

Annual Report (2024-2025)

IUGG Union Commission on Planetary Sciences (UCPS)

Website: <http://202.127.29.4/geodesy/ucps>

1. INTRODUCTION

The IUGG Union Commission on Planetary Sciences (UCPS) aims to promote and coordinate scientific (physical, chemical, and mathematical) studies of planets in the solar system and around other stars. UCPS intends to advance planetary science through advocacy of solar system and extrasolar exploration, seeking insights on the origin, formation and evolution of planets and systems, including a search for habitable worlds beyond Earth. The UCPS together with other IUGG associations will share knowledge through scientific research and comparative studies between planetary objects and the Earth in the fields of atmosphere, surface and interior science. Additional information about UCPS can be found at <http://202.127.29.4/geodesy/ucps>.

Objectives:

- To advance and foster the study of scientific problems in the planetary sciences;
- To promote and coordinate international cooperation in planetary science, and promote planetary science activities in developing countries;
- To facilitate, on an international basis, discussion and publication of the results of the studies, research and work indicated above;
- To contribute to coordinating activities for future space missions.

Executive Committee

- Shuanggen Jin (IAG, China) (Chair)
- Nader Haghighipour (University of Hawaii, USA) (Vice-Chair)
- Paul Hartogh (MPI, Germany) (Vice-Chair)
- Scot Rafkin (IAMAS, USA) (Secretary/Treasurer)

2. ACTIVITIES

- Session: Microwave and Infrared Remote Sensing of Solar System Objects at AOGS 21st Annual Meeting, 23-28 June 2024, Pyeongchang, South Korea.

Conveners:

Dr Paul Hartogh (Max Planck Institute for Solar System Research, Germany)

Dr Scott Bolton (Southwest Research Institute, USA)

Prof Yasuko Kasai (Institute of Science Tokyo, Japan)

Prof Yi-Jehng Kuan (National Taiwan Normal University, Taiwan, China)

- 25-26 July 2024, Shuanggen Jin attended the fourth editorial board meeting of Satellite Navigation and discussed current status and next plans, Beijing, China.



- 2-15 September 2024, Shuanggen Jin was invited to give a lecture at International Training Workshop on BDS Technology and Applications in the Belt and Road Regions, Beijing, China



- 25-26 October 2024, UCPS and Shuanggen Jin organized Forum on Intelligent Sensing and Spacetime Service & Experts Face to Face Dialogue with Nobel Prize Winer Edvard I Moser etc., Jiaozuo, China.



- 10-12 December 2024, Shuanggen Jin was invited to attend International Symposium on Peaceful Use of Space Technology, Haikou, China.



3. PLANNED FUTURE ACTIVITIES/ANNOUNCEMENTS

- Session: Science and Exploration of Mars and Venus at AOGS 22nd Annual Meeting, 27 July-1 August 2025, Singapore.

Conveners:

Prof Varun Sheel (Physical Research Laboratory, India)

Dr Takeshi Imamura (The University of Tokyo, Japan)

Prof Shuanggen Jin (Henan Polytechnic University, China)

- 2nd IUGG Symposium on Planetary Science (IUGG-PS 2025): New Observations and Advances in Solar System, 2025.