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INTERNATIONAL SPACE SCIENCE INSTITUTE - BEIJING

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Second meeting of the ISSI - ISSI Beijing International Team "Timing and Processes of Planetesimal Formation and Evolution"

March 4th – 8th, 2024

Agenda

Note: *All times specified correspond to Beijing, China (GMT+8)*

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, Japan, and United States.*

Monday, 4th March 2024

- 10:00 – Welcome to on-site participants (W. Neumann, TU Berlin, Germany)
- 10:30 – The short-lived ^{107}Pd-^{107}Ag chronometer – dating impacts and core crystallisation with iron meteorites (M. Schönbächler, ETH Zürich, Switzerland)

11:30 – Lunch

- 13:00 – Welcome to online participants
- 13:30 – CY chondrite characterisation and recent achondrite lab work (A. Bouvier, Bayreuth University, Germany)

14:30 – Coffee Break

- 15:00 – Carbonate record of aqueous alteration in water-rich planetesimals (W. Fujiya, Ibaraki University, Japan, *remote talk*)
- 16:15 – Discussion or splinter meeting: Lab analysis of extra-terrestrial samples

17:00 – End of Session

Tuesday, 5th March 2024

- 10:00 – Dating the giant planet orbital instability in our solar system with enstatite meteorites (M. Delbo, Observatoire de la Côte d'Azur, France)

11:30 – Lunch

- 13:00 – Thermal evolution model fits: Ryugu, CI chondrites, (2) Pallas, EC 002, and angrites (W. Neumann, TU Berlin, Germany)

14:30 – Coffee Break

- 15:00 – Radioisotopic dating of impact craters: constraining the collisional history of planetary bodies (M. Trieloff, Heidelberg University, Germany, *remote talk*)
- 16:00 – Discussion: Cosmochemical constraints on the accretion time and internal processes in parent bodies (focus on Ryugu, CI, Tagish Lake, CM, and CY samples)
- 16:30 – Discussion or splinter meeting: Thermal evolution of meteorite parent bodies and the evolution of the asteroid belt (Delbo, Neumann, Trieloff, …)

17:30 – End of Session

Tuesday night: Welcome reception at the hotel

Wednesday, 6th March 2024

- 10:00 – Probe the regolith characteristics of asteroids from multi-epoch thermal light curves (L.-L. Yu, Nanjing University, Suzhou, China)

11:30 – Coffee Break

- 12:00 – Early Bombardments of the Moon (M.-H. Zhu, Macau University of Science and Technology, China)

13:00 – End of Session due to the Joint NAOC/ISSI-BJ Colloquium at NAOC at 14:30

Thursday, 7th March 2024

- 10:00 – Origin of Bennu and its connection to the new Polana family (D. Takir, NASA Johnson Space Center, Houston, USA, *remote talk*)

11:30 – Lunch

- 13:00 – Thermophysical modeling for understanding cometary activity: applications to the Rosetta data of comet 67P (X. Shi, Shanghai Observatory, China)

14:00 – Coffee Break

- 14:30 – Missions to small bodies (M. Kueppers, ESA, Spain, *remote talk*)

15:30 – Coffee Break

- 16:00 – Lab work on Lunar samples (C. Deligny, Swedish Museum of Natural History, Stockholm, Sweden, *remote talk*)
- 16:30 – Discussion or splinter meeting: Inclusion of the team work in ongoing and planned space missions

17:30 – End of Session

Friday, 8th March 2024

- 10:00 – Optional: Discussion or splinter meeting: Collisional evolution of the Moon

11:30 – Lunch

- 13:00 – Splinter Meeting: Angrite lab work and modeling (Bouvier, Neumann, Trieloff, …)

14:30 – Coffee Break

- 15:00 – Optional discussion: Open questions, work packages, publications

16:00 – End of Meeting

Participants

Participants in attendance

Audrey Bouvier

Marco Delbo

Wladimir Neumann

Maria Schönbächler

Xian Shi

Liang-Liang Yu

Meng-Hua Zhu.

Participants with remote access

Chrysa Avdellidou

Cécile Deligny

Wataru Fujiya

William K. Hartmann

Michael Kueppers

Jürgen Oberst

Driss Takir

Mario Trieloff

Hisayoshi Yurimoto.