Evening Session 2, September 20, 2017
Jinni Hotel, Chengdu

Report on Division of Plasma Physics, AAPPS

M. Kikuchi, AAPPS-DPP chair

DPP public meeting

What is AAPPS-DPP?

- Division of plasma physics under AAPPS

Objective of DPP

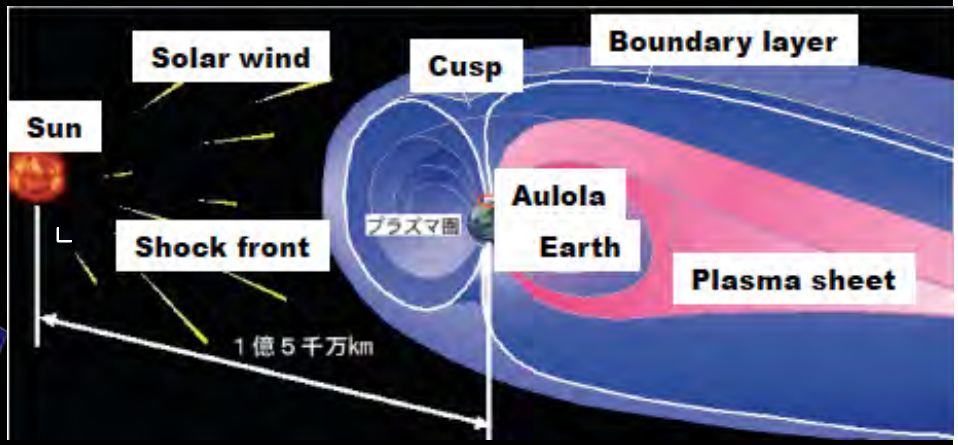
- shall be the advancement and dissemination of the knowledge, understanding and applications of plasmas of natural and laboratory origin.

All fields of plasma physics:

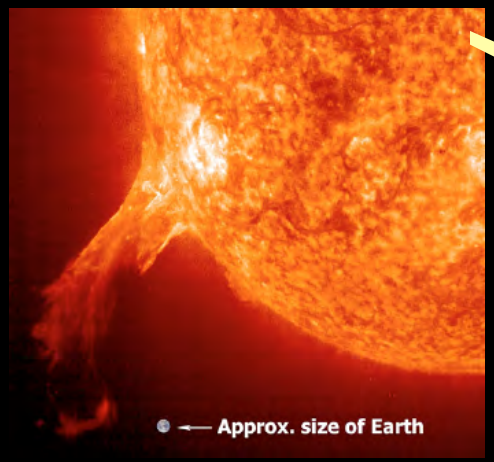
- **Fundamental, Basic, Applied plasma, Laser plasma, Space plasma, Solar/Astro, Magnetic Fusion**

"Fundamental" covers 1. Mathematical plasma physics, 2. MHD and Reconnection, 3. Kinetic MHD, 4. Plasma turbulence, 5.Gyro kinetic, 6. NC transport, 7. Turbulent transport, 8. Current Drive, etc.
"Basic" covers 1. Diagnostics, 2. Simulation, 3. A&M in plasma for astro/solar/space, laser, low temperature and fusion applications, 4. Strongly coupled plasma, 5. Non-neutral plasma, 6. Quantum plasma, 7. Plasma propulsion, 8. Plasma source and plasma heating system, 9. Plasma material interaction, 10. Relativistic plasma physics, etc.

• Plasma : 4th state of matter

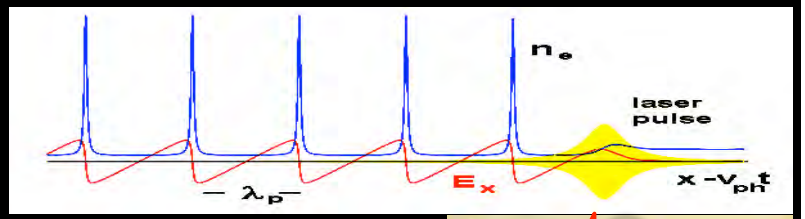


Hinode



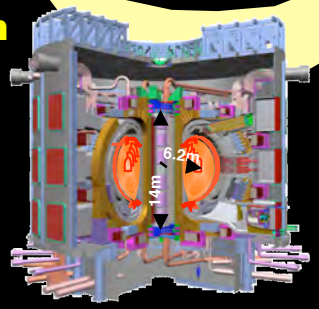
Solar flare/dynamo

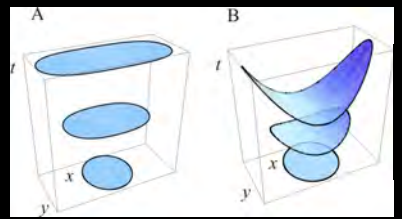
Aulola



Plasma Wakefield effect
Relativity : V ~C

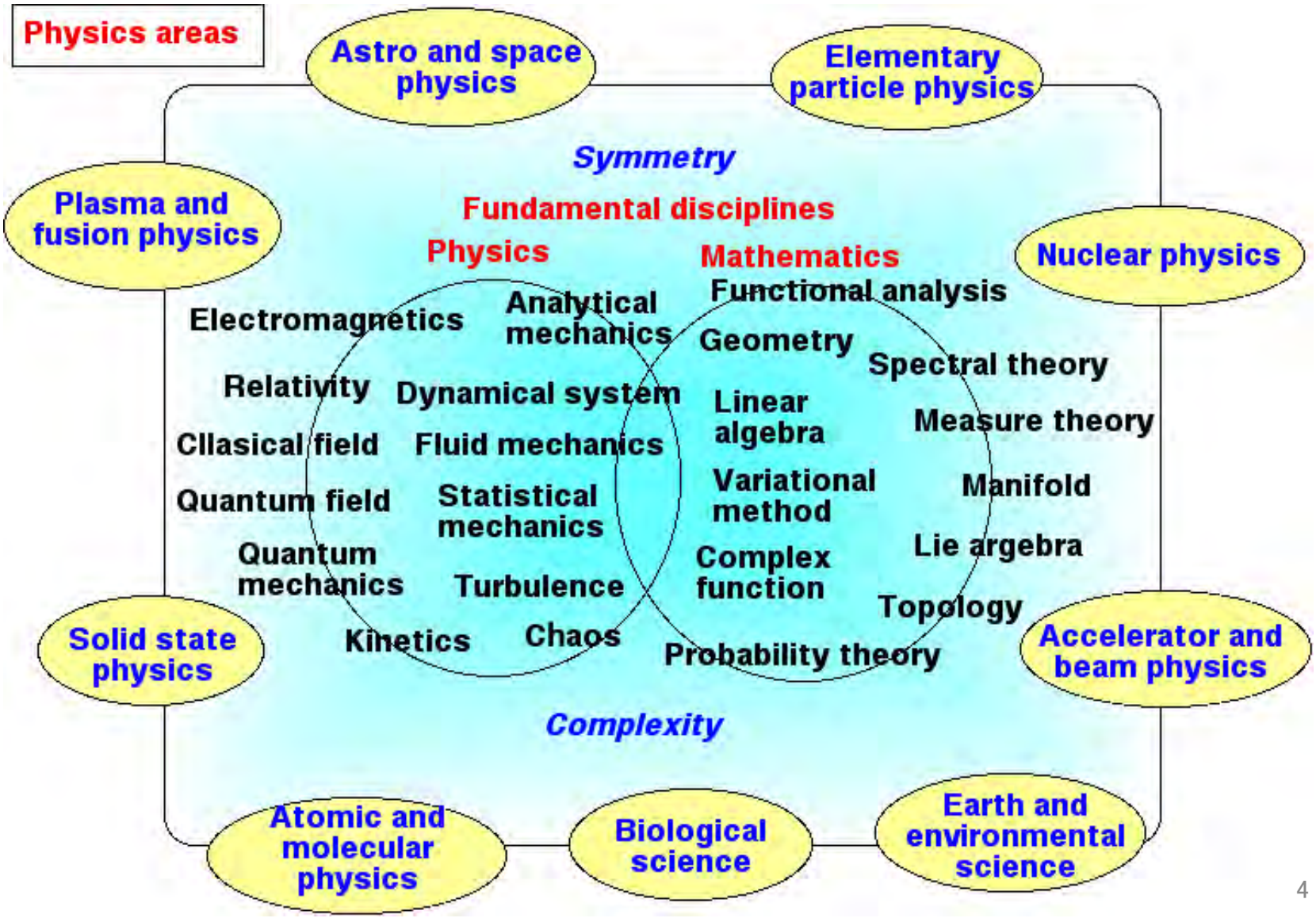
Fusion research





Origin of magnetic field & vorticity

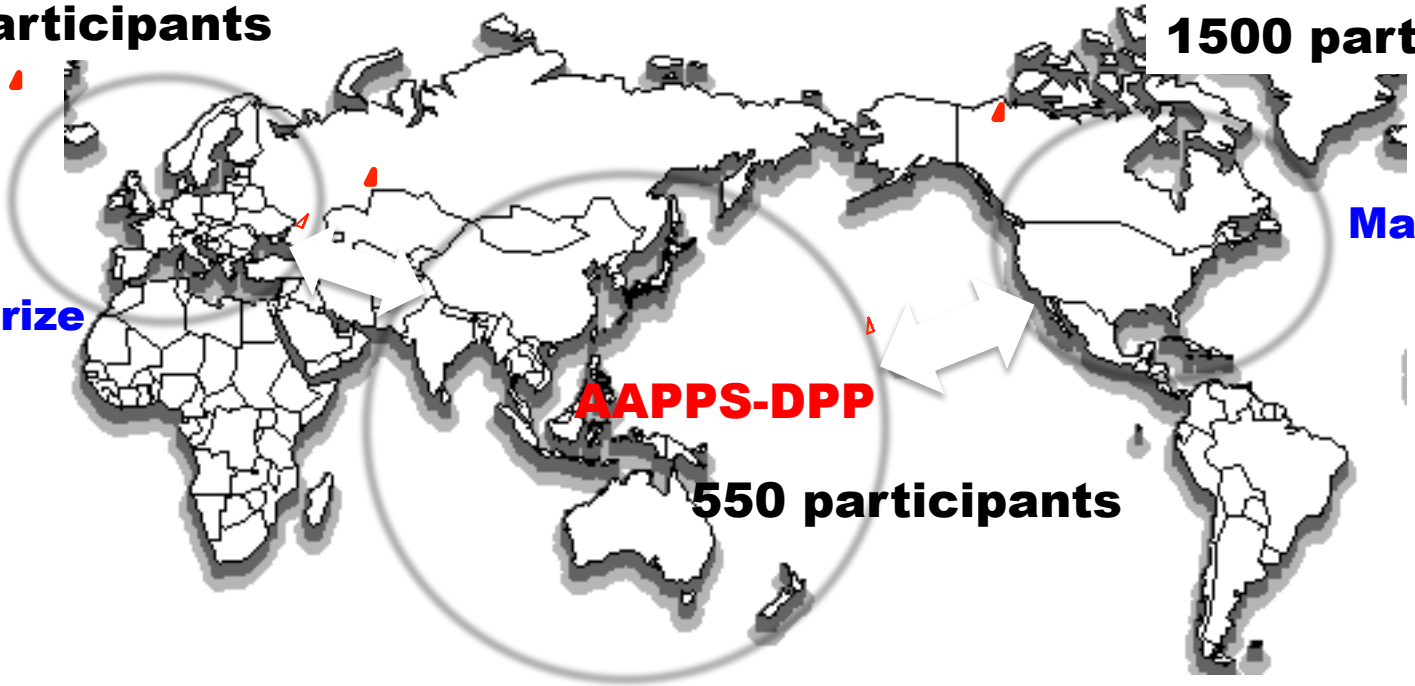
Plasma physics made significant progress benefited by fundamental disciplines



AAPPS (DPP cooperation)

European Physical society (EPS)
Division of plasma physics
700 participants

American Physical society (APS)
Division of plasma physics
1500 participants



Alfven prize

Maxwell prize

AAPPS-DPP

550 participants

AAPPS : Association of Asia Pacific Physical societies

Divisions

- **Division of plasma physics**
- **Division of Astrophysics, cosmology and gravitation**
- **Division of Nuclear physics**

Activity of AAPPS
[1] Council meeting
[2] Asia Pacific Physics Conference (APPC)
[3] AAPPS Bulletin

AAPPS Council

DPP report

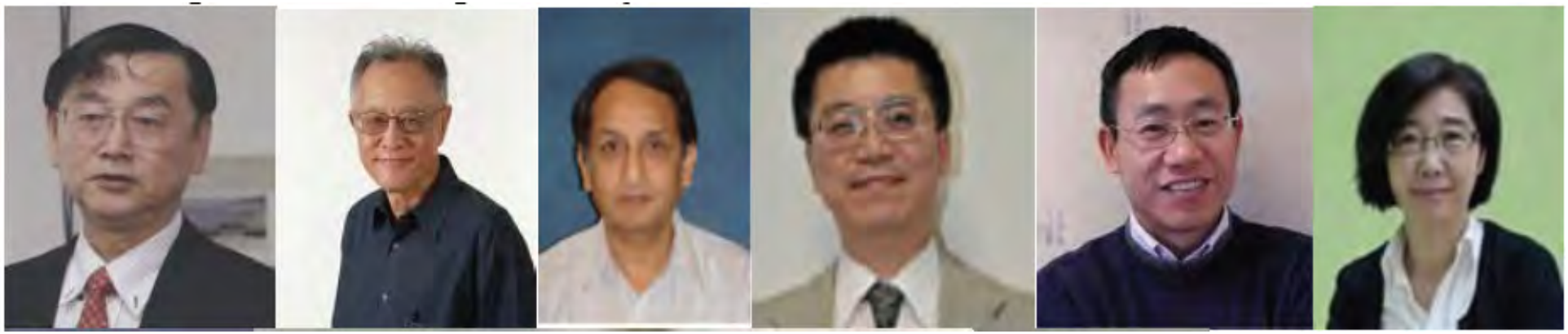
APPC-12 (2013):Nobel Prize laureate: Kobayashi
Plenary: Liu Chen, T. Tojima, K. Shibata, RK Chu

Evening Session 2, September 19, 2017
Jinni Hotel, Chengdu

Division of Plasma Physics

- Established 2014 (AAPPS council)
- S. Chandrasekhar Prize
  - 2014 : Setsuo Ichimaru
  - 2015 : Predhiman Kaw
  - 2016 : Don Melrose
  - 2017 : CZ. Cheng and Lou C. Lee
- DPP Young research Award
- 1st Asia-Pacific Conference on Plasma Physics (annual conference) 2017

Executive committee (decision body 2014-1017)



M. Kikuchi
Chair

L. Chen
fundamental

A. Sen
basic

M. Shiratani
Applied

ZM Sheng
Laser

Lin Ni Hau
Space

D. Ryu
Solar/astro

M. Hole
APPC-13

T. Onjun
Secretary general

H. Nagai
Home page

K. Imadera
Member

International honorary advisory committee (I-HAC) (advisory body) 2014-2017







P. Kaw A. Hasegawa C. Yu, R. Dewar, C.Z. Cheng, C.S. Chang, F.F. Chen,







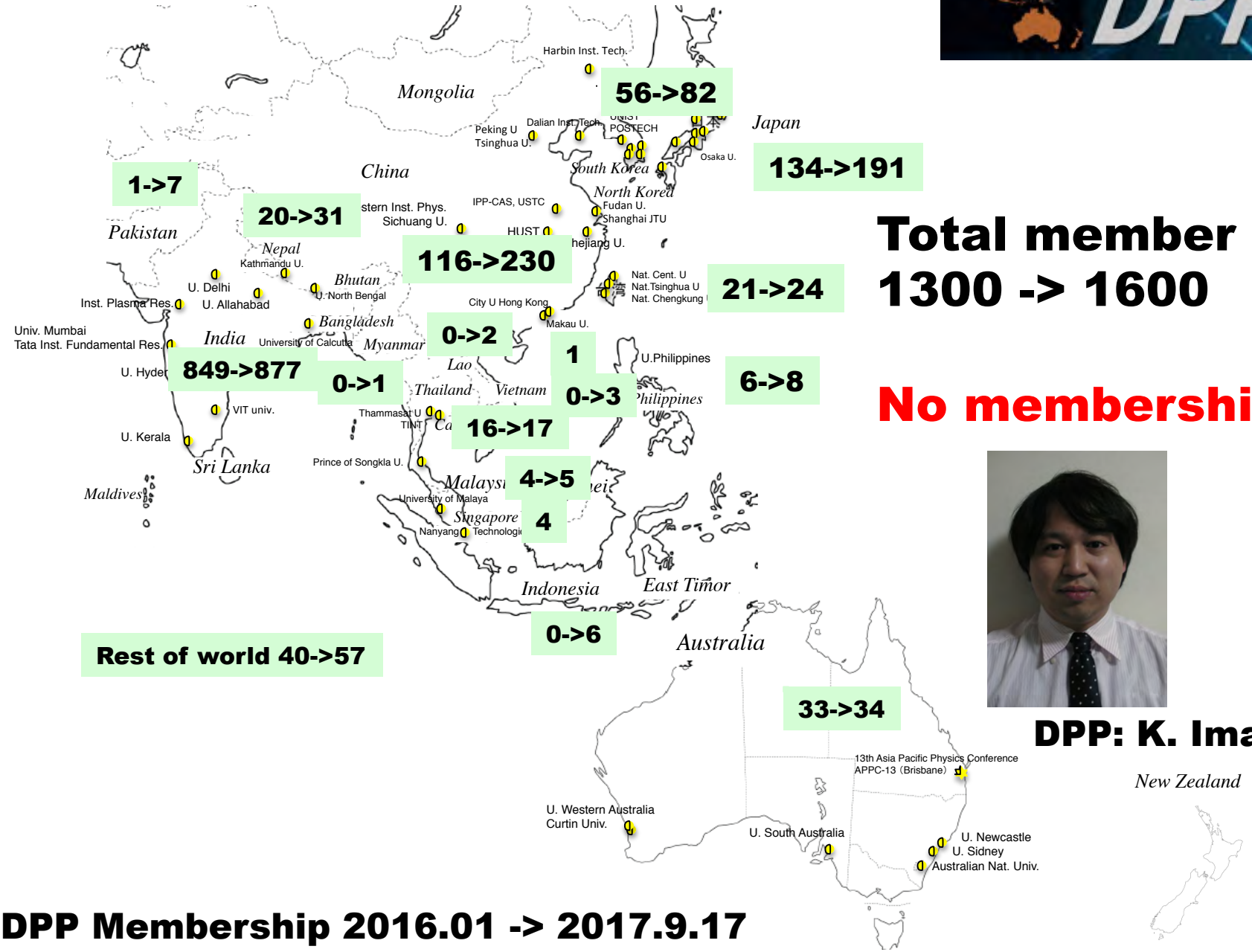
R. Hatakeyama, R. Boswell, T. Tajima, X.T. He. K. Mima, K. Shibata, L.C. Lee






Z. Pu , W. Namkung, M. Sasao, H. Takabe, C. Pan B. Buti

Membership distribution



Total member
1300 -> 1600

No membership fee

DPP: K. Imadera

DPP Membership 2016.01 -> 2017.9.17

DPP News; start in April 2014 to introduce Asian plasma activity

DPP News on WLS2014

AAPPS-DPP News 2014.05.12

International West Lake Symposium on Laser Plasma Interactions at Hangzhou, China

M.Y. Yu (ZJU), H.-C. Wu (ZJU), Zheng-Ming Sheng (SJTU), and L. Chen (ZJU)

In April 21-25, 2014, the 8th International West Lake Symposium on Laser Plasma Interactions (IWLS-LPI) was held at the Zhejiang Hotel hidden in the beautiful hills next to the West Lake in Hangzhou, China. There were more than 120 participants from China, France, Germany, India, Italy, Japan, Portugal, Russia, UK, USA, etc. representing more than 27 institutions worldwide. More than 60 oral talks and posters were presented.

The West Lake Symposium series is organized and hosted annually by the Institute for Fusion Theory and Simulation, Zhejiang University for the purpose of exchanging ideas in a relaxed atmosphere on topics ranging from magnetically confined fusion plasmas, laser plasma interactions, and space plasmas to computational plasma physics. This year, the Symposium, co-sponsored by the newly established Division of Plasma Physics, Association of Asian-Pacific Physical Societies (AAPPS-DPP), is focused on "Laser Plasma Interactions". Most presentations in the Symposium are on the interaction of relativistic high-intensity lasers with plasmas, including the generation of ultrashort wavelength light sources, ultrafast and high flux electron and ion beams, ultraintense magnetic fields, etc. These topics are consistent with the current main interests in relativistic laser-plasma interactions, which may find applications in laser-driven fusion, laboratory modelling of astrophysical phenomena, novel and compact radiation and beam sources, medical diagnostics and tumor treatment, etc. The use of lasers can greatly reduce the overall size of the devices in the applications and is therefore practical as well as economical interest. The 30-minute oral talks were ergonomically arranged, leaving ample time for stressless discussions and interchange of ideas. The Symposium also contains several informative 50 minute review talks that cover the up-to-date research topics as well the relevant basic physics. There were also many fruitful after-session discussions among participants.

From the author lists of the works presented, one can also see that there exists a great deal of collaborations among the researchers from China and other countries (especially Germany: involving more than 6 Max Planck Institutes, Helmholtz Centers, and universities), as well as from different institutions within China. The Symposium should result in an enhancement of this welcoming trend, which we look forward to seeing in the next West Lake Symposium.

The agenda, participant list, PPT of talks, and other information on the 8th IWLS-LPI can be found at http://ifts.zju.edu.cn/lpi/.

DPP News:ASEAN school

DPP News 2015.01.14

1st ASEAN School on Plasma and Nuclear Fusion (ASPNF2015)
January 6-9, 2015 (https://sites.google.com/site/fussionthai2015/)

Dr.Thawatchai Onjun
Sirindhorn International Institute of Technology, Thailand

The 1st ASEAN School on Plasma and Nuclear Fusion was held under the framework of the ration Agreement in the field of magnetic fusion research between the France and Thailand. are many organizations supporting this activity including the French Alternative Energies and ic Energy Commission or CEA, the French Embassy of Thailand, the Association of Asia c Physical Societies: Division of Plasma Physics, Sirindhorn International Institute of ology, Thammasat University, National Research Council of Thailand, Thailand Physics ty, and Nuclear Society of Thailand. It was an intensive course taught by fusion experts from ry 6, 2015 through January 9, 2014 at Sirindhorn International Institute of Technology, and.

Twenty six participants were selected and joined ASPNF2015. A breakdown by country ed, 21 participants from Thailand, 2 participants from Malaysia, 1 participant each from esia, India, and Philippine, respectively. A breakdown by position was as follows: 15 ate students, 4 undergraduate students, and 7 young researchers. The school contained lectures basic plasma physics and thermonuclear fusion, plasma diagnostic, and simulations for fusion as.

Lectures given are 1. Fusion around the World & ITER, Path for fusion energy (J.M Ané, , 2. Plasma Physics and Fusion Research (M. Kikuchi, JAEA), 3. Magnetic Fusion Research nce & WEST (T. Hoang, CEA), 4. Fusion Research Program in Thailand (T. Onjun, SIIT), 5. Concept (J.M Ané, CEA), 6. ICF Concept (M. Murakami, Osaka University), 7. Laser Fusion igh Energy Density Physics (M. Murakami, Osaka University), 8. Plasma Waves and ities (R. Dumont, CEA), 9. Waves and Instabilities in Magnetic Fusion Plasmas (R. Dumont, , 10. Heating & Current Drive (A. Ekedahl, CEA), 11. Lecture on MHD stability of tokamak ikuchi, JAEA), 12. Transport and turbulence (R. Guirlet, CEA), 13. Diagnostics I (R. Guirlet, , 14. Diagnostics II (R. Guirlet, CEA), 15. Modeling of Plasma Scenarios I (G. Giruzzi, CEA), odeling of Plasma Scenarios II (G. Giruzzi, CEA).

DPP News on Council

AAPPS-DPP News 2015.02.12

AAPPS Council Meeting in Seoul, February 6-7, 2015

AAPPS-DPP Chairman, Mitsuru Kikuchi

The 31st AAPPS Council Meeting was held from Feb. 6-7, in Seoul (Renaissance Seoul hotel). Since DPP was approved in 30th AAPPS council in Taipei, I gave an annual report of the DPP activity.

Participants are Swan Kim (president), S. Nagamiya (past president), GL Long (Vice president), and others can be seen from photo. There are society reports from AIP, CPS, PS-Hong Kong, Indonesia PS, Japan-PS, Japan S Applied Phys., Malaysian IoP, IoP-Singapore, PS-Taipei, Vietnam National IoP, KPS. Then, APCTP report by HY Choi.

There is an application of new division, called Division of Astrophysics, cosmology and Gravitation (DACG) explained by S.P. Kim. Chair is Prof. Misao Sasaki (Yukawa Inst. For theoretical physics), Vice Chairs are R.G. Cai (CPS), B. Dawson(AIP), X.G. He(PS-Taipei), S.Y. Kim(KPS), J. Yokoyama (secretary general), Advisory committee are J.E. Kim (SNU), S.C. Lee(Acad. Sinica), J. R. Mould(Swinburne U. T.), Katsuhiro Sato (NINS), YL Wu (CAS). We will have a close communication with new division with Swan and GL Long(in charge of division). I have reported annual report of activity of DPP activity as attached (requests to the council and accounting information, and agreement between SWIP and AAPPS-DPP are dropped). Foundation of the S. Chandrasekhar prize is unanimously endorsed by the council.

Dr. R. Robinson reported preparation for APPC-13 in Brisbane, Dec. 4-8, 2016 just AOP congress. There will be full 4 days and less plenary slots since ASEPS will not be held this time. Unfortunately I have to leave council during his talk. There can be enough parallel sessions.

Group photo of 2015 AAPPS council (2: Monika Rahariti (Indonesia), 3:, 4: R. Robinson(AIP), 5: Shoji Nagamiya (Riken), 6: Swan Kim(AAPPS president, KPS, Postech), 7: Gui Lu Long(CPS, Tsinghua U.), 8: M. Kikuchi (DPP), 9: Swee-Ping Chia(MIP, Malaya U.), 10: Yoshio Kuramoto(JPS, Tohoku U.), 13: Fu-Jen Kao, (PS-Taiwan, National Yang-Ming U.), 14: L. Han Tang (PS-Hong Kong, Hon-Kong Baptist U.), 16: Mitsumasa Iwamoto (JSAP, Tokyo Inst. Tech), 18: Nguyen Q. Liem (Vietnam Nat. IoP), 20: Sang Pyo Kim (council secretary). Missing are Won Namkung (Postech), Xing Zhu (CPS, Peking U.), Youngah Park (KISTEP), etc.

DPP News on APTWG2015

AAPPS-DPP News 2015.06.17

Summary of the 5th Asia-Pacific Transport Working Group (APTWG) International Conference

Xiang Gao, Chair of APTWG 2015 Int. Conference

The 5th Asia-Pacific Transport Working Group (APTWG) international conference was held at Dalian in China (http://demo.ipp.ac.cn/html/aptwg2015/) during 9-12 June 2015. This meeting was a series of APTWG conference started at NIFS of Japan in 2011, then at Chengdu of China in 2012, and Jeju island at Korea in 2013, and at Kyushu University of Japan in 2014.

The 5th APTWG international conference consisted of (1) Plenary Session; (2) Working Group Sessions; (3) Poster Sessions; (4) Young Researcher's Forum; and (5) Summary Sessions. The purpose of the Plenary Session is to discuss the important topics in transport physics that have not been clarified yet. In this year, a few talks were selected for the plenary session. 5 topics were chosen for the working group session, i.e. (a) Turbulence suppression and transport barrier formation; (b) Effect of magnetic topology on MHD activity and transport; (c) Non-diffusive contribution of momentum and particle transport; (d) Non-local transport and turbulence spreading and coupling; and (e) Energetic particles and instability. Each working group session consisted of two or three invited talks, several orals and 20 minutes discussion. Poster sessions of 90 min were arranged after the oral sessions of each working group session. Summary talks of each working group were given on the last day.

There were 48 invited and oral talks and 109 posters, and over 100 participants from six countries in APTWG 2015. The next conference will be held in Korea in 2016.

Photo of the 5th APTWG international conference

DPP News;

DPP News on A3 foresight

AAPPS-DPP News 2015.01.16

3rd A3 Foresight Workshop on Spherical Torus
Dec. 15-17, 2014

Michiaki Inomoto
Organizer of 3rd A3 Foresight Workshop on Spherical Torus
Associate Professor, GSFS, The University of Tokyo, Japan

3rd A3 Foresight Workshop on Spherical Torus (ST) was held from Dec. 15 to Dec. 17, 2014, at Okura Akademia Park Hotel, Kisarazu, Chiba, Japan, as a seminar of A3 Foresight Program on "Innovative Tokamak Plasma Startup and Current Drive in Spherical Torus" supported by JSPS (Japan) / NRF (Korea) / NSFC (China) since 2012. The goals of this project is to establish center-solenoid-free ST start-up scheme and to comprehend MHD/non-MHD dynamics and transport of center-solenoid-free ST plasmas under the international cooperative framework among six distinctive ST experiments operated in universities in Japan, Korea, and China. As well as personnel exchanges for joint research, workshops and summer schools are convened in this project. Previous workshops were held in Seoul (Jan 2013), and Beijing (Jan 2014), and previous summer schools were held in Tokyo (Jul 2013), and Jeju Island (Jul 2014).

Forty-nine participants attended the 3rd workshop and thirty-nine oral talks focused on ST start-up technique (waves, helicity injection, merging, etc.), ST plasma physics, ST reactor design, and diagnostics, were presented. Education and training of young researcher/students is another important objective of this program. In this workshop, four students were given awards for their outstanding presentations.

The next A3 Summer School on ST will be held in Chengdu, China in 2015 summer, and the next A3 workshop on ST will be held in Korea in 2015-2016 winter.

Group photo of A3 foresight workshop

Y. Ono

DPP News :Fermi Prize to Tajima

AAPPS-DPP News 2015.09.17

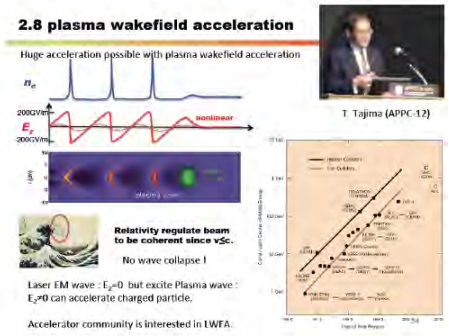
AAPPS-DPP I-HAC member
Prof. Toshiki Tajima (Norman Rostoker Professor) will receive Enrico Fermi Prize 2015

AAPPS-DPP Chair M. Kikuchi

On September 21, 2015, the Italian Physical Society will award the Enrico Fermi Prize to Toshiki Tajima, Professor at UC Irvine. Toshiki Tajima is rewarded "for the **invention of the laser-wake-field acceleration technique** which led to a number of fundamental and interdisciplinary applications ranging from accelerator science to plasma physics and astrophysics," says the Italian Physical Society. Laser-plasma acceleration is often presented as the next-generation technology that will enhance radio frequency-based accelerators such as cyclotrons or synchrotrons. It would indeed reduce their size by a factor of about 1000. Toshiki Tajima is also a tireless champion of **Extreme Light**. He is very involved in scientific public outreach in Europe and particularly on the Saclay plateau and took part in projects such as ELI (Extreme Light Infrastructure), IZEST and ICAN. The Enrico Fermi Prize was created 14 years ago, on the occasion of Enrico Fermi's centenary, to reward particularly remarkable work led by members of the Italian Physical Society.

Copied from Press release:
https://www.polytechnique.edu/en/content/toshiki-tajima-winner-enrico-fermi-prize

Following is my presentation to explain Wakfield acceleration at IMFP2013.



T. Tajima

DPP News :ICPP 2016 in Kaoslun

AAPPS-DPP News 2016.08.03

Group photo (not all) Prof. A. Iiyoshi (Keynote)

Prof. T. Klinger (MCF plenary) IUPAP Young Scientist Award in Plasma Physics at conference diner

Poster session (Tuesday) Laboratory Astrophysics

Prof. C. Joshi (LBP plenary) Prof. Y. Ono at Summary session

CZ Cheng

DPP News :APPC-13 in Brisbane

AAPPS-DPP News 2016.12.12

Report on APPC-AIP 2016 Congress (I)
Plenary talks

M. Kikuchi (AAPPS-DPP chair), M. Hole(vice chair)

13th Asia Pacific Physics Conference (APPC-13) has been held during December 4-8 in Brisbane convention and exhibition center.

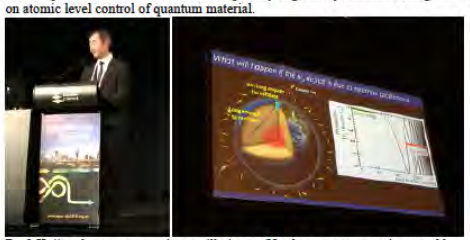
AIP president (Warrick Cauch), organizing committee chair (Halina Rubinsztein-Dunlop) and AAPPS president (Swan Kim) gave opening addresses.

On the first day (Dec. 5), first plenary speaker is 2015 Novel prize laureate in physics, Prof. Takaaki Kajita (U. Tokyo). He gave an evening talk as well. 2nd plenary is given by Richard Easther (U. Auckland, NZ) on cosmology.

On the second day, Jean Jacquinot (ITER organization) gave a plenary talk on ITER physics, which is well received. It includes physics and humor and understandable for all. Since I am chairing, there is no photo available. 2nd plenary was given by Y. Park(KISTEP) on woman leadership.

On the third day, Michelle Simmons gave plenary talk on quantum computing starting from Moore's law. 2nd plenary was given by David Reitze (LIGO) on gravitational wave observation in LIGO. Observation of the gravitational wave is a last tango of binary black holes and the dawn of gravitational wave astronomy.

On the fourth day, Alain Aspect (U. Orsay, France) gave a plenary talk on second quantum revolution. The second plenary is given by QK Xue (Tsinghua U.) on atomic level control of quantum material.



Prof. Kajita plenary on neutrino oscillation. Up-down asymmetry is caused by oscillation during long distance between μ and τ neutrino.

T. Kajita

DPP Homepage (Linked from AAPPS HP) volunteer work by H. nagai

DPP News

Prof. Predhiman Kaw is Laureate of 2015 S. Chandrasekhar Prize!! <<<
Press Release Press Release(Japanese) Congratulatory Wordings

Call for Web Advertising. AAPPS-DPP needs your cooperation!!
Make contact with APPS-DPP Secretary aapps.dpp#gmail.com(substitute @ for #)
Download Application Form

Call for Donation for S. Chandrasekhar Prize of Plasma Physics

January 17, 2016
See Web advertisement.
DPP News January 17,2016

January 14, 2016
First Announcement of the 43rd EPS Conference on Plasma Physics.
DPP News January 14-3,2016

January 14, 2016
Meeting Information; VidishaConference.
DPP News January 14-2,2016

January 14, 2016
ICPP2016 abstract submission ready.
DPP News January 14,2016

January 13, 2016
Report of 10 year cerebration of plasma physics lab. in Nepal.
DPP News January 13-3,2016

January 13, 2016
Prof. Francis Froyon passed away.
DPP News January 13-2,2016

January 13, 2016
2015 S. Chandrasekhar Prize Laureate is Prof. Predhiman Kaw.
DPP News January 13,2016 Congratulatory Wordings Press Release

Upcoming meeting

- APFA 2015, Dec.14-18, 2015, Gandhinagar, India
- 2015 ITER International Scool, Dec.14-18, 2015, Heifei, China
- 10th West Lake International Symposium (WLIS) on Magnetic Fusion and the 12th Asia Pacific Plasma Theory Conference (APPTC), May.9-12, 2016, Hangzhou, China
- The 18th International Congress on Plasma Physics (ICPP-2016), June 27-July1, 2016, Kaohsiung, Chinese Taipei
- EPS 2016, July.4-8, 2016, Leuven, Belgium

Education/school

APPS-DPP site

Schools & Books past items

There are number of plasma schools which may be useful for Asia-researchers.This page provide informations schooling opportunitie also all over the world.

Schools

Asia-Pacific school information:

- Sokendai Asian Winter School(AWS2014)
  - Date: Dec.2, 2014 - Dec. 5, 2014
  - Location: National Institute for Fusion Science, Japan
  - Intended for: Students and young researchers in Japan ar
  - Capacity: 30 people
- 2nd ASEAN School on Plasma and Nuclear Fusion Jan 18-22 University, Bangkok,, Thailand
  It will be an intensive one-week course taught by fusion experts i

S. Chandrasekhar Prize

1. Foundation of S. Chandrasekhar Prize

Subrahmanyan Chandrasekhar (1910-1995) was an Indian- American astrophysicist who was awarded the 1983 Nobel Prize for physics for his theory of black hole. He worked in various areas including plasma physics. Plasma physics community is benefited from his works through his textbooks such as "Principles of stelar dynamics (1942)", "Plasma Physics (1975)", "Hydrodynamics and Hydromagnetic stability (1981)"

In 2014, we have established the Division of Plasma Physics under AAPPS. Asia-Pacific region is rapidly growing economically and scientifically. A large number of new programs on various fundamental and applied aspects of plasma physics are emerging in several countries of Asia and the Pacific regions. Young people taking up careers in plasma science in these regions look forward to the prestige of recognition by their peers and this becomes more equitable when your peers are intimately familiar with your work. This will also give a "sense of accomplishment" to the Asia-Pacific region as a whole because the body of significant work already pioneered by the Awardees will be ascribed to this region. The Executive Committee of division of plasma physics after consultation to I-HAC (International Honorary Advisory Committee) decided to establish Plasma Physics Prize after S. Chandrasekhar to recognize seminal/pioneering works in this field.

2. Description of the S. Chandrasekhar Prize

The Chandrasekhar Prize is awarded by the Division of Plasma Physics of the AAPPS to recognize outstanding contributions to experimental and/or theoretical research in fundamental plasma physics and plasma applications in all fields of physics.

i) Rule: This Prize will be given to an AAPPS-DPP member who has made seminal / pioneering contribution to any field of plasma physics or plasma applications as stated above.
ii) Nomination: Necessary documents and time schedule for nomination will be announced in the DPP home page. DPP seeks outstanding nominations worldwide and especially from the Asia-Pacific region.
iii) Selection: Selection will be made by the Chandrasekhar Prize Selection Committee annually.
iv) Selection Committee: DPP-ExCo will appoint Chair and members of selection committee taking into account of the I-HAC recommendations.
v) Award Ceremony: Certificate, Medal and a cash award will be bestowed to the awardees at the APPC conference held every three years.
vi) Obligations: Chandrasekhar awardees should deliver invited talks in the APPC as well as contribute review papers to the DPP journal.

3. Call for Sponsorship and Contribution

Division of Plasma Physics (DPP) seeks the official sponsorship by any organizations and personal contributions in support of above prospectus. Contribution will be used for DPP operation and awards. Official sponsorship by the organization will be recorded in the diploma of DPP Awards and the home page. Official sponsorship shall be one or more units in the US $ 5, 000. You may visit AAPPS-DPP HP at http://aappsdpp.org/AAPPSDPPF/index.html.

Sponsors and Contributors a

Web advertisement

JEOL Ltd. Thin Film Formation Equipment
Company Philosophy
On the basis of "Creativity" and "Research and Development", JEOL positively challenges the world's highest technology, thus forever contributing to the progress in both Science and Human Society through its products.

Toshiba Corporation
Toshiba Corporation, a Fortune Global 500 company, channels world-class capabilities in advanced electronic and electrical product and systems into five strategic business domains: Energy & Infrastructure, Community Solutions, Healthcare Systems & Services, Electronic Devices & Components, and Lifestyles Products & Services.

High-Power Electrical Equipment Testing Center of CASHIPS
High-Power Electrical Equipment Testing Center of CASHIPS (abbreviated as HEETEC), equipped with the largest DC power test platform and steady state test platform in China, is a professional test organization on high power electrical equipment.

HEFEI KEJUGAO TECHNOLOGY CO.,LTD
HEFEI KEJUGAO TECHNOLOGY CO.,LTD is a sole corporation established by the Institute of Plasma Physics, Chinese Academy of Sciences. KEJUGAO has deeply participated in ITER international cooperation projects and can offer the Fusion Engineering Technology Division with comprehensive solutions in designing, researching, and testing.

Chinese Laser Press for more information
Founded in 2009, Chinese Laser Press (CLP) is a non-profitable company providing professional multilateral connections for the laser, optics and photonics community, through publishing, meetings, and other activities.

Join DPP membership

AAPPS-DPP started member registration

I) If you are participants of APPC-12;
Please send your informations to **AAPPS-DPP secretary** for the following items;
1. Name (First, Middle, Family)
2. Salutation
3. Affiliation
4. Position
5. E-mail
6. Fields of interest: D-0, D-1, D-2, D-3, D-4, D-5
   - D-0 : Fundamental Plasma Physics (MHD, turbulence, transport, wave-particle interaction)
   - D-1 : Basic Plasma Physics (plasma diagnostics, atomic and molecular processes in plasmas, plasma simulation, complex and non-neutral plasma, etc)
   - D-2 : Applied Plasma Physics
   - D-3 : Laser Plasma (including laser wake field acceleration)
   - D-4 : Space Plasma Physics
   - D-5 : Solar & Astro Plasma Physics
7. I am currently a student (Baccalaureate, Master, Doctoral) Yes or No

AAPPS-DPP Secretary aapps.dpp@gmail.com or imader@center.iae.kyoto-u.ac.jp (substitute @ for

II) If you are not the APPC-12 participant;
Please ask any AAPPS-DPP member for your recommendation and send his/her informatio to AAPPS-DPP secretary.
Present AAPPS-DPP members are founders of AAPPS-DPP and only one member's recor required.

The member fee is free at this moment !
For your registration, please use the following form.

DPP endorsed conferences

AAPPS-DPP Meetings

The 12th Asia Pacific Plasma Theory Conference
1-4 July, 2014, Jeju Island, Korea
Host : 12th APPTC Organizing Committee
Co-sponsor: AAPPS-DPP
Topics: Visit following page http://plasma.ee.pusan.ac.kr/apptc2014/index2.html

4th Asia-Pacific Transport Working Group (APTWG) conference
10-13 June 2014, Kasuga, Japan
Host : APTWG2014 Organizing Committee
Co-sponsor: AAPPS-DPP
Topics: Visit following page http://aptwg2014.nifs.ac.jp/

8th International West Lake symposium
April 21-25, 2014 at Hangzho, China
Host : Institute for Fusion Theory and Simulation, Zhejian University
Co-sponsor: AAPPS-DPP
Topics :Novel Radiation Sources, Advanced Particle Accelerators, Laser-Driven N Radiation Reaction Effects, Computational Plasma Physics, Laser-Plasma Applic

AAPPS Meetings

The 13th Asia-Pacific Physics Conference will be held in **Brisbane** in December 2016, in con
2016 AIP Congress 2014 AIP Congress

Upcoming meetings

May 13-15, 2014	Hefei, China	Conference Chair: Bing Qiu (USTC and IPP-CAS); Exe. Secretaries(Max-Planck-Institut for Plasma Physics and Technical Univ. of Munich)
May 18-23, 2014	Nara, Japan	7th International Conference on Plasma Medicine(ICPM7)
June 10-13, 2014	Kasuga, Japan	4th Asia-Pacific Transport Working Group Meeting; 1st Asia-Pacific Transport Working Group Meeting; 1st Asia-Pacific Transport Working Group Meeting
June 23-27, 2014	Singapore	The 8th Joint Meeting of Chinese Physicists Worldwide
July 1-4 , 2014	Jeju Island, Korea	The 12th Asia Pacific Plasma Theory Conference and Japan-Korea Workshop on Modeling and Simulation of Magnetic Fusion Plasmas; The conference topics include theory, modeling, and simulations for magnetic fusion plasmas, space plasmas, laser-plasma interactions, and low-temperature plasmas as well as basic plasma phenomena.
Jul 28 –Aug 1, 2014	Lanzhou, China	The 7th China-Japan-Korea Joint Seminar on Atomic and Molecular Processes in Plasma (AMPP2014)
Aug 31 - Sep 5 , 2014	Adelaide, South Australia	12th Asia Pacific Conference on Plasma Science and Technology (APCPST) and Symposium on Plasma Science for Materials (SPSM)
Sep 15-19, 2014	Lisbon, Portugal	International Congress on Plasma Physics, ICPP2014
Sep 21-24, 2014	Beijing , China	2nd International Conference on High Energy Density Physics, ICHEDP2014
Sep 22-24, 2014	Kathmandu, Nepal	International Conference on Plasma Science and Application
Oct 12-17, 2014	Goa, India	ICUIL2014 - international Committee for Ultrahigh Intensity Lasers
Nov 18-21, 2014	Niigata, Japan	Plasma Conference 2014
Dec 15-19, 2014	Daejeon, Korea	IAEA ™ on Atomic , Molecular and plasma-material interaction data for fusion science and technology
Jan 15-17, 2015	Kolkata, India	Laser and Plasma Application in Material Science (LAPAMS 2015)
Feb 22-26, 2015	Munster, Germany	ESCPS2015 - European winter conference on plasma spectroscopy
March 16-27, 2015	Trieste, Italy	Joint ICTP-IAEA Advanced School and Workshop on Modern Methods in Plasma Spectroscopy
March 26-31, 2015	Nagoya University, Japan	ISPlasma2015/IC PLANTS2015: 7th Int. Symp. Advanced Plasma Science and its Applications for Nitrides and Nanomaterials and 8th Int. Conf. Plasma Nanotechnology and Science
April 13-17, 2015	Kochi(Cochin), India	IPPT-7: 7th Int. Conf. the Frontiers of Plasma Physics and Technology
June 9-12, 2015	Dalian , China	5th APTWG (Asia Pacific Transport Working Group Conference).
15 June - 10 July, 2015	Nordita, Sweden	Origin, Evolution, and Signatures of Cosmological Magnetic Fields
July 05-10, 2015	Antwerp, Belgium	ISPC 22 - 22nd International symposium on Plasma Chemistry
Aug 17-22, 2015	POSTECH, Korea	5th East-Asia School and Workshop
Aug.24-Sept.4, 2015	Leuven, Belgium	12th Gleb Wataghin Summer school

AAPPS-DPP Prize : S. Chandrasekhar Prize of Plasma Physics

AAPPS-DPP

Prospectus : S. Chandrasekar Prize of Plasma Physics

AAPPS-DPP executive committee

1. Foundation of S. Chandrasekar Prize

Subrahmanyan Chandrasekhar (1910-1995) was an Indian-American astrophysicist who was awarded the 1983 Nobel Prize for physics for his theory of black hole. He worked in various areas including plasma physics. Plasma physics community is benefited from his works through his textbooks such as "Principles of stelar dynamics (1942)", "Plasma Physics (1975)", "Hydrodynamics and Hydromagnetic stability (1981)".

In 2014, we have established the Division of Plasma Physics under AAPPS. Asia-Pacific region is rapidly growing economically and scientifically. A large number of new programs on various fundamental and applied aspects of plasma physics are emerging in several countries of Asia and the Pacific regions. Young people taking up careers in plasma science in these regions look forward to the prestige of recognition by their peers and this becomes more equitable when your peers are intimately familiar with your work. This will also give a "sense of accomplishment" to the Asia-Pacific region as a whole because the body of significant work already pioneered by the Awardees will be ascribed to this region. The executive committee of division of plasma physics after consultation to I-HAC (International Honorary Advisory Committee) decided to establish Plasma Physics Prize after S. Chandrasekar to recognize seminal/pioneering works in this field.

1st S. Chandrasekhar prize
Prof. Em. Setsuo Ichimaru (2014)

Prof. Em. S. Ichimaru

Rev. Mod. Plasma Phys. (2017)1:6
DOI 10.1007/s41614-017-0008-z

CHANDRASEKHAR LECTURE

Now published on-line, Sept. 19

Phase transitions, interparticle correlations, and elementary processes in dense plasmas

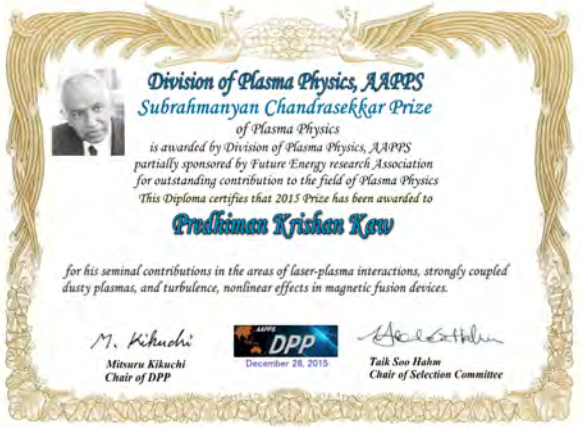
Setsuo Ichimaru[1]

Citation : For his contributions to the establishment of the theoretical basis of the science of **strongly coupled plasmas** and their applications, not only to laboratory plasmas and plasmas in solid- or liquid-state materials including fusion plasmas, but also to important astrophysical plasma phenomena including radiation and nuclear reactions.

AAPPS-DPP Prize : S. Chandrasekhar Prize of Plasma Physics

2015 S. Chandrasekhar prize
Prof. Predhiman Kaw

Prof. Predhiman Kaw



Citation : For his seminal contributions in the areas of laser-plasma interactions, strongly coupled dusty plasmas, and turbulence, nonlinear effects in magnetic fusion devices.

Rev. Mod. Plasma Phys. (2017)1:2
DOI 10.1007/s41614-017-0005-2

CHANDRASEKHAR LECTURE

Published on June 16

Nonlinear laser–plasma interactions

P. K. Kaw[1]

AAPPS-DPP Prize : S. Chandrasekhar Prize of Plasma Physics

2016 S. Chandrasekhar prize : Prof. Donald B. Melrose

Citation: For his sustained original contributions to the theory of coherent emission processes in astrophysical and space plasmas, and for his seminal contributions to the theory of quantum plasmas.

Rev. Mod. Plasma Phys. (2017)1:5
DOI 10.1007/s41614-017-0007-0

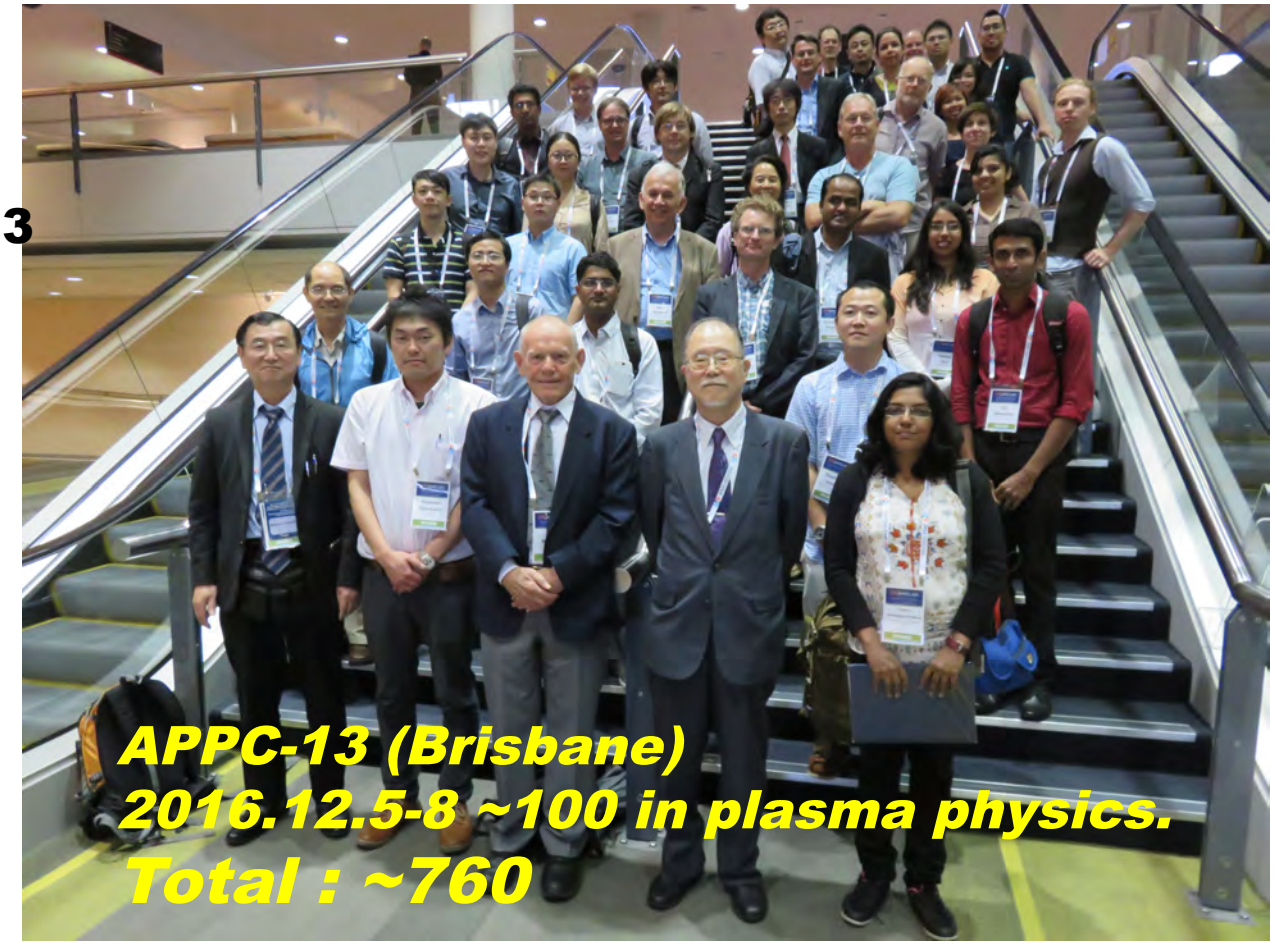
CHANDRASEKHAR LECTURE

Coherent emission mechanisms in astrophysical plasmas

D. B. Melrose[1]

Published on July 25

M. Hole
Vice chair
for APPC-13



AAPPS-DPP Education program
: 2nd ASEAN plasma and fusion school Jan.17-22, 2016

CEA(French)-TINT(Thailand) agreement, co-sponsored by AAPPS-DPP
T. Onjun (DPP chief secretary) : organizer
4 lecturers from Japan M. Murakami, H.Nagatomo, S. Ohdachi, MK,
58 students

Springer

springer.com

Official Journal of the
Division of Plasma Physics,
Association of Asia Pacific
Physical Societies
(AAPPS-DPP)

Reviews of Modern Plasma Physics

Official DPP Journal:
Reviews of Modern Plasma Physics

1. **Name of journal**: "***Reviews of Modern Plasma Physics***" in short ***RMPP***

2. **Concept of RMPP**:

- High quality international **review journal specialized in plasma physics**

- High **impact factor** above 10 (target)

- Cutting-edge reviews and tutorials of modern plasma physics for the Asia-Pacific region

3. **Planned first publication** : **January 2017.**

4. **Term**: first contract may be **5 years** subject to renewal.

5. **Journal model**: ***hybrid journal model***, i.e. a subscription journal with an option to choose open access. If author wants to select open access, he/she has to pay. If not, **free charge**.

6. First two years will be fully open access and from 3rd year, all articles will be closed access (subscription).

7. **Publication model**: ***Continuous article publishing*** model.

8. **Royalty to AAPPS-DPP**: ***25% of net revenue*** after 3rd year.

9. **Merit for AAPPS-DPP members**: ***Free access to individual DPP members*** but not for institutional members. **For authors, USD 100$ book voucher.**

10. **S. Chandrasekhar prize laureates** are requested to write review papers.

11. Summary speakers of AAPPS-DPP annual conference are requested as well.

We started first publication from June 16 , 2017

Authors	Titles
G. K. Parks, E. Lee, S. Y. Fu, N. Lin, Y. Liu, Z. W. Yang	Shocks in collisionless plasmas
P. K. Kaw	Nonlinear laser–plasma interactions
H. Tanaka, K. Ishikawa, M. Mizuno, S. Toyokuni, H. Kajiyama, F. Kikkawa, H.-R. Metelmann, M. Hori	State of the art in medical applications using non-thermal atmospheric pressure plasma
Peter H. Yoon	Kinetic instabilities in the solar wind driven by temperature anisotropies
D. B. Melrose	Coherent emission mechanisms in astrophysical plasmas

S. Ichimaru Phase transition --

1st Editorial Board meeting held on Sept. 19, 7:00 -7:40

PST will Publish Special Issue for This Conference

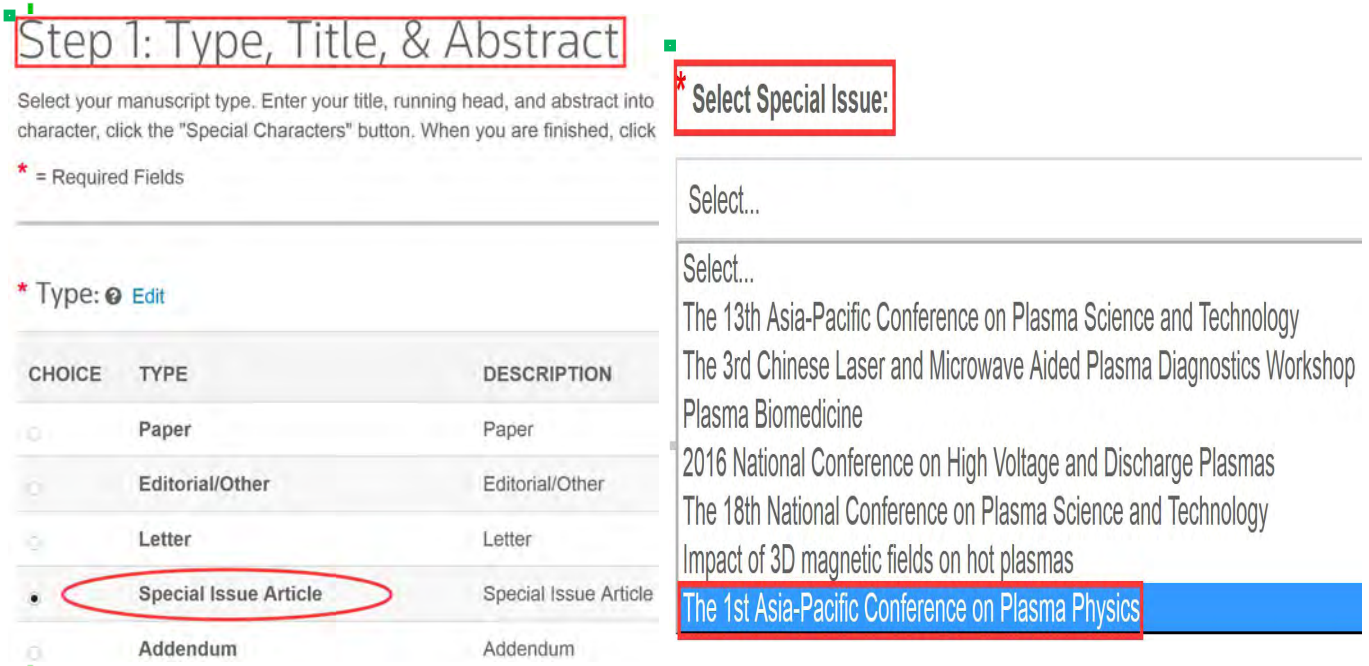
- **Plenary and invited speakers are encouraged to submit your original works for special issue**

  [Review to RMPP]

- **All other are welcome to submit your works as regular paper**

Submit your paper online at: https://mc03.manuscriptcentral.com/pst

Submission deadline: December 25, 2017

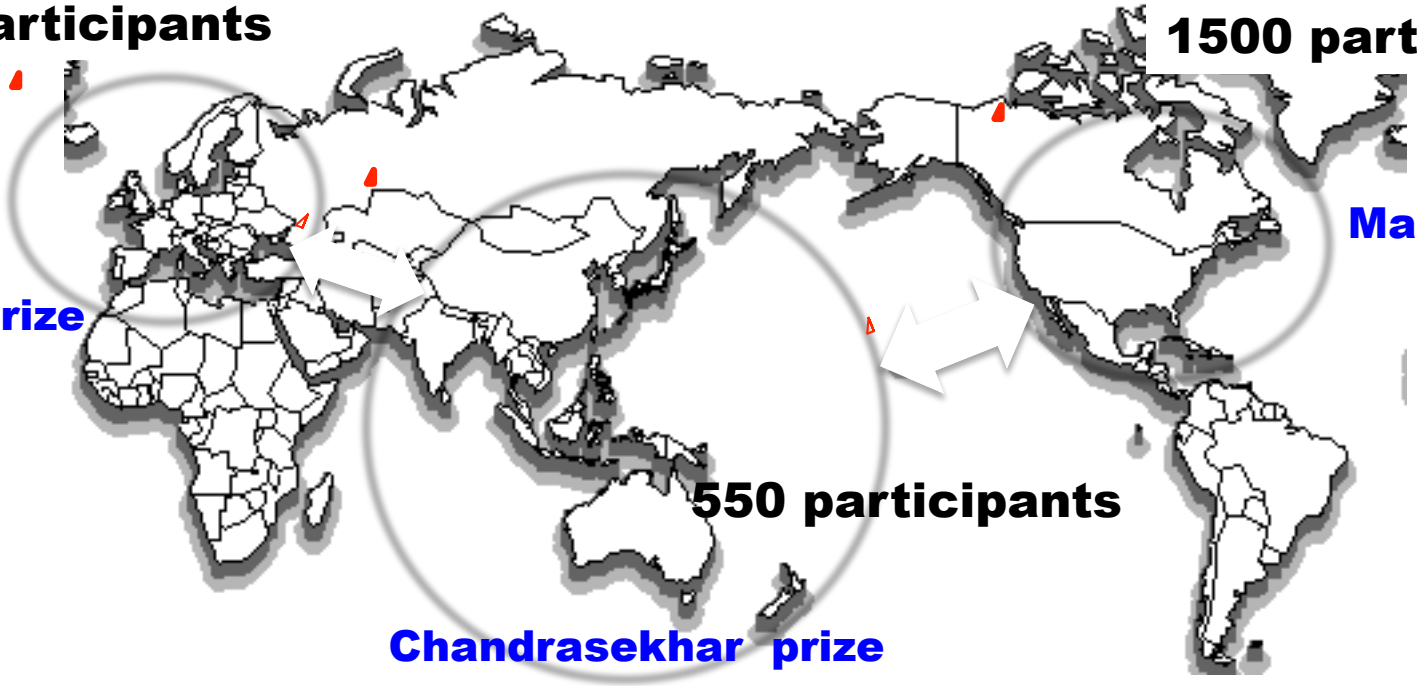


Note: please first select "Special Issue Article" in manuscript Type column, then select "The 1st Asia-Pacific Conference on Plasma Physics" in Select Special Issue column when submitting your manuscript in PST manuscript system.

DPP Annual Conference

European Physical society (EPS)
Division of plasma physics
700 participants

American Physical society (APS)
Division of plasma physics
1500 participants



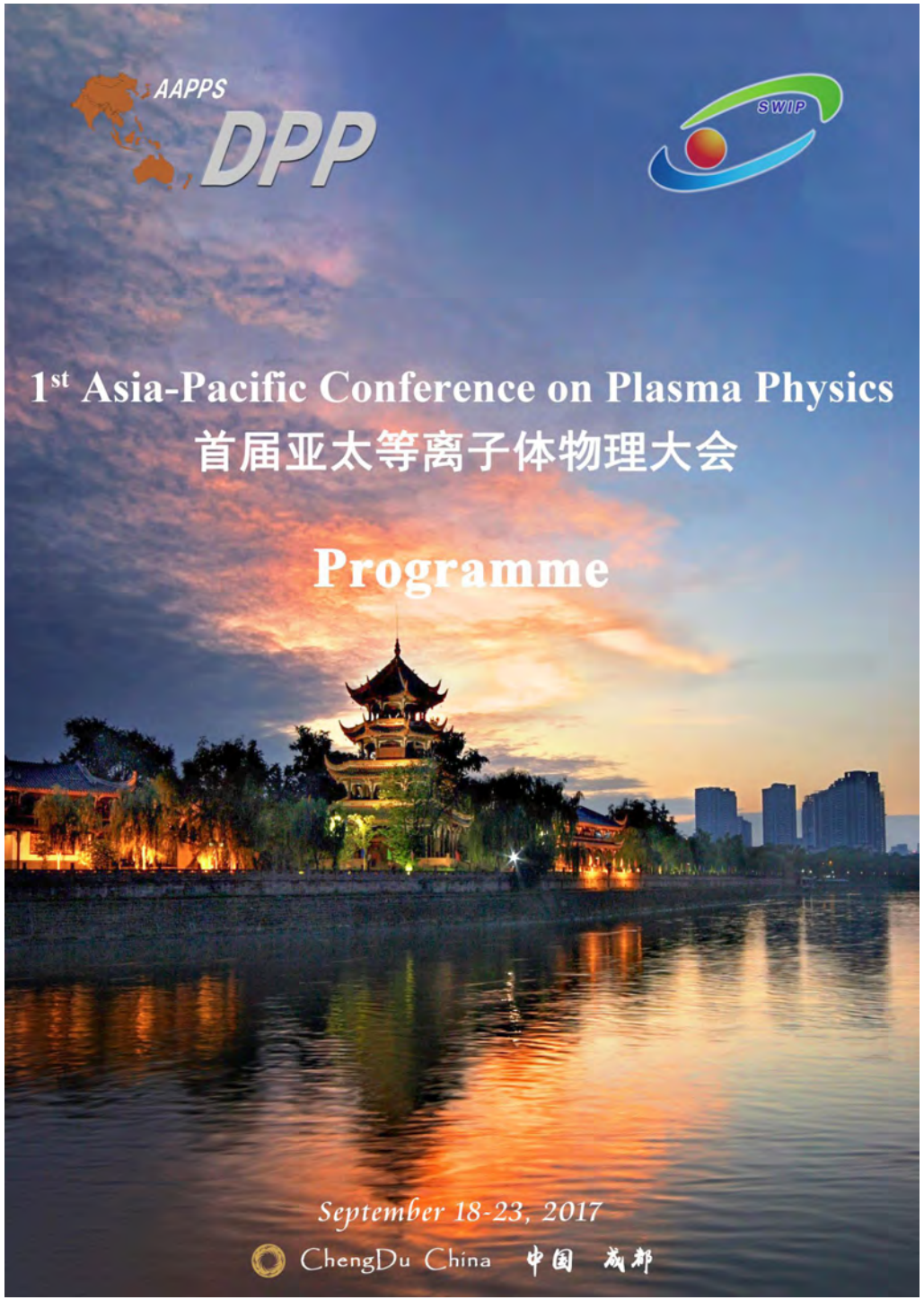
Alfven prize

Maxwell prize

550 participants

Chandrasekhar prize

AAPPS-DPP
Division of plasma physics



Organized by AAPPS-DPP

Hosted by SWIP
(LOC chair: Y. Liu)

IOC chair: Liu Chen

General PC chair: M. Kikuchi

Fundamental chair: TS Hahm
Basic chair: A. Sen
Applied chair: M. Shiratani
Laser chair: ZM Sheng
Space chair: Lou C. Lee
Solar/Astro chair: K. Shibata
Magnetic F. chair: B. Wan


1st Asia-Pacific Conference on Plasma Physics
首 届 亚 太 等 离 子 体 物 理 大 会
September 18-23, 2017 Chengdu, China


1st Asia-Pacific Conference on Plasma Physics
首 届 亚 太 等 离 子 体 物 理 大 会
September 18-23, 2017 Chengdu, China

1st Asia-Pacific Conference on Plasma Physics

Plenary (30minutes), Invited (30-25minutes), Oral (15 minutes), Public Lectures (60min)

Monday (2017.09.18)	Tuesday (09.19)	Wednesday (09.20)	Thursday (09.21)	Friday (09.22) **Interdisciplinary**
7:00~: Breakfast/ Registration	7:00~: Breakfast/ Registration	7:00~: Breakfast/ Registration	7:00~: Breakfast/ Registration	7:00~: Breakfast/ Registration
	Plenary 2 [Jiangang Li]	Yu memorial [Hua Li]	Plenary 6 [Won Namkung]	Plenary 8 [P. Diamond]
8:00: Opening Session	8:00-8:30: P4 D. Campbell	8:00-8:30:P11 B. Wan	8:00-8:30: P18 H. Park	8:00-8:30:P25 M. Osakabe
	8:30: P5 T. Watanabe	8:30-9:00: P12 Y. Ono	8:30-9:00: P19 M. Bonitz	8:30-9:00: P26 S. Inagaki
	9:00: P6 K. Kusano	9:00-9:30: P13 JL. Miquel	9:00-9:30:P20 B. Tsurutani	9:00-9:30: P27 YX. Liu
9:30-10:00: Photo Break	9:30: P7 HT. Kim	9:30-10:00: P14 Hui Li	9:30-10:00:P21 T. Hosokai	9:30-10:00: P28 T. Chiueh
Kaw memorial [Liu Chen]	10:00: Coffee Break	10:00-10:30: Coffee Break	10:00-10:30: Coffee Break	10:00-10:30: Coffee Break
10:00-10:30: P1 X.T. He	Plenary 3 [R. Matsumoto]	Plenary 5 [M. Shiratani]	Plenary 7 [Don Melrose]	Plenary 9 [T. Hoang]
10:30-11:00: P2-1 L.C. Lee	10:30: P8 K. Shibata	10:30-11:00:P15 H. Hayashi	10:30-11:00: P22 T. Souradeep	10:30-11:00: P29 X. Duan
11:00-11:30: P2-2 C.Z. Cheng	11:00: P9 D. Baker	11:00-11:30:P16 M. Sunkara	11:00-11:30: P23 H.C. Wu	11:00-11:30: P30 Y. Li
11:30-12:00: P3 A. Nishida	11:30: P10 Y. Ikehara	11:30-12:00:P17 S. Shinohara	11:30-12:00: P24 G. Tynan	11:30-12:00: P31 H. Qin
12:00-14:00 Lunch &Poster 1	12:00-14:00 Lunch &Poster 1	12:00-14:00 Lunch &Poster 2	12:00-14:00 Lunch &Poster2	12:00-12:30:P32 H. Akatsuka
				12:30-13:30 Lunch
14:00-16:00 F I [P. Diamond]	14:00-16:00: F III [T. Chieuh]	14:00-16:00: F V [G. Tynan]	14:00-16:00: F VII [D. Escande]	Plenary(Summary)[S. Senguputa]
14:00-16:00 B I [A. Sen]	14:00-16:00: BIII [H.Akatsuka]	14:00-16:00: B V [Lin I]	14:00-16:00: B VII [M. Bonitz]	13:30-14:00: Fundamental M. Xu
14:00-16:00 A I [M.Hiramatsu]	14:00-16:00: A III [RS Rawat]	14:00-16:00: A V [YX Liu]	14:00-16:00: A VII [H. Toyoda]	14:00-14:30: Basic A. Sen
14:00-16:00 L I [ZM Sheng]	14:00-16:00: L III [CH Nam]	14:00-16:00: L V [M. Murakami]	14:00-16:00: L VII [Ke Lan]	14:30-15:00:Applied M. Shiratani
14:00-16:00 S I [J. Buchner]	14:00-16:00: S III [Y. Omura]	14:00-16:00: S V [M. Mauel]	14:00-16:00: S VII [B. Tsurutani]	15:00-15:30: Laser ZM Sheng
14:00-16:00 SA I [K. Shibata]	14:00-16:00: SA III [G. Choe]	14:00-16:00: SA V [D. Melrose]	14:00-16:00: SA VII [R.Yamazaki]	
14:00-16:05MFI-1[M. Kikuchi]	14:00-16:00:MFIII-1[AM Garofalo]	14:00-16:00: MF V-1 [H. Park]	14:00-16:00: MF VII-1 [J.Q. Li]	15:30-16:00: Coffee Break
14:00-16:05 MF I-2 [M. Xu]	14:00-16:00: MF III-2 [GS Xu]	14:00-16:00: MF V-2 [K. Ida]	14:00-16:00: MF VII-2 [Y. Liang]	Plenary(Summary) [M. Kikuchi]
	14:00-16:00: MF III-3 [M. Hole]	14:00-16:00:MFV-3[A.Kirschner]	14:00-16:00: MF VII-3 [JQ Dong]	16:00-16:30: Space Y. Omura
16:00-16:30: Coffee Break	16:00-16:30: Coffee Break	16:00-16:30: Coffee Break	16:00-16:30: Coffee Break	16:00-17:00: S/A P. F Chen
				17:00-17:30: MF Jiangang Li
16:30-18:30: F II [T.Watanabe]	16:30-18:30: F IV [Lu Wang]	16:30-18:30: F VI [J. Cho]	16:30-18:30: F VIII [H. Sugama]	
16:30-18:30: B II [C.S. Liu]	16:30-18:30:BIV [S. Shinohara]	16:30-18:30: B VI [Z. Wang]	16:30-18:30: B VIII [F. Doveil]	Closing Session
16:30-18:30: A II [JS Oh]	16:30-18:30: A IV [T. Kaneko]	16:30-18:30:AVI [I.P. Ganachev]	16:30-18:30: A VIII [K. Sasaki]	17:30-18:00: MK&LC
16:30-18:30: L II [MS Hur]	16:30-18:30: LIV [H. Kiriyama]	16:30-18:30: LVI [D. Batani]	16:30-18:30: L VIII [H. Zhuo]	
16:30-18:30: S II [Q.M. Lu]	16:30-18:30: S IV [Q. Zong]	16:30-18:30: S VI [S.Zenitani]	No space session	
16:30-18:30:SAII[R.Matsumoto]	16:30-18:30: SA IV [L. Wang]	16:30-18:30: SA VI [J. Lin]	16:30-18:30: SA VIII [PF Chen]	**In-depth discussion**
16:30-18:30:MFII-1[ZX Wang]	16:30-18:30: MF IV-1 [G. Tynan]	16:30-18:30: MF VI-1 [D. Li]	16:30-18:30: MF VIII-1 [W. Xiao]	
16:30-18:30: MF II-2 [YK Oh]	16:30-18:30: MF IV-2 [M. Kim]	16:30-18:30: MF VI-2 [R. Pitts]	16:30-18:30:MFVIII-2 [G. Zhuang]	
	16:30-18:30: MF IV-3 [Y. Liu]	16:30-18:30: MF VI-3 [X. Sun]	16:30-18:30:MFVIII-3 [J. Weiland]	
	18:30-19:30: diner time	18:30-19:30: diner time		
19:00-21:00: Reception	18:40-19:40: EV-1 (S1) [Yong Liu] Luo Delong	18:40-19:40: EV-2 (S1) M. Kikuchi, B. Wan	19:30-22:00: Conference Dinner (Award intro.)	

Public lectures: Y. Liu, K. Shibata at Sichuan U. Sunday

Publication of AAPPS-DPP 2017 papers

S. Chandrasekhar prize winners are requested to write review paper to RMPP.
Summary speakers are requested as well.

Plenary and invited speakers are encouraged to submit review paper if appropriate.

Invited and contributed speakers are encouraged to submit original paper to PST.

Executive committee (decision body 2017-2020)

Function	Name (OLD ExCo)	Name (NEW ExCo)
Chair :	M. Kikuchi	-> M. Kikuchi
Chair-Elect :	No	-> B. Wan
Vice chair		
Fundamental :	Liu Chen(CN)	-> Z. Yoshida (JP)
Basic :	A. Sen(IN)	-> Shih-hung Chen(TW)
Applied :	M.Shiratani(JP)	-> Jung-Sik Yoon (KR)
Laser :	ZM Sheng (CN)	-> Amita Das (IN)
Space :	Lin Ni Hau (TW)	-> X.T. Deng (CN)
Solar/Astro :	D. Ryu (KR)	-> R. Matsumoto(JP)
Magnetic Fusion :	No	-> X. Duan (CN)
2018 DPP :	No	-> Uesugi (JP)
Next APPC :	M. Hole (AU)	-> R.S. Rawat (SG)
Budget :	No	-> M. Shiratani (JP)
Chief Div. secret. :	T. Onjun (TH)	-> M. Hole (AU)
DPP (HP) :	H. Nagai(JP)	-> H. Nagai (JP)
DPP secretary :	K. Imadera(JP)	-> Yong Liu (CN)

I-HAC(advisory body 2017-2020)

Chair : Liu Chen

Vice Chair: A. Sen

DPP Calendar

- 2013: APPC-12 (Makuhari, Japan)
- 2014: Start DPP, Start S. Chandrasekhar Prize
- 2015: S. Chandrasekhar
- 2016: APPC-13(Brisbane, Australia)
- 2017: 1st AAPPS-DPP conf., RMPP journal
- 2018: 2nd AAPPS-DPP conf., Kanazawa, Japan Nov. 12-16
- 2019: APPC-14 (Sarawaku, Malaysia)
- 2020: 3rd AAPPS-DPP conf.
- 2021: 4th AAPPS-DPP conf.
- 2022: APPC-15 (?)

Next year to KANAZAWA!