(Lehigh University) Nonlinearities in magnetic confinement, ionospheric physics, and population explosion leading to profile resilience
AK-2-I4 25min	Katsunobu Nishihara(Institute of Laser Engineering, the University of Osaka) The dawn of plasma simulation and 60 years of memories with Professor Hasegawa
AK-2-I5 25min	Akihiro Maruta(The University of Osaka) Optical Solitons and Eigenvalue Communications

[2] Mini Workshop for Women in Plasma Physics (WIPP)

Mini Workshop for Women in Plasma Physics (WIPP) started from AAPS-DPP2023 and continued to AAPS-DPP2024. 2025 WIPP WS will be held during Lunch time 13:00-14:00 on Monday 22th and Tuesday 23rd of September 2025.

WIPP-1 WIPP WS [Chair: Anisa Qamar&T. Murphy] 13:05-14:05, Sep. 22 [203+204]

WIPP-I1 20min	Ya Zhang(Wuhan University) Challenges, Triumphs, and the Future of Women in Plasma Physics
WIPP-I2 20min	Farah Atour(Max Planck institute for Plasma Physics) From Engineering to Physics: A Personal Perspective on Interdisciplinary Research
WIPP-I3 20min	Giuseppina Nigro(the University of Rome Tor Vergata) A Winner Is a Dreamer Who Never Gives Up: Reflections on My Journey through Plasma Physics and Astrophysics

WIPP-2 WIPP WS [Chair: Anisa Qamar&T. Murphy] 13:05-14:05, Sep. 23 [203+204]

WIPP-I4 20min	Haruka Suzuki(Nagoya University) Women in STEM in Japan: Current Efforts and Challenges
WIPP-I5 20min	Anna Tenerani(University of Texas, Austin) A Journey of Purpose and Growth in Plasma Physics

List of Speakers



1. Farah Atour

Affiliation: Max Planck Institute for Plasma Physics, Germany

Talk Title: From Engineering to Physics: A Personal Perspective on Interdisciplinary Research

Abstract: In this talk, I'll share how my academic journey has evolved, from studying energy and electrical power engineering in Jordan to pursuing physics in Germany, beginning with experimental work and gradually transitioning into theoretical and modelling physics. At every stage, a persistent curiosity about the deeper 'why' behind scientific phenomena has guided my path. This drive has not only shaped my scientific journey but also deepened my appreciation for the hidden links between different areas of science. By sharing my story, I hope to inspire other women to stay curious, embrace change, and continue their path in science.



2. Anna Tenerani

Affiliation: The University of Texas at Austin, USA

Talk Title: A Journey of Purpose and Growth in Plasma Physics

Abstract: As a woman in a STEM field, I understand the challenges that women and individuals from other underrepresented groups encounter throughout their scientific careers. In this talk, I will share some of my personal experiences and the lessons I have learned along the way. I will discuss how finding a supportive environment and maintaining a clear focus on well-defined goals helped me overcome obstacles and strengthen my sense of belonging in the scientific community.



3. Giuseppina Nigro

Affiliation: Department of Physics, University of Rome Tor Vergata, Italy

Talk Title: A Winner Is a Dreamer Who Never Gives Up: Reflections on My Journey through Plasma Physics and Astrophysics

Abstract: In this talk, I reflect on my journey through plasma physics and astrophysics, tracing the motivations that led me into science, the challenges encountered, and the often-invisible forces like cognitive biases and societal norms that shape careers, especially for women. I share how adversity became a catalyst for growth, emphasizing the role of resilience, mentorship, and authenticity. By revisiting key moments in my path, I aim to inspire others with a message of courage, perseverance, and self-belief.



4. Professor Haruka Suzuki

Affiliation:Nagoya University, Japan

Talk Title: Women in STEM in Japan: Current Efforts and Challenges

Abstract: The underrepresentation of women in STEM (science, technology, engineering, and mathematics) fields in Japan remains a serious issue. Although there has been gradual progress over the past few decades, the percentage of female students and professionals in fields such as engineering, physics, and information science remains very low. In this lecture, we will provide an overview of the current situation of women in STEM fields in Japan based on recent statistical data. In addition to introducing national and institutional initiatives such as diversity promotion programs and outreach activities funded by the government, we will also focus on specific initiatives to promote gender equality at Nagoya University.



5. Professor Ya Zhang

Affiliation:School of Physics and Mechanics, Wuhan University of Technology, China

Talk Title: Challenges, Triumphs, and the Future of Women in Plasma Physics

Abstract: This talk traces my journey as a woman in plasma physics, from early academic training under esteemed mentors in China to a transformative postdoctoral experience in Belgium. It highlights the impact of supportive mentors, gender-balanced academic environments, and collaborative research on my growth. Drawing on experiences at Wuhan University of Technology and insights from mentoring PhD students, the talk emphasizes the importance of community, mentorship, and representation in fostering success and resilience for women in physics.

[3] Mini Symposium : Advancements in hydrogen boron fusion

This symposium covers the landscape of hydrogen-boron research with both magnetic confinement and laser-driven approaches.

Organizer : Dimitri Batani(University of Bordeaux), Martin Yuankai Peng(ENN Energy Technology Institute)

PB Advancements in hydrogen boron fusion [Chair: Dimitri Batani] 16:30-18:50, Sep. 24 [410]

PB-I1 20min	Yueng-Kay Martin Peng(ENN Science and Technology Development Corp., Ltd.) EXL-50U Experiments, Addressing Key Physics Issues for Future Spherical Torus Proton-Boron Reactors
PB-I2 20min	Kunihiro Ogawa(National Institute for Fusion Science) Demonstration of aneutronic p-11B reaction in a magnetic confinement device
PB-I4 20min	Yangchun Liu(Zhejiang University) Energize Hydrogen and Boron Ions via Beam-Driven Ion Bernstein Waves
PB-I5 20min	Yongtao Zhao(Xi'an Jiaotong University) Proton-boron nuclear reaction in plasma initiated by laser-accelerated protons both in pitcher-catcher and in-target scheme
PB-I6 20min	Dimitri Batani(University of Bordeaux) Progress on laser-driven experiments on Proton-Boron Fusion
PB-I7 20min	Dong Wu(Shanghai JiaoTong University) Quantum degenerate plasmas: particle-in-cell simulation method and the role to increase beam-target p-11B fusions

[4] Mini Symposium: Physics of matter and hydro processes in high energy density plasmas

Far from equilibrium dynamics are omnipresent in plasma processes in nature and technology at astrophysical and at atomic scales. Examples include plasma instabilities in the inertial confinement fusion, thermonuclear flashes in supernovae, coronal mass ejections in the Solar flares, and efficiency of plasma thrusters.

Organizer : Snezhana Abartzhi The University of Western Australia

HEDP-1 Physics of matter and hydro processes in high energy density plasmas [Chair: Hiroshi Azechi] 16:30-19:00, Sep. 24 [404]

HEDP-1-I1 30min	Ryunosuke Takizawa(Institute of Laser Engineering, Osaka University) Experimental Investigation of Fast Ignition Toward High-Efficiency Ignition
HEDP-1-I2 30min	Chihiro Matsuoka(Osaka Metropolitan University) A rotation-free vortex solution in special and general relativistic hydrodynamics
HEDP-1-I3 30min	Patrick Diamond(UC San Diego) How the Tail Wags the Dog: On Voids and the Physics of Edge-Core Coupling in Confined Plasmas
HEDP-1-I4 30min	Yasuhide Fukumoto(Institute of Mathematics for Industry, Kyushu University, Osaka Central Advanced Mathematical Institute) Nambu Bracket, isomagnetovortical perturbations and wave energy for compressible baroclinic MHD

[10] Prize and Award

10.1 2025 S. Chandrasekhar Prize

Aug 5, 2025

Association of Asia-Pacific Physical Societies (AAPPS)

Division of Plasma Physics (AAPPS-DPP)

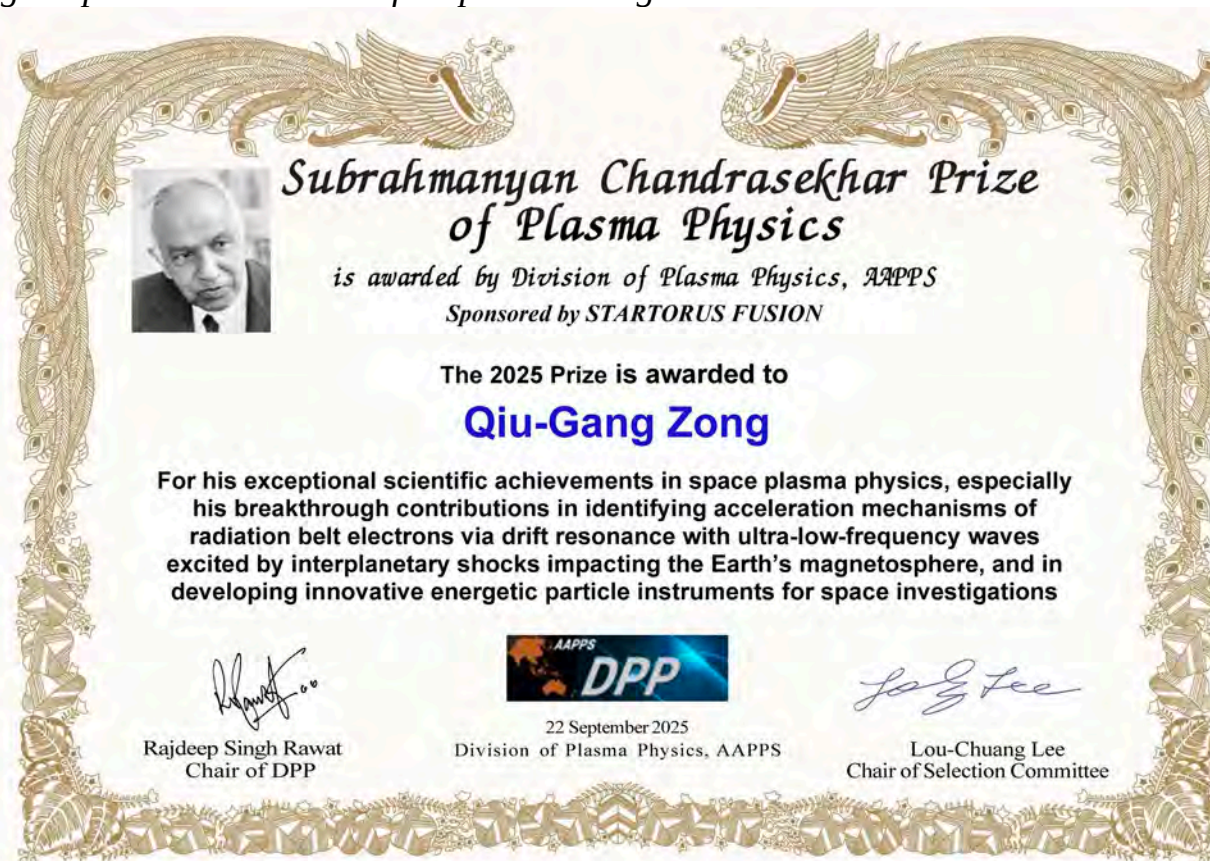
Subrahmanyan Chandrasekhar Prize of Plasma Physics

– Professor Qiu-Gang Zong is selected as 12th (2025) Laureate –

The Division of Plasma Physics (CEO: Mitsuru Kikuchi, Chair: Rajdeep Rawat) under the Association of Asia Pacific Physical Societies (President: Hyoungh Joon Choi) has selected Professor Qiu-Gang Zong of the Peking University/Macao University of Science and Technology as the 12th (2025) Laureate of S. Chandrasekhar Prize of Plasma Physics, which is awarded to scientist who have made seminal / pioneering contributions in the field of plasma physics.

Citation:

Qiu-Gang Zong : *For his exceptional scientific achievements in space plasma physics, especially his breakthrough contributions in identifying acceleration mechanisms of radiation belt electrons via drift resonance with ultra-low-frequency waves excited by interplanetary shocks impacting the Earth's magnetosphere, and in developing innovative energetic particle instruments for space investigations.*



Certificates of 2025 S. Chandrasekhar Prize of Plasma Physics

Certificate, medal and cash prize will be given at the 9th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2025) Sept. 21-26, 2025 at Fukuoka International Convention Center, Fukuoka, Japan.

Contact points :

AAPPS-DPP Association Inc. : Representative Director and CEO, Mitsuru Kikuchi, TEL: +81-80-1115-3482

AAPPS-DPP Homepage Address : <http://aappsdp.org/AAPPSDPPF/index.html>

AAPPS-DPP Plasma Innovation Prize

– Dr Keishi Sakamoto is selected as Seventh Laureate (2025) –

The Division of Plasma Physics (CEO: Mitsuru Kikuchi, Chair: Rajdeep S. Rawat) under the Association of Asia Pacific Physical Societies (President: Hyoung Joon Choi) selected Dr Keishi Sakamoto of Kyoto Fusioneering as the 7th Laureate of AAPPS-DPP Plasma Innovation Prize, which is awarded to scientists who have made seminal / pioneering contributions in the field of plasma applications, focusing on impacts on industry.

Citations:

Keishi Sakamoto: For his outstanding contributions to the development and commercialization of gyrotron and mm-wave facilities and demonstration for 1 MW gyrotron oscillation, electron spent beam energy recovery and diamond output window for delivering high-efficiency power of megawatt-class gyrotrons, that have helped elucidate fusion plasma devices; for commercialization of gyrotron for plasma heating and demonstration for a practical energy source, fusion energy.



AAPPS-DPP Innovation Prize

*is awarded by Division of Plasma Physics, AAPPS
for outstanding contribution to the field of Plasma Applications.
This award is partially sponsored by MDPI AG.
The 2025 Prize is awarded to*

Keishi Sakamoto

For his outstanding contributions to the development and commercialization of gyrotron and mm-wave facilities and demonstration for 1 MW gyrotron oscillation, electron spent beam energy recovery and diamond output window for delivering high-efficiency power of megawatt-class gyrotrons, that have helped elucidate fusion plasma devices; for commercialization of gyrotron for plasma heating and demonstration for a practical energy source, fusion energy.


Rajdeep S. Rawat
Chair of DPP


Se Youn Moon
Chair of Selection Committee

22 September, 2025

Certificates of 2025 Plasma Innovation Prize

Certificate, medal and cash prize will be given at the 9th Asia-Pacific Conference on Plasma Physics (AAPPS-DPP2025) Sept. 21-26, 2025 at Fukuoka International Congress Center.

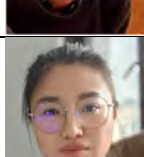
Contact point : AAPPS-DPP Association Inc. : Representative Director and CEO, Mitsuru Kikuchi,

TEL: +81- 80-1115-3482, AAPPS-DPP Homepage Address : <http://aappsdp.org/AAPPSDPPF/index.html>

10.3 2025 Young Researcher Award AAPS-DPP Young Researcher (U40) Award

AAPS-DPP recognizes young research scientists who made a significant research contribution(s) to plasma physics at AAPS affiliation not more than 40 by AAPS-DPP young researcher award since 2016. Past recipients (2016-2024) can be found at <http://aappsdpp.org/AAPPSDPPF/youngawardtable.html>

This year(2025), 22 candidates are nominated from AAPS-DPP members, who published papers in leading journals. Selection committee are formed and selected 7 winners including 1 female winner by rigorous evaluation.

U40 Winner	Field, Name and Affiliation	Citation
	[Fundamental Discipline] Gyungjin Choi KAIST	<i>For his fundamental contributions to the understanding of the role of zonal flow dynamics in fast ion induced plasma turbulence reduction and the vortex evolution inside a magnetic island</i>
	[Basic Plasma] Yangyang Fu Tsinghua University	<i>For his significant contributions to the understanding of partially ionized gas discharges at microscales and the development of scaling laws for low-temperature plasmas</i>
	[Applied Plasma] Atsushi Komuro AIST	<i>For his significant contributions to understanding of fundamental plasma physics questions, especially concerning low-temperature plasmas, energy exchange, and molecular relaxation mechanisms, in addition to translating his findings into practical technological advances</i>
	[Laser] Yanfei Li Xi'an Jiaotong University	<i>For her outstanding contributions to the laser-driven polarized sources, particularly the original breakthroughs in the theoretical model, numerical method and physical mechanisms</i>
	[Space/Geomagnetism] San Lu University of Science and Technology of China (USTC)	<i>For his significant contributions to understanding of magnetic reconnection, plasma transient processes/structures and their global impacts in geospace</i>
	[Solar/Astro] Feng Chen Nanjing University	<i>For his significant contributions in simulating the sunspot formation and coronal heating, which shed important light on our understanding of these solar phenomena</i>
	[Magnetic Fusion] Naoki Kenmochi National Institute for Fusion Science	<i>For his outstanding contributions to understanding of the mechanism of nonlocal transport through advanced multiscale diagnostic instrument in magnetic fusion</i>

2025 U40 Selection committee:

Chairman: Prof. Hyyong Suk (GIST, KR)

Members: Prof. Amita Das (Indian Institute of Technology Delhi, IN)

Prof. Arnab Rai Choudhuri (Indian Institute of Science-Bangalore, IN)

Prof. Tomo-Hiko Watanabe (Nagoya University, JP)

Prof. Kazunori Koga (Kyushu University, JP)

Prof. Linghua Wang (Peking University, CN)

Prof. Tsun-Hsu Chang (National Tsing Hua University, TW)

Prof. Xavier Garbet (Nanyang Technological University, SG)

Prof. Yunfeng Liang (Forschungszentrum Jülich GmbH, DE)

Prof. Dominique Escande (Aix-Marseille Université, FR)

10.4 2025 Kunioki Mima U30 Award

Kunioki Mima U30 Doctoral Scientist / Student Award

AAPPS-DPP recognizes exceptional U30 (under 30 years old) scientists/ students who have performed original work of outstanding scientific quality and achievement in the area of plasma physics with current institution or nationality is required to be in the AAPPS region since 2018 sponsored by IFE Forum. Past recipients (2018-2024) can be found at <http://aappsdpp.org/AAPPSPDPF/U30awardtable.html>

From this year (2025), award name is changed after Prof. Kunioki Mima (founder of U30 award). 24 candidates are nominated from AAPPS-DPP members, who published papers in leading journals. Selection committee are formed and selected 6 winners by rigorous evaluation.

Mima awardee	Field, Name, Affiliation	Citation
	[Laser] Xinzhe Zhu Shanghai Jiao Tong University	<i>For contributions to the experimental demonstration of intense laser guiding and wakefield acceleration in curved plasma channels</i>
	[Basic] Shaoyu Lu Soochow University	<i>For contributions to the understanding of various microscopic mechanisms of solid dusty plasmas, including internal friction, elasticity, and plasticity</i>
	[Applied] Vikas Rathore Walailak University/ Institute for Plasma Research	<i>For contributions to the physics, chemistry, and applications of non-thermal plasma interactions with liquids</i>
	[Space] Jing-Huan Li Swedish Institute of Space Physics/ Peking University	<i>For contributions to advancing our understanding of nonlinear wave-particle interactions through spacecraft observations</i>
	[Magnetic Fusion] Yeongsun Lee Seoul National University	<i>For contributions to our understanding of startup runaway electron generation in fusion plasmas and extending the Dreicer-mechanism to weakly-ionized plasmas</i>
	[Solar&Astro] Zihao Yang High Altitude Observatory-NCAR / Peking University	<i>For contributions to global-scale coronal magnetic field measurements, with significant implications for space weather forecasting and heliospheric magnetic field modeling</i>

2025 Kunioki Mima U30 award Selection committee:

Chairman: Prof. Sudeep Bhattacharjee (Indian Institute of Technology, Kampur, IN)

Vice chair: Prof. Kazuo Tanaka (the University of Osaka and IFE Forum, JP)

Members: Prof. Lin I (National Central University, TW)

Prof. Lu Wang (Huazhong University of Science and Technology, CN)

Dr. Won-Ha Ko (Korean Institute of Fusion Energy, KR)

Dr. Anthony Murphy (CSIRO, AU)

Prof. Nor Saidina Amin (Universiti Teknologi Malaysia, MY)

Prof. Troy Carter (ORNL/UCLA, US)

Prof. Hantao Ji (Princeton University, US)

[11] Publication to Reviews of Modern Plasma Physics

RMPP is review journal specialized to plasma physics. RMPP has now impact factor and CiteScore.

Impact Factor (2024) : 4.5

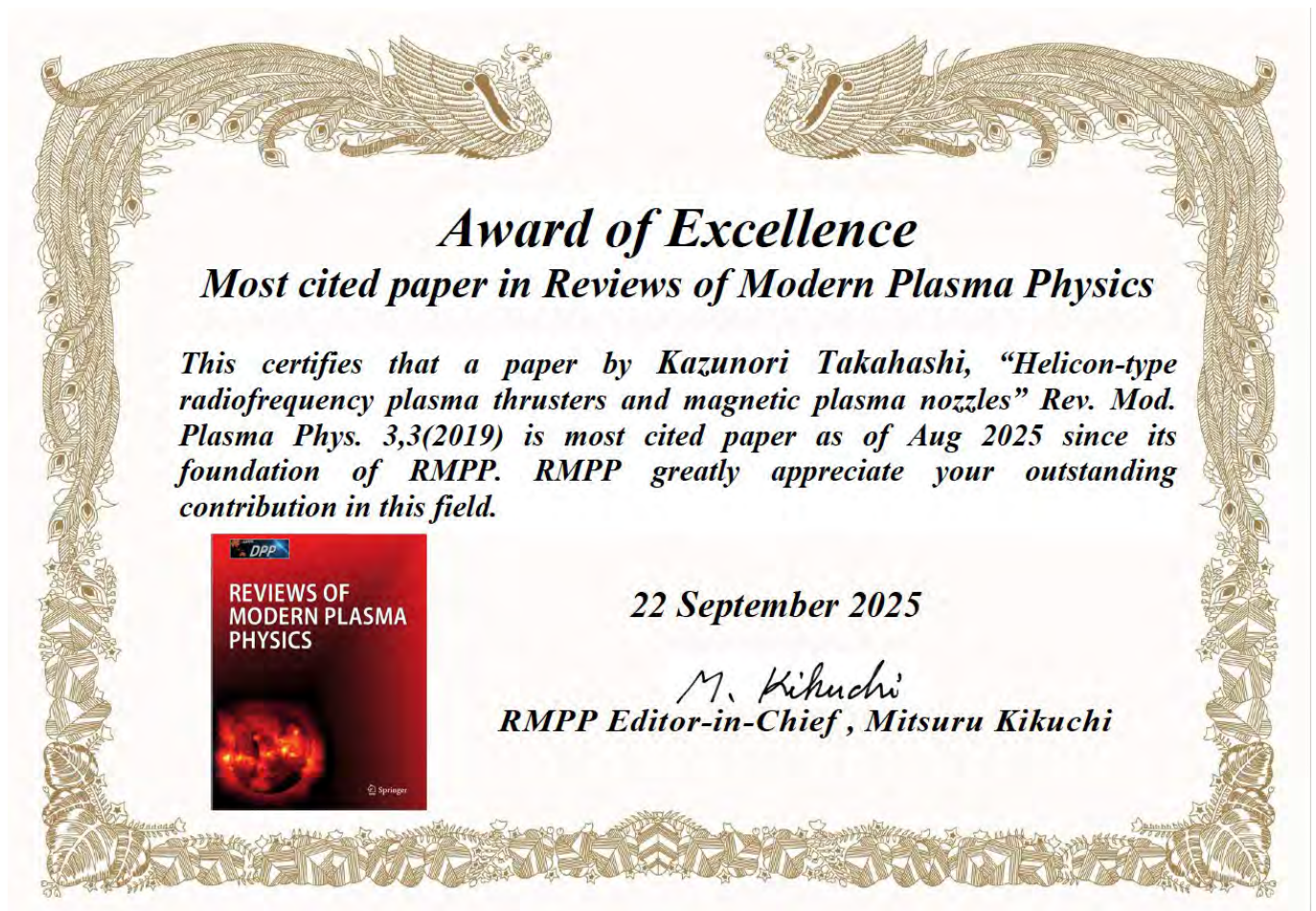
CiteScore (2024) : 7.0

Top 20 highly cited papers from foundation of this journal in 2017 are shown below. RMPP EIC will give a certificate to top cited author K. Takahashi during the opening session.

Top 20 Highly cited papers in RMPP [Aug 22, 2025]

#	1 st Author(year)		WoS*	Dimension	Google
1	K. Takahashi(2019)	Helicon-type radiofrequency plasma thrusters and magnetic plasma nozzles	158	197	264
2	QG Zong(2017)	The interaction of ultra-low-frequency pc3-5 waves with charged particles in Earth's magnetosphere	154	167	195
3	D Melrose(2017)	Coherent emission mechanisms in astrophysical plasmas	131	184	213
4	T Blackburn(2020)	Radiation reaction in electron-beam interactions with high-intensity lasers	100	114	165
5	Y Todo(2018)	Introduction to the interaction between energetic particles and Alfvén eigenmodes in toroidal plasmas	98	104	117
6	F Sahrhouli(2020)	Magnetohydrodynamic and kinetic scale turbulence in the near-Earth space plasmas: a (short) biased review	96	104	117
7	D Lev(2019)	Recent progress in research and development of hollow cathodes for electric propulsion	95	104	147
8	P Yoon(2017)	Kinetic instabilities in the solar wind driven by temperature anisotropies	95	117	120
9	D Moiseev(2018)	Recent progress in fast-ion diagnostics for magnetically confined plasmas	71	73	90
10	F Taccogna(2019)	Latest progress in Hall thrusters plasma modelling	70	78	121
11	T Tajima(2020)	Wakefield acceleration	68	81	117
12	H Tanaka(2017)	State of the art in medical applications using non-thermal atmospheric pressure plasma	67	107	144
13	A Hillier(2017)	The magnetic Rayleigh–Taylor instability in solar prominences	54	70	78
14	Z Zhang(2019)	A review of the characterization and optimization of ablative pulsed plasma thrusters	54	66	78
15	A Marinoni(2021)	A brief history of negative triangularity tokamak plasmas	50	61	81
16	A Dubinov(2018)	Above the weak nonlinearity: super-nonlinear waves in astrophysical and laboratory plasmas	47	50	58
17	S Ratynskaia(2022)	Dust and powder in fusion plasmas: recent developments in theory, modeling, and experiments	43	45	69
18	YY Fu(2023)	Similarity theory and scaling laws for low-temperature plasma discharges: a comprehensive review	37	40	45
19	P Kaw(2017)	Nonlinear laser–plasma interactions	37	51	80
20	M Hori(2022)	Radical-controlled plasma processes	32	44	50

*: Web of Science:Reviews of Modern Plasma Physics is indexed recently in the Web of Science (WoS). The citation counts for each article were retrieved by WoS's Cited Reference Search tool



AAPS-DPP encourage publication of plenary and invited speakers to our official journal Reviews of Modern Plasma Physics (RMPP) <https://www.springer.com/journal/41614>. Article types are general "Review", "Special Topics" focused on your/group works, "Tutorial" for introduction, "History", "Chandrasekhar Lecture", "Plasma Innovation Lecture". Contact RMPP Editor in Chief (M. Kikuchi) for any question. RMPP is a hybrid journal with subscription access and open access options. No Publishing fee is required for subscription option while open access option requires publication charge.

[12] Committee

1. International Organizing Committee (IOC)

IOC chair: Rajdeep S. Rawat (SG), IOC Co-chairs: Mitsuru Kikuchi (JP), Wonho Choe (KR), Yutong Li (CN), Anisa Qamar(PK)

Plasma societies: Kristel Crombé (EPS-DPP), Cameron Robinson Geddes (APS-DPP), Hyoung Joon Choi (AAPS),

DPP Prize Laureates: Don Melrose (AU), Lou-Chuang Lee (TW), Toshiaki Tajima (JP/US), Liu Chen (CN), Kazunari Shibata (JP), Hyeon Park (KR), Masaru Hori (JP), TS Hahm (KR), Arnab Rai Choudhuri (IN), Katsumi Ida (JP), Takayuki Watanabe (JP), Pisin Chen (TW), Miran Mozetic (SL),

CD: K.R. Sreenivasan (US/IN), Rahul Pandit (IN), Gregory Falkovich (IL), Michio Yamada (JP), Roald Sagdeev (US), Uriel Frisch (FR), Patrick Diamond (CN/US), Amita Das (IN), Yusuke Kosuga (JP), Eunjin Kim (UK), Kumiko Hori (JP), Alsu Sladkomedova (UK), Yasmin Andrew (UK), Ting Long (CN), Weixin Guo (CN), Kimitaka Itoh (JP), Shin-Ichi Takehiro (JP), Guilhem Dif-Pradalier (FR), Walter Gekelman (US), Steven Tobias (UK), Zhi-Bin Guo (CN), Susanna Cappello (IT),

Fundamental: Akira Hasegawa (JP), Chuan Sheng Liu (US), Zensho Yoshida (JP), Hideo Sugama (JP), Akihito Fujisawa (JP), Yasushi Ono (JP), Guoyong Fu (CN), Shaojie Wang (CN), Yasuhide Fukumoto (JP), Mahendra Verma (IN), F. Zonca (IT), Dominique Escande (FR), Xavier Leoncini (FR), Xavier Garbet (SG), George Tynan (US), Bruno Coppi (US), James Drake (US), Ding Li (CN), Phillip Morrison (US), Yasushi Todo (JP), Hui Li (US), Stanislav Boldyrev (US), Tomo-Hiko Watanabe (JP), Zhiyong Qiu (CN), Kiori Obuse (JP), Pablo Mininni (AR), William Heidbrink (US), Alain Brizard (US), Masaru Furukawa (JP), Nobuyuki Sawado (JP), Adelle Wright (US),

Basic: Lin I (TW), Rajaraman Ganesh (IN), Michel Bonitz (DE), Giovanni Manfredi (FR), Amar Misra (IN), Guru Ganguli (US), Prabal K. Chattopadhyay (IN), Suresh Sharma (IN), Troy Carter (US), Mike Mauel (US), Cary Forest (US), Shunjiro Shinohara (JP), Hiroshi Akatsuka (JP), Yaming Zou (CN), Yang Yang (CN), Kwo Ray Chu (TW), Yoshihiko Uesugi (JP), Katia Bazaka (AU), Shih-Hung Chen (TW), Avinash Khare (IN), Yasuhiro Idomura (JP), Maxime Lesur (FR), Ritoku Horiuchi (JP), Katsuji Ichiguchi (JP), Haruhiko Himura (JP), Frank Jenko (DE), Zhihong Lin (US), Frederick Skiff (US), Mark Koepke (US), Cormac Corr (AU), Heremba Bailing (IN), Sudeep Bhattacharjee (IN), A A Mamun (BG), Yan Feng (CN), Gert Brodin (SE), Kenji Tanaka (JP), Taiichi Shikama (JP), Takashi Kikuchi (JP), Holak Kim (KR), Yangyang Fu (CN), Choong-Seock Chang (US), Akira Ando (JP),

Kazunori Takahashi (JP), Takuma Yamada (JP), Fernando Haas (BR), Bhawani S. Sharma (IN), Izumi Murakami (JP), Shinichi Namba (JP), Masaki Nishiura (JP), A. Sen (IN), Anisa Qamar (PK), Hoa Truong Thi (VN), Mieko Toida (JP), Haewon Shin (KR), Jyotsna Sharma (IN), Swarnima Singh (IN), Evdokiya Kostadinova (US), Hui Jiang (CN), Zubia Kiran (PK), Saba Khalid (PK), Rozina Chaudhary (PK), Saba Gondal (PK), Nilam S. Pradham (NP),

Applied: Rikizo Hatakeyama (JP), Francis F. Chen (US), Yi-Kang Pu (CN), Masaharu Shiratani (JP), Masaya Shigeta (JP), Giichiro Uchida (JP), Seiji Samukawa (JP), Mineo Hiramatsu (JP), Koichi Takaki (JP), Satoshi Uchida (JP), Paul Kim Ho Chu (HK), Eun Ha Choi (KR), Se Youn Moon (KR), Michael Keidar (US), Felipe Iza (UK), Zdenko Machala (SK), Davide Mariotti (UK), Eric Johnson (FR), Heping Li (CN), Jinxiu Ma (CN), Qiang Chen (CN), Jung-Sik Yoon (KR), Hae June Lee (KR), Deepak Prasad Subedi (NP), Suresh Sharma (IN), Ashish Ganguli (IN), Bong Geun Hong (KR), Sudhir Kumar Nema (IN), Kenji Ishikawa (JP), Jing Zhang (CN), Anbang Sun (CN), Uwe Czarnetzki (DE), Uros Cvelbar (SL), Jianjun Shi (CN), Tony Murphy (AU), Remi Dussart (FR), Se Youn Moon (KR), Subroto Mukherjee (IN), Alexander Fridman (US), Xin Tu (UK), Tao Shao (CN), Hyun-Ha Kim (JP), Dae Hoon Lee (KR), Tsun-Hsu Chang (TW), Ta-Chin Wei (TW), Srikumar Ghorui (IN), Nilesh Vasa (IN), Ram Prakash (IN), Yasunori Tanaka (JP), Jan Benedikt (DE), Shuyan Xu (SG), Xiaolei Fan (UK), Young Dae Jung (KR), Tomohiro Nozaki (JP), Kunihiro Kamataki (JP), Shinji Kambara (JP), Toshiro Kaneko (JP), Shinya Kumagai (JP), Koichi Sasaki (JP), Xiaoxia Zhong (CN), Nor Aishah Saidina Amin (MY), Qiuyue Nie (CN), Marcella Bilek (AU), Haruka Suzuki (JP), Xian Meng (CN), Naho Itagaki (JP), Ya Zhang (CN), Sandugash Kodanova (KZ), Vida Mildaziene (LT), Ying Guo (CN), Young Kyoung Lee (KR),

Laser: Kunio Mima (JP), Xian Tu He (CN), Jie Zhang (CN), Chang Hee Nam (KR), Ryosuke Kodama (JP), G. Ravindra Kumar (IN), M. Krishnamurthy (IN), Zheng Ming Sheng (CN), Yoshiaki Kato (JP), Tetsuya Kawachi (JP), Chan Joshi (US), Wenjun Ma (CN), TY Tou (MY), E. Michael Campbell (US), Bruce Remington (US), Petros Tzeferacos (US), John Kline (US), Sylvie Jacquemot (EU), Robert Bingham (UK), Sergei Bulanov (EU), Vladimir Tikhonchuk (FR), Michel Koenig (FR), Dimitri Batani (FR), Kazuo Tanaka (JP), Yasuhiko Sentoku (JP), Youichi Sakawa (JP), Masakatsu Murakami (JP), Alexey Arefiev (US), Hideki Habara (JP), Akifumi Yogo (JP), Hitoki Yoneda (JP), Katsunobu Nishihara (JP), Gianluca Gregori (UK), Jian Zheng (CN), Wei Lu (CN), Ke Lan (CN), Baifei Shen (CN), Sudip Sengupta (IN), V. Ravishankar (IN), Hyyong Suk (KR), Shao-Wei Chou (TW), Ming-Wei Lin (TW), Mark Herrmann (US), Shinsuke Fujioka (JP), Hiroyuki Shiraga (JP), Min Chen (CN), Wei-Min Wang (CN), Yuji Fukuda (JP), Kitae Lee (KR), Ming Zeng (CN), Tong-Pu Yu, Yanfei Li (CN), Seong Shan Yap (MY), Nozomi Tanaka (JP), Natsumi Iwata (JP), Yanping Chen (CN), Qing Jia (CN), Yuxue Zhang (CN), Seong Hee Park (KR), Jianhui Bin (CN), MinSup Hur (KR), Snezhana Abazhi (AU), Chihiro Matsuo (JP), Tatiana Pikuz (JP), Mamiko Nishiuchi (JP),

Space/Geomag: Zuyin Pu (CN), Yasuhiro Omura (JP), Dong-Hun Lee (KR), Chuanyi Tu (CN), Xiaohua Deng (CN), Qiugang Zong (CN), Xiaogang Wang (CN), Lin Ni Hau (TW), Gurbax Lakhina (IN), Amar Kakad (IN), Satyvir Singh (IN), Kirit Makwana (IN), Dibyendu Nandi (IN), Iver Cairns (AU), Francesco Califano (IT), Keizo Fujimoto (CN), Daniel Baker (US), Kristopher Klein (US), Peter Yoon (CN), Gregory G. Howes (US), Jay R. Johnson (US), Robert Lysak (AU), Fouad Sahraoui (FR), David Ruffolo (TH), Uwe Motschmann (DE), Akira Kageyama (JP), Chi Wang (CN), Vladimir Kocharovskiy (RU), Yusuke Ebihara (JP), Xuening Bai (CN), Rongsheng Wang (CN), Meng Zhou (CN), Narayan P. Chhapagain (NP), Quanqi Shi (CN), Jiansen He (CN), Quanming Lu (CN), Yuto Katoh (JP), Naoki Terada (JP), Yoshizumi Miyoshi (JP), Seiji Zenitani (AT), Tohru Hada (JP), Akimasa Yoshikawa (JP), Rodrigo A. Miranda (BR), Abraham Chian (AU), Santiago Vagas-Dominguez (CO), Joerg Buchner (DE), Yu Lin (US), Nazish Rubab (PK), Maria Elena Innocenti (DE), Li Li (CN), Aohua Mao (CN), Tianran Sun (CN), Honghong Wu (CN), Rumi Nakamura (AT), Mahalingam Balaram Dhanya (IN), Adriane Marques de Souza Franco (BR), Kaiti Wang (TW), Laura Fernanda Morales (AR), Kaiti Wang (TW), Hyesung Kang (KR), Kanako Seki (JP), Sadia Zaheer (PK), Laila Zafar Kahlon (PK), Kyung Sun Park (KR), Marina V. Stepanova (CL),

Solar/Astro: Jingxiu Wang (CN), Masahiro Hoshino (JP), Jongchul Chae (KR), De-Jin Wu (CN), Kanya Kusano (JP), Rony Keppens (DE), Stefaan Poedts (DE), Joerg Buechner (DE), Sami Solanki (DE), Geoffrey Bicknell (AU), Dongsu Ryu (KR), Jinlin Han (CN), Feng Yuan (CN), Yang Su (CN), Siming Liu (CN), Hui Tian (CN), Vinod Krishan (IN), Kazuo Makishima (JP), Kandasamy Subramanian (IN), Durgesh Tripathi (IN), Dipankar Banerjee (IN), Shu-ichiro Inutsuka (JP), Fu-Lai Guo (CN), Hantao Ji (US), Shuang-Nan Zhang (CN), Wing-Huen Ip (TW), Xuening Bai (CN), Takaaki Yokoyama (JP), Ryo Yamazaki (JP), Bhimsen Shivamoggi (US), Masaomi Tanaka (JP), Shin Toriumi (JP), Xin Cheng (CN), Jungyeon Cho (KR), Peng-Fei Chen (CN), Ryoji Matsumoto (JP), Shinji Koide (JP), Takeru Suzuki (JP), Kengo Tomida (JP), Ellen Zweibel (APS-DPP), Piyali Chatterjee (IN), G.C. Anupama (IN), Mami Machida (JP), Brigitte Schmieder (FR), Linghua Wang (CN), Huirong Yan (DE), Tingyu Gou (CN), Ting Li (CN), Jasmina Magdalenic (BE), Feilu Wang (CN), Li Feng (CN), Sera Markoff (NL), Fatima Bint-e-Munir (PK), Lilia Ferrario (AU),

Magnetic Fusion: Won Namkung (KR), Xuru Duan (CN), Jiangang Li (CN), Osamu Motojima (JP), Baonian Wan (CN), Ge Zhuang (CN), Myeun Kwon (KR), Yong-Seok Hwang (KR), Hiroshi Yamada (JP), Siwoo Yoon (KR), Lu Wang (CN), Tomohiro Morisaki (JP), Guosheng Xu (CN), Xianzu Gong (CN), Jiaqi Dong (CN), Zhe Gao (CN), Yutaka Kamada (ITER), Yasuaki Kishimoto (JP), Shashank Chaturvedi (IN), Anthony Donne (EU), Sibylle Guenter (DE), Ulrich Stroth (DE), Alain Becoulet (ITER), Andrea Grosman (CEA), Emmanuel Joffrin (FR), Tuong Hoang (CN), Ian Chapman (UK), Joaquin Sanchez (ES), Francesco Romanelli (IT), Piero Martin (IT), Jozef Ongena (BE), Geert Verdoolaege (BE), Paola Mantica (IT), Ambrogio Fasoli (CH), Francois Waelbloek (US), Dennis Whyte (US), Jon Menard (US), Yuanxi Wan (CN), Kazunobu Nagasaki (JP), Kazuaki Hanada (JP), Masaki Osakabe (JP), Mizuki Sakamoto (JP), Suguru Masuzaki (JP), Richard Buttery (US), Yufeng Liang (DE), Takaaki Fujita (JP), Howard Wilson (UK), Stan Kaye (US), P. Snyder (US), J. Rice (US), S. Brezinsek (DE), Robert Wolf (DE), Richard Sydora (CA), Kerchung Shaing (TW), Francesco Pegoraro (IT), Emilio Martinez (IT), Mike Zamstorf (US), Wayne Solomon (US), Min Xu (CN), Matthew J. Hole (AU), Yong-Su Na (KR), Wulyu Zhong (CN), Linge Zang (CN), Yongkyoon In (KR), Indranil Bandyopadhyay (IN), Kazuaki Hanada (JP), Noriyasu Ohno (JP), Ivan Calvo (ES), Alexander Melnikov (RU), Youngmu Jeon (KR), Volodymyr Mykhaylenko (KR), Kenichi Nagaoka (JP), Siye Ding (US), Rui Ding (CN), Young Dae Yoon (KR), Zhiwei Ma (CN), Zheng-Mao Sheng (CN), Yong Xiao (CN), JM Kwon (KR), Jeronimo Garcia (FR), Atsushi Fukuyama (JP), Masaya Hanada (JP), Vladimir Rozhansky (RF), Gungu Yun (KR), Chaofeng Sang (CN), Masahiro Kobayashi (JP), Jiansheng Hu (CN), Liang Wang (CN), Jinping Qian (CN), Thawatchai Onjun (TH), Mamiko Sasao (JP), Ling Zhang (CN), Elizaveta Kaveeva (RF), Pascale Hennequin (FR), Guo Meng (DE), Hiroe Igami (JP), Joelle Mailloux (UK), Siriya Pom Sangaroon (TH),

Fusion Companies: Martin Peng (CN), Mikhail Gryaznevich (UK), Yuichi Takase (UK), Junichi Miyazawa (JP), S. Konishi (JP), K. Matsuo (JP), D. Gates (US),

2. International Program Committee

General PC chair: M. Kikuchi (JP), co-chairs: W. Choe (KR), R. Rawat (SG), Yutong Li (CN), Sudeep Bhattacharjee (IN)

CD (Cross Disciplinary: Focused Topics related turbulence and structure formation) : PH Diamond (Chair, US), X. Garbet (Vice-Chair, SG), TS Hahm (Vice-Chair, KR), Yusuke Kosuga (JP), Ting Long (CN), Gyungjin Choi (KR), Wei Xin Guo (CN), Steve Tobias (UK), Misha Medvedev (US), Nami Li (US), Prasad Perlekar (IN), Ozgur Gurcan (FR)

F (Fundamental disciplines in plasma physics): Fulvio Zonca (Chair, IT/CN), Amita Das (Vice-Chair, IN), Zhiyong Qiu (Vice-Chair, CN), Yu Lin (Vice-Chair, US), Zensho Yoshida (JP), Sudeep Bhattacharjee (IN), Tara Ahmadi (JP), Matthew Hole (AU), Daniela Grasso (IT), Hogun Jhang (KR), Lu Wang (CN), Makoto Hirota (JP), Rui Ma (CN), Julia Stawarz (UK)

B1 (Plasma Simulation, Diagnostics and Data Science) : T.-H. Watanabe (Chair, JP), Gunsu Yun (Vice-Chair, KR), Emi Narita (JP), T. Tokuzawa (JP), Weixing Wang (US), Seiji Zenitani (AT), Yong Xiao (CN), Yunfeng Liang (DE), Zhihong Lin (US), Lorenzo Zanisi (UK), Sandor Zoletnik (HU), R. Michael Churchill (US), Ling ZHANG (CN)

B2 (Quantum/Dusty plasma, Plasma Source, Basic Experiments, A&M) : Yan Feng (Chair, CN), Sanat Kumar Tiwari (Vice-Chair, IN), Yuanhong Song (Vice-Chair, CN), Lin I (TW), Edward Thomas (US), Zhehui (Jeph) Wang (US), Lorin Matthews (US), Rajaraman Ganesh (IN), Chijie Xiao (CN), Chandra Prakash Dhard (DE), Tito Mendonca (PT), Izumi Murakami (JP), Job Beckers (NL), Takuma Yamada (JP), Hanno Kahlert (DE), Debaprasad Sahu (IN), Swarnima Singh (US), Hiroyuki Takahashi (JP)

A1 (Plasma Materials and Processing): Se Youn Moon (Chair, KR), [plasma source, sensing and characterization] JJ Shi (CN), Shinjae You (KR), Chanho Moon (JP), Quan-Zhi Zhang (CN), Kai Zhao (CN), Seong Ling Yap (MY), [plasma etching/deposition process] HSIAO Shih-Nan (JP), Kyungnam Kim (KR), Ogawa Daisuke (JP), Hojun Kim (KR), Heeyeop Chae (KR), Duksun Han (KR), [plasma surface processing] Deepak Prasad Subedi (NP), Satyananda KAR (IN), Ana Sobota (NL), Tao Shao (CN), [plasma gas conversion] Xin Tu (UK), Dae Hoon Lee (KR), Sanghoo Park (KR), Somaiyeh Allahyari (IR), Nicolas Boschern (LU), Annemie A.M.B. Bogaerts (BE), [thermal plasma/nanomaterial synthesis] Tony Murphy (AU), Sooseok Choi (KR), Taehee Kim (KR)

A2 (Plasma Life Science): Masafumi Jinno (Chair, JP), Nevena Puac (Vice-Chair, RS), Zhitong Chen (CN), Eun Ha Choi (KR), Hirofumi Kurita (JP), Dingxin Liu (CN), Muhammad Nur (ID), Suresh C. Sharma (IN), Deepak Prasad Subedi (NP), Douyan Wang (JP), Seong Ling Yap (MY), Maksudbek Yusupov (UZ)

L1 (ICF, HEDS, Laboratory Astro Physics): Yasuhiko Sentoku (Chair, JP), Sudip Sen Gupta (Vice-Chair, IN), Natsumi Iwata (Vice-Chair, JP), Zheng-Ming Sheng (CN), Takayoshi Sano (JP), Alexey Arefiev (US), Hui Chen (US), Tomoyuki Johzaki (JP), Hiroshi Sawada (US), Mamiko Nishiuchi (JP), Dimitri Batani (FR)

L2 (LWFA/PWFA, Photon beam Science): Min Chen (Chair, CN), M. Krishnamurthy (Vice-Chair, IN), Hyyong Suk (Vice-Chair, KR), Tomonao HOSOKAI (Vice-Chair, JP), Chang Hee Nam (KR), G. Ravindra Kumar (IN), Zheng-Ming Sheng (CN), Jens Osterhoff (US), Robert Bingham (UK), Sergei Bulanov (CZ), Stefan Weber (CZ), Masakatsu Murakami (JP), Yang Wan (CN), Yueyue Chen (CN), Amita Das (IN), Chen Lin (CN), Yutong Li (CN), Masaki Kando (JP)

SG (Space plasma & Geomagnetism): Yoshiharu Omura (Chair, JP), Linghua Wang (Vice-Chair, CN), Peter Yoon (Vice-Chair, US), QuanMing Lu (CN), Abraham Chian (BR), Lin-Ni Hau (TW), Kyung Sun Park (KR), Gurbax Lakhina (IN), Nazish Rubab (PK), Tohru Hada (JP), Yasuhito Narita (DE), Kanako Seki (JP), Wai Leong The (MY)

SA (Solar & Astro plasma): Peng-Fei Chen (Chair, CN), Ryoji Matsumoto (Vice-Chair, JP), Jungyeon Cho (Vice-Chair, KR), Yuhong Fan (US), J. L. Han (US), Kyungsuk Cho (KR), Patrick Antolin (UK), Schmieder Brigitte (FR), Piyali Chatterjee (IN), Shu-ichiro Inutsuka (JP), Hui Li (US), Takaaki Yokoyama (JP), Takeru Suzuki (JP), Lou Lee (TW), Fulai Guo (CN), Rony Keppens (BE), David Pontin (AU), Nami Machida (JP)

MF1 (Magnetic Fusion plasma : Core): Zheng-Xiong Wang (Chair, CN), Won-Ha Ko (Vice-Chair, KR), Mitsutaka Isobe (JP), Xiang Jian (CN), Alberto Marinani (IT), Shijie Liu (DE), George Mckee (US), Dongmei Fan (CN), Miura Yukitoshi (JP), Kishimoto Yasuaki (JP), Jaehyun Lee (KR), Valentin Igochine (DE), Joelle Mailloux (UK)

MF2 (Magnetic Fusion plasma : Edge): Young-chul GHIM (Chair, KR), Eun-Nam BANG (Vice-Chair, KR), Rui DING (Vice-Chair, CN), Soo-hyun SON (KR), Hyungho LEE (KR), Choongki SUNG (KR), Chi-shung YIP (CN), Byron PETERSON (JP), Kobayashi MASAHIRO (JP), George WILKIE (US), Didier MAZON (FR), Ting Long (CN), Kazuaki HANADA (JP)

3. Local Organizing Committee (LOC)

LOC Chair: Masaharu Shiratani, Kyushu University

LOC member: Kunihiro Kamataki, Kyushu University, Takamasa Okumura, Kyushu University, Manabu Tanaka, Kyushu University, Kazunori Koga, Kyushu University, Naho Itagaki, Kyushu University, Hiroki Kondo, Kyushu University

Conference Venue : Fukuoka International Congress Center



Check the web site shown below how to get to the Conference Venue,
<https://www.marinemesse.or.jp/eng/congress/access/#bus>

