

Sept. 15, 2023

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 **7 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:

1.	Fundamental plasma physics	: Dr. Shinya Maeyama, National Institute for Fusion Science	Japan
2.	Applied plasma physics	: Dr. Attri Pankaj, Kyushu University	India
3.	Laser plasma physics	: Dr. Yang Wan, Henan QiFeng New Light Source Co., Ltd.	China
4.	Space/Geomag plasma physics	: Dr. Shiyong Huang, Wuhan University	China
5.	Solar/Astro plasma physics	: Dr. Ting Li, National Astronomical Observatory, CAS	China
6.	Magnetic Fusion plasma physics	s: Dr. Rui Ding, Institute of Plasma Physics, CAS	China
7.	Magnetic Fusion plasma physics	s : Dr. Xiaodi Du, General Atomics	China

#### **AAPPS-DPP U30 Doctoral Scientist / Student Award winners:**

1.	Basic plasma physics	: Dr. Swarnima Singh, Institute for Plasma Research	India
2.	Laser plasma physics	: Dr. Masato Ota, National Institute for Fusion Science	Japan
3.	Space plasma physics	: Dr. Zhi-Yang Liu, Peking University	China
4.	Solar/Astro plasma physics	: Dr. Yajie Chen, MPS/Peking University	China
5.	Magnetic Fusion plasma physics: Dr. Yi Zhang, Southwestern Institute of Physics		China
6.	Magnetic Fusion plasma physic	s: Dr. Jaemin Seo, Chung-Ang University	Korea

Certificate, plate and cash prize will be given at the 7<sup>th</sup> Asia-Pacific Conference on Plasma Physics in Nov.13, 2023 at Port Messe Nagoya.

### **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 (2016-2022) can be found at <a href="http://aappsdpp.org/AAPPSDPPF/youngawardtable.html">http://aappsdpp.org/AAPPSDPPF/youngawardtable.html</a>

This year(2023), 31 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, US, Europe and selected 7 winners including 1 women by rigorous evaluation.

U40 Winner	Field, Name and	Citation
	Affiliation	
	[Fundamental] Shinya Maeyama National Institute for Fusion Science	For his pioneering work on multi-scale gyrokinetic simulation of drift wave turbulence and transport in magnetically confined plasma, revealing cross-scale interactions of plasma turbulence and zonal flows. The achievements contributed to quantitative evaluation of the anomalous transport in fusion plasma experiments.
	[Applied] Attri Pankaj Kyushu University	For outstanding research in low-temperature plasmas, including understanding the mechanisms of reactive species generation in the gas and liquid phases, and their applications in agriculture and medicine.
	[ Laser ] Yang Wan [万阳] Henan QiFeng New Light Source Co., Ltd.	For his significant contributions to exploring the key physics of laser-plasma ion acceleration and developing advanced diagnostics for revealing the key processes involved in laser-plasma wake-field acceleration.
	[ Space/Geomagnetism] Shiyong Huang [黄狮勇] Wuhan University	For his significant contributions to the understanding of magnetic structures and plasma waves during magnetic reconnection, the properties of plasma turbulence spanning from MHD to electron scales, and the interplay between magnetic reconnection and plasma turbulence.
	[ Solar/Astro ] Ting Li[李婷] National Astronomical Observatory, CAS	For her important contributions to scientific advances in the 3D evolution and triggering mechanism of solar eruptive activities, including the discovery of observational evidence for 3D reconnection models of solar flares.
	[ Magnetic Fusion ] Rui Ding[丁锐] Institute of Plasma Physics, CAS	For his outstanding contributions towards understanding of plasma-wall interaction processes via development of material erosion and migration models and dedicated experiments in various tokamaks, and effective divertor physics solutions for fusion reactors.
	[ Magnetic Fusion ] Xiaodi Du [杜晓第] General Atomics	For his significant contribution to development of diagnostic systems for fusion products such as neutrons and tritons, demonstration of MeV ion confinement and visualization of beam ion profiles and transport due to MHD instabilities toward understanding fusion burning plasmas.

2023 U40 Selection committee:

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

Members: Prof. G. Ravindra Kumar (Tata Institute of Fundamental Research, IN)

Prof. Katsumi Ida (National Institute for Fusion Science, JP)

Prof. Tohru Hada (Kyushu University, JP)

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

Prof. Yunfen Liang (Forschungszentrum Jülich GmbH, DE/ Institute of Plasma Physics-CAS, CN)

Prof. Jungyeon Cho (Chungnam National University, KR)

Prof. Anthony B. Murphy (CSIRO, AU)

Prof. Troy Carter (UCLA, US)

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

# 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 (2018-2022) can be found at http://aappsdpp.org/AAPPSDPPF/U30awardtable.html

This year(2023), 20 candidates are nominated from AAPPS-DPP members, who published papers in leading journals. Selection committee are formed by members from India, China, Korea, Japan and selected 6 winners including 1 women by rigorous evaluation.

U30 Winner	Field, Name, Affiliation	Citation
	[ Basic ] Swarnima Singh Institute for Plasma Research	For the significant contribution on "Demonstrating formation of square lattice in a monodisperse complex plasma"  Main paper: Swarnima Singh, et al, Square Lattice Formation in a Monodisperse Complex Plasma, Phys. Rev. Lett. 2022
	[ Laser ] Masato Ota National Institute for Fusion Science	For the significant contribution on "Ultra-fast visualization of electric fields around a relativistic electron bunch"  Main paper: Masato Ota, et al., Ultrafast visualization of an electric field under the Lorentz transformation, Nature Physics (2022)
	[ <b>Space</b> ] Zhi-Yang Liu [刘志扬] Peking University	For the significant contribution on "New findings on multiscale wave-ion interaction in near-earth space plasmas"  Main paper: ZY. Liu ,et al., Simultaneous macroscale and microscale wave-ion interaction in near-earth space plasmas, Nature com (2022)
	[Solar&Astro] Yajie Chen [陈亚杰] MPS/Peking University	For the significant contribution to "the understanding of small-scale reconnection events in the solar atmosphere"  Main paper: Yajie Chen, et al, Transient small-scale brightenings in the quiet solar corona: A model for campfires observed with Solar Orbiter, Astronomy &Astrophysics (2021)
	[ Magnetic Fusion ] Yi Zhang [张毅] South Western Institute of Physics	For the significant contribution on "Finding effects of curvature of radial electric field on edge magnetohydrodynamics mode in toroidal plasmas"  Main paper: Y. Zhang, et al., Curvature of Radial Electric Field Aggravates Edge Magnetohydrodynamics Mode in Toroidally Confined Plasmas, Phys. Rev. Lett. (2020)
	[ Magnetic Fusion ] Jaemin Seo Chung-Ang University	For the significant contribution on "Finding a new-type of self-generated current in magnetized plasmas"  Main paper: Yong-Su Na, Jaemin Seo, et al, Observation of a new type of self-generated current in magnetized plasmas, Nature com (2022)

2023 U30 Selection committee:

Chairman: Em. Prof. Kunioki Mima (Osaka University, JP) Members: Prof. Ryoji Matsumoto (Chiba University, JP)

> Prof. Joydeep Ghosh (Institute for Plasma Research, IN) Prof. Liming Chen (Shanghai Jiaotong University, CN)

Prof. Xuening Bai (Tsinghua University, CN)

Prof. Jong-Kyu Park (Seoul National University, KR)