

Paneth Kolloquium 2025 Program**Sunday 26 October 2025****13:00-17:00****Pre-Kolloquium Field Trip to the Ries****Monday 27 October 2025****9:00-9:15****Registration and Welcome**

09:15 Bouvier, A.

Overview talk: Dating early solar system processes and the search for a robust short-lived radionuclide anchor

[#0051](#)

09:45 Lindner, M., Hopp, T., Kleine, T.

In situ, oxide interference corrected Rb-Sr data of meteorite samples using LA-MC-ICP-MS/MS

[#0049](#)**10:00-10:30****Coffee Break & Posters**

10:30 Leitner, J., Metzler, K., Singerling, S.A., Brenker, F.E., Ott, U.

Effects of thermal alteration on the presolar grain inventories of chondritic meteorites

[#0004](#)

10:45 Ogunjobi, C.A.M., Hezel, D.C., Brenker, F.E.

Heterogeneous asteroidal thermal alteration of the CV3 chondrite NWA 1356 – The need to introduce an expanded subtype classification scheme

[#0029](#)

11:00 Trixler, F., Greiner de Herrera, A., Kara, M., Klein, A.

The role of nanoconfined water in meteoritic material and on early earth for catalyzing prebiotic syntheses

[#0056](#)

11:15 Tkalcic, B.J., Baert, T., Herthogs, J., Libourel, G., Conolly, H.C., Lauretta, D.S., Vincze, L., Brenker, F.

Rare-Earth element distribution in cross-cutting veins within a Bennu rock fragment

[#0036](#)

11:30 Pittarello, L., Hauser, N., Bonato, E., and TESCANA team

Deformation effects in a shocked quartz pebble from the Araguinha impact structure, Brazil, investigated by CL and EBSD

[#0043](#)

11:45 Langbein, J., Pollok, K., Fazio, A., Langenhorst, F.

A quartz-to-coesite solid-state transformation pathway: Experimental evidence

[#0033](#)**12:00-14:00****Lunch break**

14:00 Lehnert, K.A., Hezel, D.C., Elangovan, P., Li, P., Mays, J., Koblitz, J.

Overview talk: ASTROMAT – NASA's Astromaterials Data System

[#0054](#)

14:15 Abel, A., Erftemeijer, R.C., Renggli, C.

Calibrating ELMO (Experimental Laboratory Magma Ocean)

[#0023](#)

14:30 Patzek, M., Gundlach, B., Güttler, C., Rückriemen-Bez, T.

From Icy Moon Interiors to the Surface of Small Bodies and the Moon – Research Focii in Münster

[#0037](#)

14:45 Erftemeijer, R.C., Renggli, C.J., Müller, T., Kleine, T.

Sulfidation of silicates under Mercury's reducing conditions

[#0059](#)**15:00-15:30****Coffee Break & Posters**

15:30 Marrocchi, Y.

Overview talk: Chondrules as tracers of protoplanetary disk processes

16:00 Palme, H., Menninga, C.

New (old) data on the bulk composition of chondrules in the Allende meteorite and the complementary nature of chondrules and matrix

[#0048](#)

16:15 Burkhardt, C., Jansen, C.A., Marrocchi, Y., Villeneuve, J., Wölfer, E., Schneider, J.M., Kleine, T.

Isotope genealogy and chronology of individual chondrules from ordinary chondrites

[#0057](#)

16:30 Marrocchi, Y., Ochem, E.

Formation conditions and chemical composition of early-condensed olivine in the solar system

[#0026](#)

16:45 Hezel, D., Barosch, J.

Mineralogically zoned chondrules in chondrites: implications for chondrule formation conditions

[#0058](#)**18:00-21:30****Get together & Tour at Rieskratermuseum****Tuesday 28 October 2025**

09:00 Wölfer, E., Spitzer, F., Hellmann, J.L., Burkhardt, C., Kleine, T.

Germanium isotopes reveal distinct processes of MVE depletion among planetesimals

[#0001](#)

09:15 Mojzsis, S.J.

Variably fractionated lithophile alkali metals and alkali earths in (exo-)planetary contexts

[#0030](#)

09:30 Speller, F.N., Hellmann, J.L., Kleine, T.

Te isotope fractionation in iron meteorites reveal near-equilibrium conditions during volatile loss

[#0028](#)

09:45 Piralla, M., Hopp, T., Burkhardt, C., Kleine, T.

Iron isotope anomalies of AOAs in CV chondrites

[#0044](#)**10:00-10:30****Coffee Break & Posters**

10:30 Nozarian, F., Timmerman, S., Leya, I.

Potassium isotopes in iron meteorites: Reassessing the constancy of galactic cosmic rays

[#0039](#)

10:45 Jacquet, E., Doisneau, B.

Unifying chondrite petrologic subtypes

[#0002](#)

11:00 Martínez, M.

Nanoscale investigation of volatile-rich phases associated with alteration of Fe,Ni metal in the Apollo 16 sample 66095 "Rusty Rock"

[#0041](#)

11:15 Krietsch, D., Busemann, H., Maden, C.

Noble gases in CV chondrites - searching for effects of parent body processing

[#0040](#)

11:30 Singerling, S.A.

Transmission electron microscopy studies of sulfides, metals, and their alteration products in CR1 GRO 95577

[#0005](#)

11:45 Busemann, H., Krietsch, D., Reinecke, I.L., Maden, C., Riebe, M., et al.

Noble gases in organic and diverse bulk materials from Ryugu, Bennu, and CI chondrites

[#0052](#)

12:00 Paliwal, D., Krietsch, D., Maden, C., Busemann, H.

Effect of thermal alteration on noble gases in type-3 ordinary chondrites

[#0050](#)**12:15-14:00****Lunch break**

14:00 Spitzer, F.

Overview talk: Isotope anomalies in meteorites as genetic tracers

14:15 Spitzer, F., Hopp, T., Burkhardt, C., Dauphas, N., Kleine, T.

The evolution of planetesimal reservoirs revealed by Fe-Ni isotope anomalies in differentiated meteorites

[#0022](#)

14:30 Hopp, T., Tian, S.Y., Kleine, T.

Iron isotope anomalies contradict pebble accretion of terrestrial planets

[#0045](#)

14:45 Sun, H., Chaussidon, M., Moynier, F.

Triple silicon isotopes of the possible building blocks of the Earth

[#0046](#)**15:00-15:30****Coffee break**

15:30 Tian, S.Y., Burkhardt, C., Hopp, T., Kleine, T.

Tracing Earth's missing building materials in meteorites

[#0055](#)

15:45 Hellmann, J.L., Spitzer, F., Kleine, T.

Origin of Earth's late-stage building blocks

[#0024](#)**16:00****wrap up**

Poster		
German, B.R.	Solar white-light flares and Andromedids	#0053
Lier, JL, Vollmer, C., Risthaus, L.	Transmission electron microscopy of the fine-grained matrix in the observed meteorite fall Winchcombe	#0047
Patzek, M., Bischoff, A.	Mineralogy of the Two Recent Meteorite Falls in Germany – Elmsborn (H3-6 _{an}) and Ribbeck (Aubrite)	#0038
Patzer, A.	The Austrian meteorites and selected tidbits of their recoveries	#0025
Roszjar, J., Varela, M.E., Sylvester, P., Garcia L.	Barred olivine in selected chondrites – insights into nebular formation conditions	#0042