

Sept. 27, 2024

Association of Asia-Pacific Physical Societies (AAPPS)
Division of Plasma Physics (AAPPS-DPP)

AAPPS-DPP Young Researcher (U40) Award and U30 Doctoral Scientist / Student Award

The Division of Plasma Physics (CEO: Mitsuru Kikuchi, Chair: Abhijit Sen) under the Association of Asia Pacific Physical Societies (President: Hyoung Joon Choi) selected 6 scientists under 40 for AAPPS-DPP Young Researcher (U40) Award and 6 scientists under 30 for U30 Doctoral Scientist / Student Award.

Sub-discipline in plasma physics, names, affiliations, home country/region are as follows.

AAPPS-DPP Young Researcher (U40) Award winners:

Fundamental plasma physics
 Dr. Tatsuya Kobayashi National Institute for Fusion Science
 Applied plasma physics
 Dr. Ya Zhang
 Wuhan University of Technology

3. Laser plasma physics : Dr. Guoqian Liao Institute of Physics, CAS

4. Space/Geomag plasma physics : Dr. Xin Tao USTC

5. Solar/Astro plasma physics : Dr. Bidya Binay Karak IIT(BHU), Varanasi

6. Magnetic Fusion plasma physics : Dr. Wei Zhang Institute of Plasma Physics, CAS

AAPPS-DPP U30 Doctoral Scientist / Student Award winners:

1. Basic plasma physics : Dr. Hao-Wei Hu Univ. Glasgow/ National Central Univ.

2. Laser plasma physics : Dr. Linzheng Wang Shanghai Jiao Tong University

3. Laser plasma physics : Dr. Shiyu Zhou Tsinghua University

4. Space plasma physics : Dr. Shimou Wang USTC

5. Solar/Astro plasma physics : Dr. Jinhan Guo KU Leuven/Nanjing University

6. Magnetic Fusion plasma physics: Dr. Haowei Zhang Max Planck Inst. for Plasma Physics/ Zhejiang Univ.

Certificate, plate and cash prize will be given at the 7th Asia-Pacific Conference on Plasma Physics in Nov.4, 2024 at Malacca, Malaysia.

Contact points:

AAPPS-DPP Representative Director and CEO, Mitsuru Kikuchi (AAPPS-DPP Association Inc.)

TEL: +81-80-115-3482, E-mail: aapps.dpp.ceo@gmail.com

AAPPS-DPP Homepage Address: http://aappsdpp.org/AAPPSDPPF/index.html

Press Release



AAPPS-DPP Young Researcher (U40) Award

AAPPS-DPP recognizes young research scientists who made a significant research contribution(s) to plasma physics at AAPPS affiliation not more than 40 by AAPPS-DPP young researcher award since 2016. Past recipients (2016-2023) can be found at http://aappsdpp.org/AAPPSDPPF/youngawardtable.html

This year(2024), 21 candidates are nominated from AAPPS-DPP members, who published papers in leading journals. Selection committee are formed by members from India, China, Australia, Japan, Korea, Europe and selected 6 winners by rigorous evaluation.

| U40 Winner | Field, Name and Affiliation | Citation |
|------------|---|---|
| | [Fundamental] Tatsuya Kobayashi National Institute for Fusion Science, NINS | For his significant contribution in fundamental understanding of background physics of self-organized plasma structure formation through utilizing novel statistical analysis techniques. |
| | [Applied] Ya Zhang Wuhan University of Technology | For her outstanding contributions to understanding low-temperature plasma physics, in developing advanced models which incorporate complex physical phenomena. Her work effectively bridges the gap between plasma physics and condensed matter physics, enhancing the utility and application of plasma technologies in various scientific fields. |
| | [Laser] Guoqian Liao Institute of Physics, CAS | For his significant contributions to the ultra-intense laser driven terahertz radiation from plasmas, particularly the original breakthroughs in the physical mechanisms, performance metrics and fast electron diagnostics |
| | [Space/Geomagnetism] Xin Tao University of Science and Technology of China (USTC) | For his fundamental contribution to understanding frequency chirping events in Earth's and planetary magnetospheres, illuminating the underlying processes in the framework of a unifying physics model. |
| | [Solar/Astro] BidyaBinay Karak Indian Institute of Technology (BHU), Varanasi | For his fundamental studies of the flux transport dynamo mechanism in the Sun and other stars to provide theoretical explanations for different aspects of the solar and stellar cycles. |
| | [Magnetic Fusion] Wei Zhang Institute of Plasma Physics, CAS | For his outstanding contribution to understanding the interaction between radiofrequency wave and fusion plasma, and the methods developed to improve the efficiency of radiofrequency wave heating. |

2024 U40 Selection committee:

Chairman: Prof. Tuong Hoang (Ex-CEA, FR)

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

Prof. Satyavir Singh (Indian Institute of Geomagnetism, IN)

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

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

Prof. Jungyeon Cho (Chungnam National University, KR)

Prof. Anthony B. Murphy (CSIRO, AU)

Prof. Xavier Garbet (Nanyang Technological University, SG)

Prof. Robert Bingham (Science and Technology Facilities Council, UK)

Press Release



AAPPS-DPP 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 (2018-2023) can be found at http://aappsdpp.org/AAPPSDPPF/U30awardtable.html

This year(2024), 18 candidates are nominated from AAPPS-DPP members, who published papers in leading journals. Selection committee are formed by members from India, China, Japan and selected 6 winners by rigorous evaluation.

| U30 Winner | Field, Name, Affiliation | Citation |
|------------|--|--|
| | [Basic] Hao-Wei Hu University of Glasgow/ National Central University | For the significant contribution in multiscale coherent excitations in microscopic acoustic wave turbulence of cold dusty plasma liquids |
| | [Laser] Linzheng Wang Shanghai Jiao Tong University | For the significant contribution in the generation of milli-joule terahertz radiation by laser wake fields in nonuniform plasmas |
| 9 | [Laser] Shiyu Zhou Tsinghua University | For the significant contribution in high efficiency uniform wakefield acceleration of a positron beam using stable asymmetric mode in a hollow channel plasma |
| | [Space] Shimou Wang University of Science and Technology of China (USTC) | For the significant contribution in direct evidence of secondary reconnection inside filamentary currents of magnetic flux ropes during magnetic reconnection |
| | [Solar&Astro] Jinhan Guo KU Leuven/ Nanjing University | For the significant contribution in thermodynamic and magnetic topology evolution of the X1.0 flare on 2021 October 28 simulated by a data-driven radiative magneto-hydrodynamic model |
| | [Magnetic Fusion] Haowei Zhang Max Planck Institute for Plasma Physics / Zhejiang University | For the significant contribution in zonal flow generation and toroidal Alfven eigenmode excitation due to tearing mode induced energetic particle redistribution |

2023 U30 Selection committee:

Chairman: Em. Prof. Kunioki Mima (Osaka University, JP)

Members: Prof. Sudeep Sengputa (Institute for Plasma Research, IN)
Prof. Jiaq Dong (Southwestern Institute of Physics, CN)
Em. Prof. Yasuaki Kishimoto (Kyoto University, JP)