

The workshop on “Studies for planetary science in the era of space surveys”

Kunming, China, December 8-11, 2025

The first announcement

Human beings have sent a few telescopes to the space for carrying out survey observations for some significant scientific goals. For example, the Gaia , TESS, and Euclid missions have produced transformative results. Synergistically, physical studies of small Solar System objects and other celestial objects have benefited from such space survey observations. In the near future, the Chinese Space Station Survey Telescope (CSST), will be launched. Since then, it will perform survey observations for ten years, and we shall obtain multi-band imaging and spectroscopic data for a large number of Solar System objects and other objects. No any doubt, this will revolutionize our knowledge for the origin and evolution of Solar System objects, even our entire Solar System, and other topics.

The aim of the workshop is to bring together astronomical experts from China and Finland to exchange experiences and share recent research results on relative topics, and to facilitate further cooperation on planetary science between researchers from China and Finland. Therefore, the workshop will be focusing on the following topics at least:

- ✧ Physical and dynamical studies of Solar System objects using space- and ground-based data.
- ✧ Physical studies of exoplanetary systems based on space- and ground-based data
- ✧ AI application in reduction of survey data and planetary physics studies
- ✧ Activities of host stars

Sponsors: Yunnan Observatories, Chinese Academy of Sciences (CAS) & University of Helsinki

Date: December 8-11, 2025

Venue: Kunming, Yunnan Province, China

Participants: Up to 30 persons

Registration fee: Free

The preliminary program

December 8: Registration

December 9: Small Solar System objects

--Survey observations and data reduction of small Solar System objects

- Dynamical analysis of small Solar System objects
- Photometric and spectroscopic analyses of asteroids
- Photometric and spectroscopic analyses of comets and TNOs
- ...

December 10: AI application, exoplanets and others

- AI application in studies of small Solar System objects
- Exoplanet detection and characterization
- Activities of host stars
- ...

December 11: Departure

Scientific Organizing Committee (SOC)

Shenghong Gu	Yunnan Observatories, CAS, China
Xiyun Hou	Nanjing University, China
Yuqiang Li	Yunnan Observatories, CAS, China
Karri Olavi Muinonen	University of Helsinki, Finland (Co-Chair)
Antti Ilmari Penttila	University of Helsinki, Finland
Ming Shen	National Astronomical Observatories, CAS, China
Xian Shi	Shanghai Astronomical Observatory, CAS, China
Xiaobin Wang	Yunnan Observatories, CAS, China (Chair)
Yunzhao Wu	Purple Mountain Observatory, CAS, China
Liyong Zhou	Nanjing University, China

Local Organizing Committee (LOC)

Shenghong Gu	Yunnan Observatories, CAS, China (Chair)
Jing Huang	Yunnan Observatories, CAS, China
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