

Paneth Kolloquium 2019
Program

Tuesday 29 October 2019

12:00

Registration and Coffee

13:00 Becker, Pack, Zipfel

Welcome

13:15 - 16:00

Oral session

13:15 Palme

A tribute to Ahmed El Goresy

13:30 Deligny

Origin and timing of nitrogen delivery to the angrite parent body

13:45 Steinegger, Busemann, Riebe, Maden, Irving

Noble Gases in five NWA angrites – First detection of a solar signature in a bulk sample.

14:00 Vollmer, Leitner, Kepaptsoglou, Ramasse, King, Schofield

Functional chemistry and isotopic composition of organics within the pristine chondrite Maribo

14:15 Piralla, Marrocchi, Villeneuve, Piani

Solar system primordial water and dust: insights from in-situ oxygen analyses of CI chondrites

14:30 Patzek, Kadlag, Bischoff, Visser, Becker, John

Assessing different types of C1 material by H, O, and Cr isotope systematics

14:45 Visser, John, Whitehouse, Patzek, Bischoff

Hydrothermal alteration in the outer solar system – constraints from Mn/Cr ages.

15:00 Leitner, Vollmer, Ott, Hoppe

The occurrence of silicon nitride in chondritic meteorites

15:15 Jacquet

Beryllium-10 and CAI origin

15:30 Pape, Rosén, Mezger, Guillong

Chondrule formation and subsequent reprocessing by partial remelting in the protoplanetary disk.

15:45 Marrocchi, Villeneuve, Jacquet

Origin and formation conditions of chondrules

16:00 - 17:00

Poster session

17:30

Ice breaker (Rieskratermuseum)

Wednesday 30 October 2019

9:30 - 12:00

Oral session

9:30 Wölfer, Budde, Kleine

W and Mo isotopic constraints on the age and origin of CH/CB chondrites

9:45 Kodolányi, Hoppe, Vollmer, Berndt

Iron-60 in primitive meteorites: New in situ data

10:00 Schneider, Burkhardt, Marrocchi, Brenneka, Kleine

Complex mixing of nebular materials inferred from combined O-Ti-Cr isotope variations in individual chondrules

10:15 Li, Stieghorst, Révay, Liersev, Feige, Gärtner

Bulk analysis of meteorites and micro-meteorite candidates using INAA at the research reactor FRM II

10:30 Kerraouch, Bischoff, Zolensky, Ebert, Patzek, Pack, Schmitt-Kopplin

A xenolith in the Murchison CM chondrite formed by fluid-assisted percolation during metasomatism (CM6?)

10:45 Spitzer, Burkhardt, Budde, Kruijer, Kleine

Genetic heritage and chronology of ungrouped iron meteorites

11:00 Ott, Vogt, Merchel, Hopp, Koll, Lachner, Trieloff, Wallner

Noble gases and radionuclides in Washington County iron meteorite

11:15 Kurtz

Searching and finding meteorites in Germany or similar European environmental conditions. Hobby research and cooperation with scientists. An example case: Renchen meteorite find in February 2019.

11:30 Bechtold, Brandstätter, Koeberl

Northwest Africa 11962: A new lunar meteorite from the Procellarum KREEP Terrane.

11:45 Walte, Solferino, Golabek

Two-stage formation of angular pallasites revealed by novel deformation experiments

13:30 - 15:00

Oral session

13:30 Braukmüller, Wombacher, Münker

Volatile element depletion in planetary materials

13:45 Hackler, Loro, Rohrbach, Klemme, Berndt

Chalcophile Element Accretion from the Late Veneer

14:00 Schmidt, Noack

The influence of K, Th, and U partition coefficients on the thermal evolution of a planet

14:15 Noack, Balduin

Heterogeneities in Earth's mantle over time due to melt depletion and mineral phase transitions

14:30 Ortenzi, Noack, Sohl

Influence of mantle redox state on the atmospheric composition of rocky planets

14:45 Hellmann, Hopp, Burkhardt, Kleine

Tellurium stable isotopic evidence for heterogeneous late accretion

15:00 - 15:30

Coffee break

15:30 - 17:00

Oral session

15:30 Mohr-Westheide, Salge, Fischer-Gödde, Falke, Palasse, Kirmse, Meßling, Greshake, Reimold

Characterizing impact generated platinum-group element alloys from Archean spherule layers.

15:45 Schmidt

Ru/Rh and Ir/Rh as diagnostic mass ratios for the identification of specific impactor compositions of terrestrial impact craters

16:00 Tusch, Münker, Jansen, Hasenstab, Marien, Kurzweil, VanKranendonk

Secular evolution of W isotope anomalies in the Pilbara Craton, NW Australia and late accretion models

16:15 Schwinger, Breuer

The FeO content of the lunar mantle – insights from geophysical and petrological constraints.

16:30 Güldemeister, Manske, Wünnemann

Thermal state of the Earth after the Moon-forming impact event using numerical simulations

16:45 Poitrasson, Zambardi, Magna, Neal.

A reassessment of the iron isotope composition of the Moon and its implications for accretion and differentiation of terrestrial planets

17:00 - 18:30

Poster session

Thursday 31 October 2019

9:30 - 11:45

Oral session

9:30 Gärtner

The First Microsecond of a Hypervelocity Impact

9:45 Manske, Güldemeister, Wünnemann

Impact-Induced Melting by Giant Impact Events

10:00 Wimmer, Schweigert, Jung, Simon

New Shatter Cones from the Ries Crater

10:15 Lompa, Wünnemann

Lunar basin formation - a numerical modeling study constrained by gravity data

10:30 Worsham, Kleine

Characterizing impactors on the Moon using Ru isotopes

10:45 Wahl, Wieczorek, Oberst

Porosity signatures of large lunar impact basins

11:00 Liu, Michael, Wünnemann, Becker, Oberst

Lunar megaregolith mixing by impacts: spatial dispersal of basin melt and its implications for sample interpretation

11:15 Gleißner, Becker

Siderophile elements in lunar granulitic impactites – Constraints on pre 4 Ga late accretion.

11:30 Haber, Scherer

Further evidence for a ~4.2 Ga age component in Apollo 16 impact melt rocks?

11:45

Farewell

Paneth Kolloquium 2019

Poster session

German	The activation of the Cosgrove hotspot in Tasmania – a key event solving the Tunguska problem.
German	Are there still errors in the interpretation of data for earth craters
Iqbal, Hiesinger, vanderBogert	Geology and crater-size frequency distributions of the Apollo 11, 12, and 17 landing sites
Riedel, Minton, Michael, Orgel, vanderBogert, Hiesinger	The contribution of new impacts to the degradation of the pre-existing lunar landscape is size-dependent
Maas, Hansen	On the fate of impact-delivered metal in a rotating terrestrial magma ocean
Wieseher, Hansen	A Smoothed Particle Hydrodynamics Method for Modelling the Dynamics of Magma Ocean Solidification
Magna, Žák, Pack, Moynier, Mougél, Peters, Skála, Jonášová, Mizera, Řanda	Disentangling impactor type and post-collision processes for Zhamanshin structure
Magna, Wang, Jiang, Žák, Skála	Potassium systematics in tektites
Schulz, Vollmer, Keller	Chemical and petrographical characterization of amorphous silicate material in GEMS
Vanderliek, Becker, Rocholl, Whitehouse	Two-Stage Evolution of Lunar Granulite 79215 as Revealed by Zircon and Phosphate Dating
Gail, Trieloff	Metallographic cooling rates of ordinary chondrites and the onion-shell model
Anand, Pape, Wille, Mezger, Hofmann	⁵³ Cr/ ⁵² Cr chromium model ages of ordinary chondrites: implications for parent body formation and thermal evolution
Orgel, Fassett, Michael, Riedel, van der Bogert, Hiesinger	Re-examination of the population, stratigraphy, and sequence of mercurian basins: Implications for Mercury's early impact history and comparison with the Moon
Loroch, Hackler, Rohrbach, Klemme	SVEs during Earth's core formation – Modeling of partitioning behavior
Alfing, Patzek, Bischoff	Modal abundances of coarse-grained components within CI-chondrites and their individual clasts.
Schmid	Chondritic d ³⁴ S in rocks from the Earth's mantle
Fischer, Peters, Hartogh, Pack	Triple oxygen isotope comparison between terrestrial and lunar rocks - implications for the lunar formation
Wimmer, Hoffmann, Kaliwoda, Hochleitner, Mikouchi	First results on the new angrite NWA 12774
Hoffmann, Wimmer, Kaliwoda, Hochleitner, Uysal	More on the Saricicek meteorite (howardite): shock stage and magnetic signature
Skála, Křížová, Matoušková	Compositions of splashform- and Muong Nong-type Australasian tektites from a single locality in the southern Laos compared
Harries, Bischoff	A >500 km-sized Differentiated Planetesimal of Enstatite-chondritic Parentage
Krietsch, Busemann, Riebe, King, Maden	Closed system step etching (CSSE) of MIL 090657 reveals significant primordial, possibly new, noble gas components in soluble phases
Peters	The nebular snow line recorded by photochemical sulfur in iron meteorites

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German	Cr isotope systematics and the Bosumtwi crater
German	The Martian blueberries and Earth tektites
German	The genesis of tektites