

Third meeting of the ISSI - ISSI Beijing International Team “Timing and Processes of Planetary Formation and Evolution”

March 3th – 6th, 2025

Agenda

Note: All times specified correspond to Bern, Switzerland (GMT+1)

Meeting format: Hybrid, involving both in-person and remote participants and requiring online connection during the entire meeting for remote presentations and discussions with online participants from Europe, China, Japan, and United States.

Monday, 3rd March 2025

- 10:00 – Welcome to participants (W. Neumann, TU Berlin, Germany)
- 10:30 – Close encounters within the Sun’s stellar cluster as trigger for the LHB and other episodic bombardments of terrestrial planets (M. Tieloff, Heidelberg University, Germany, *remote talk*)

11:30 – Lunch

- 13:00 – Nucleosynthetic fingerprints of solar system materials (M. Schönbächler, ETH Zürich, Switzerland)

14:30 – Coffee Break

- 15:00 – Shock effects in angrites and consequences on chronological records (A. Bouvier, Bayreuth University, Germany)
- 16:00 – Potential chronological disturbance of the D’Orbigny angrite Inferred from discordant ²⁶Al ages (C. Deligny, Swedish Museum of Natural History, Stockholm, Sweden)

17:30 – End of Session.

Tuesday, 4th March 2025

- 10:00 – The timing and conditions of aqueous alteration in Ryugu (W. Fujiya, Ibaraki University, Japan)

11:30 – Lunch

- 13:00 – Carbonates in Ryugu and Bennu: Implications for aqueous alteration in outer Solar System (Max Mahlke, Besancon, France)

14:30 – Coffee Break

- 15:00 – Differentiation in the main belt (M. Delbo, Observatoire de la Côte d’Azur, France, *remote talk*)
- 16:00 – Fragmentation and reassembly of planetesimals in the early Solar System (Jialong Ren, Hong Kong Polytechnic University, China)

17:30 – End of Session.

Wednesday, 5th March 2025

- 10:00 – Reconstructing the History of the Solar System: Using Astronomical Observations, Laboratory Analyses, and Theories (D. Takir, NASA Johnson Space Center, Houston, USA)

11:30 – Coffee Break

- 11:30 – New differentiated asteroid family (Chrysa Avdellidou, University of Leicester, United Kingdom, *remote talk*)

13:00 – End of Session, time for sightseeing.

Thursday, 6th March 2025

- 10:00 – AI-based thermophysical modelling for small solar system bodies (X. Shi, Shanghai Observatory, China)
- 11:00 – Low speed impacts into regolith (video by W. Hartmann, Planetary Science Institute, Tucson).

11:30 – Lunch

- 13:00 – Missions to small bodies: Update on Hera and RAMSES (M. Kueppers, ESA, Spain, *remote talk*)

14:00 – Coffee Break

- 14:30 – SPHEREx for the Solar System: Minor body characterisation beyond 2.5 micron (Max Mahlke, Besancon, France)

15:30 – Coffee Break

- 16:00 – Discussion: Planning of publications, joint studies, joint scientific proposals, potential follow-up meeting; wrap-up.

17:30 – End of Meeting.

Participants

Participants in attendance

Audrey Bouvier

Cécile Deligny

Wataru Fujiya

Max Mahlke

Wladimir Neumann

Jialong Ren

Maria Schönbachler

Xian Shi

Driss Takir

Hisayoshi Yurimoto.

Participants with remote access

Chrysa Avdellidou

Marco Delbo

William K. Hartmann

Michael Kueppers

Jürgen Oberst

Mario Trieloff

Bo Wu

Liang-Liang Yu

Meng-Hua Zhu.