

Division of Plasma Physics (DPP)

The Division of Plasma Physics (DPP) was the first division that was formed under AAPPS (Association of Asia Pacific Physical Societies) in 2014 (HP: <http://aappsdp.org/AAPPSDPPF/index.html>). We started with 103 founding members and now there are 1491 members as of April 25, 2018. In the following article we will discuss recent activities of the DPP.

2ND ANNUAL CONFERENCE ON PLASMA PHYSICS

Following the successful first annual conference held at Chengdu (December 2017, Volume 27, No.6, page 46-47), the DPP is organizing the Second Annual Conference on Plasma Physics at the Kanazawa Chamber of Commerce and Industry Hall and Ishikawa Prefectural Bunkyo Hall in Kanazawa, Japan from Nov. 12-17, 2018 (<http://aappsdp.org/DPP2018/index.html>).

The conference will be organized by several sub-disciplines as follows: CD (Cross-Disciplinary), F(Fundamental), B(Basic), A(Applied), L(Laser), S(Space), SA(Solar/Astro) and MF(Magnetic Fusion).

We have approximately four plenary speakers from each sub-discipline. This year's 32 plenary speakers are Prof. Steven Tobias (U. Leeds), Prof. Shigeo Yoden (Kyoto U.), Prof. Chijie Xiao (Peking U.), Prof. Daniel Lathrop (U. Maryland), Prof. Michio Yamada (Kyoto U.), Prof. Fulvio Zonca (ENEA), Prof. Katsumi Ida (NIFS), Prof. Yi-Kang Pu (Tsinghua U.), Prof. A.A. Mamun (Jahangirnagar U.), Prof. Yasushi Todo (NIFS), Prof. Kwo-Ray Chu (National Taiwan University), Prof. Chao Chang (Xi'an Jiaotong U.), Prof. Masaru Hori (Nagoya U.), Prof. Ken Ostrikov (Queensland University of Technology), Prof. Ho Jun Kim (Dong-A University/Samsung Electronics), Prof. Ryosuke Kodama (Osaka U.), Prof. G. Ravindra Kumar (Tata Institute of Fundamental Research), Prof. Björn Manuel Hegelich (Institute of Basic Science), Prof. Xian-Tu He (Institute of Applied Physics and Computational Mathematics), Prof. James F. Drake (U. Maryland), Prof. Gurudas Ganguli

(Naval Research Laboratory), Prof. Daniel Baker (U. Colorado), Prof. Fouad Sahraoui (Universit  Pierre & Marie Curie), Prof. Kazuo Makishima (U. Tokyo), Prof. Xuening Bai (Tsinghua U.), Prof. Masahiro Hoshino (U. Tokyo), Prof. Peter H. Yoon (U. Maryland), Prof. Yunfeng Liang (IPP-CAS), Dr. Yong Kyoon In (NFRI), Dr. Wulyu Zhong (SWIP), Prof. Tony Donn  (EUROfusion), and Dr. Naoyuki Oyama (QST). Details can be seen at <http://aappsdp.org/DPP2018/programme.html>.

This conference is sponsored by the city of Kanazawa, Ishikawa prefecture, APCTP (Asia Pacific Center for Theoretical Physics), NFRI (National Fusion Research Institute, Korea), the IFE-Forum, and Hamamatsu Photonics and is endorsed by the Division of Plasma Physics of the American Physical Society (APS-DPP); the Division of Plasma Physics of the European Physical Society (EPS-DPP); the Physical Society of Japan (JPS); the Division of Plasma Physics of the Chinese Physical Society (CPS-DPP); the Division of Plasma Physics of the Korean Physical Society (KPS-DPP); the Plasma Science Society of India (PSSI); the Asian African Association on Plasma Training (AAAPT); the Australian ITER Forum; the Astronomical Society of Japan (ASJ); the Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS); the Laser Society of Japan (LSJ); the Division of Plasma Electronics of the Japan Society of Applied Physics (DPE-JSAP); the Society of Nuclear Fusion and Plasma Physics of the Chinese Nuclear Society (CNS-NFPP); and the Japan Society of Plasma Science and Nuclear Fusion Research (JSPF).

We have a total of 270 invited speakers. The number of invited speakers in each sub-discipline is as follows: CD (Cross-disciplinary) 24, F (Fundamental plasma) 24, B (Basic plasma) 60, A (Applied plasma) 24, L (Laser plasma) 42, S (Space and Geomagnetism plasma) 24, SA (Solar/Astro plasma) 24, MF (Magnetic Fusion plasma) 48.

AAPPS-DPP AWARDS

In parallel with programming activities, the DPP will also be presenting several prizes and awards.

1. Subramanyan Chandrasekhar Prize of Plasma Physics

In 2014, AAPPS-DPP began awarding the Chandrasekhar Prize of Plasma Physics. We received several nominations and closed the period for nominations on March 20, 2018. The winner will give the Chandrasekhar Lecture at AAPPS-DPP 2018 in Kanazawa (<http://aappsdpp.org/AAPPSDPPF/prizetable.html>).

2. AAPPS-DPP Young Researcher Award

In 2016, AAPPS-DPP created the Young Researcher Award. The deadline for the application is May 31, 2018. The selection committee, chaired by Prof. Liu Chen (Zhejiang University), will select several winners. Each winner will receive a certificate and US\$ 500. The following materials are requested in the nomination package.

1. Candidate's biographical sketch, including date of birth and citation metrics (WoS total citations and H-index).
2. Candidate's list of referred journal publications including citations numbers (WoS).
3. Nomination letter: the nominator must be a AAPPS-DPP member.
4. Supporting letters: a maximum of two letters. Writers are not limited to AAPPS-DPP members.
5. Significant publications in PDF format: a maximum of two publications.

3. AAPPS-DPP U30 Doctoral Scientist / Student Award

AAPPS-DPP started the U30 award this year, which is sponsored by IFE Forum in Japan. The deadline for the application is May 31, 2018. The selection committee, chaired by Prof. Kunioki Mima (Osaka University), will choose several winners. Each winner will receive a certificate and US\$ 300. The following materials are requested in the nomination package.

1. Nominee's contact information, publication list, CV.
2. Nominator's letter of not more than 1,000 words evaluating the nominee's qualifications for the award (self-nomination is not allowed).
3. At least one, but no more than four, supporting letters.
4. The nominee's main paper, which will be evaluated as the work for the award.

Recipients of the above three categories of prize/awards will give talks at AAPPS-DPP 2018 in Kanazawa. There will also be a poster prize.

REVIEWS OF MODERN PLASMA PHYSICS (RMPP)

The DPP started this official journal in 2017 under the contract with Springer-Nature. The DPP owns the journal copyright and 10 articles have been published, including the Chandrasekhar lectures, review papers and an obituary for P. Kaw in 2017. The first volume can be seen at <https://link.springer.com/journal/41614/1/1/page/1>.

The papers are free access until Dec. 31, 2018. From 2019, papers are closed, with the exception of open access papers, and will be provided through subscriptions. As of April 24, 2018, four papers have been published in the second; they can be seen at <https://link.springer.com/journal/41614/2/1/page/1>.

The following papers have been the published after last report in December 2017.

1. H. Sugama, Modern gyrokinetic formulation of collisional and turbulent transport in toroidally rotating plasmas (<https://doi.org/10.1007/s41614-017-0010-5>): Open access
2. Q. Zong, et al., The interaction of ultra-low-frequency pc3-5 waves with charged particles in Earth's magnetosphere (<https://doi.org/10.1007/s41614-017-0011-4>)
3. Andrew Hillier, The magnetic Rayleigh-Taylor instability in solar prominences (<https://doi.org/10.1007/s41614-017-0013-2>): Open access
4. A.E. Dubinov, D.Y. Kolotkov, Above the weak nonlinearity: super-nonlinear waves in astrophysical and laboratory plasmas (<https://doi.org/10.1007/s41614-018-0014-9>)
5. J. Li, W. Zhong, Summary of magnetic fusion plasma physics in 1st AAPPS-DPP meeting (<https://doi.org/10.1007/s41614-018-0015-8>)
6. O. Baranov, et al., Towards universal plasma-enabled platform for the advanced nanofabrication: plasma physics level approach (<https://doi.org/10.1007/s41614-018-0016-7>)

