

Program, Day 1 (22.11.2021). Dust, ice, and molecules

8:45 – 9:05 Registration

Session 1.

09:05 – 09:15 Introduction. **Cornelia Jäger**

09:15 – 10:00 Invited talk. **Rens Waters** “Molecules, Ice and Dust: from the Interstellar Medium to Planets” ([online](#))

10:00 – 10:45 Invited talk. **Harald Mutschke** „Measurements of dust optical constants at long wavelengths and low temperatures” ([online](#))

10:45 – 11:30 Coffee break + Registration

11:30 – 12:15 Invited talk. **Belen Mate** “Physical and chemical processes on interstellar ice and dust analogues: recent results at IEM-CSIC”

12:15 – 12:35 Contributed talk. **Jiao He** “Refractive index and extinction coefficient of vapor deposited water ice in the UV-Vis range”

12:35 – 12:55 Contributed talk. **Franciele Kruczkiewicz** “Merging THz-TDS and FTIR data for direct reconstruction of CO dielectric properties”

12:55 – 13:15 Contributed talk. **Will Rocha** “Getting ready for JWST: introducing the new Leiden Ice Database and the ENIGMA fitting tool”

13:15 – 14:30 Lunch

Session 2.

14:30 – 15:15 Invited talk. **Otto Dopfer** “Photochemical Properties of Silicon Clusters: Bridging the Gap Between Diatomics and Grains”

15:15 – 16:00 Invited talk. **Paul Scheier** “Helium-tagging spectroscopy as a tool for the identification of diffuse interstellar band carriers” ([online](#))

16:00 – 16:45 Coffee break

16:45 – 17:05 Contributed talk. **Robert Radloff** “Astrochemically-Relevant Silicon Carbide Clusters: Photodissociation and Electronic Properties”

17:05 – 17:25 Contributed talk. **Eileen Döring** “High Resolution IR Spectroscopy on small metal bearing molecules”

17:25 – 17:45 Contributed talk. **Guido Fuchs** “Mid-Infrared Observations of Late-type Stars at High Spectral Resolution”

17:45 – 18:05 Contributed talk. **Miguel Jiménez-Redondo** “Study of low-temperature ion-neutral interactions in a 22-pole ion trap”

18:05 – 18:25 Contributed talk. **Valerio Lattanzi** “High-Resolution Gas-Phase Spectroscopy for Astrophysics at CAS@MPE” ([online](#))

19:30 Conference dinner

Program, Day 2 (23.11.2021). Complex organic molecules and the Origin of Life.

Session 1.

09:00 – 09:45 Invited talk. **Cornelia Meinert** “The cosmic origin of biomolecular chirality” ([online](#))

09:45 – 10:30 Invited talk. **Angela Ciaravella** “Formation of complex organic molecules in ices triggered by X-rays”

10:30 – 11:15 Coffee break + Poster session

11:15 – 12:00 Invited talk. **Guillermo Munoz Caro** “Formation of N-heterocycles and S-chains in UV-photoprocessed interstellar ice analogs”

12:00 – 12:20 Contributed talk. **Ko-Ju Chuang** “Formamide formation in H₂O-rich and CO-rich interstellar ice analogs”

12:20 – 12:40 Contributed talk. **Riccardo Urso** “Energetic processing of methanol-rich ices”

12:40 – 13:00 Contributed talk. **Gayatri Batra** “Exploring silicon chemistry in the electrical discharge of methyl phenyl silane (MPS) using chirped-pulse Fourier-transform microwave spectroscopy” ([online](#))

13:00 – 14:30 Lunch

Session 2.

14:00 – 14:45 Invited talk. **Wolf Geppert** “Astrobiology and the origin of life” ([online](#))

14:45 – 15:30 Invited talk. **Kathrin Altwegg** “Cometary chemistry”

15:30 – 16:15 Coffee break + Poster session

16:15 – 16:35 Contributed talk. **Diksha Garg** “Fragmentation Dynamics of Fluorene, on Femtosecond Timescales” ([online](#))

16:35 – 16:55 Contributed talk. **Tushar Suhasaria** “A novel UHV setup with MALDI- high resolution mass spectrometry for the in-situ detection of biomolecules”

16:55 – 17:15 Contributed talk. **Parker Crandall** “Optical Properties of Simple Diamondoid Cations and Their Astrochemical Relevance”

17:15 – 17:35 Contributed talk. **Taarna Studemund** “Small Si_nO_m^+ Clusters - Photodissociation & Optical Absorption Properties”

17:35 – 17:55 Contributed talk. **Dima Semenov** “Sensitivity of gas-grain chemical models to surface reaction barriers: Effect from a key carbon-insertion reaction, $\text{C} + \text{H}_2 \rightarrow \text{CH}_2$ ”

18:00 – 19:00 Poster session

Online

18:00 – 18:05 **Donatella Loru** “Revealing the chemistry of polycyclic aromatic hydrocarbons by plasma sources”

18:05 – 18:10 **Holger Kreckel** “Astrochemistry at the Cryogenic Storage Ring”

18:10 – 18:15 **Annika Oetjens, Aigars Znotins** “Preparations for experiments with triatomic hydrogen ions at the Cryogenic Storage Ring”

18:15 – 18:20 **Philipp Schmid** “Sneaking into the astrochemistry of chlorine: Gas-phase IR action spectroscopy of CH_2Cl^+ and CH_3ClH^+ ”

18:20 – 18:25 **Elham Ghavidel** “Electronic transitions in Rb_2^+ dimers solvated in Helium”

18:25 – 18:30 **Stefan Bergmeister** “Atomic and molecular clusters embedded in helium nanodroplets”

18:30 – 18:35 **Miriam Meyer** “Action Spectroscopy of PAH Ions Using the Helium Droplet Technique”

In presence

Oskar Asvany “Rotational action spectroscopy of CN^+ , CH_2NH_2^+ and CH_3NH_3^+ ”

Luis Bonah “LLWP – A new Loomis-Wood Software at the Example of Propanone- $^{13}\text{C}_1$ ”

Cesare Cecchi-Pestellini “Chemical and physical processes caused by electrons impacting on $\text{H}_2\text{O-CO}$ mixed ices”

Victor Herrero “Polymerization in C_2H_2 plasmas used for the generation of interstellar dust analogues”

Bettina Heyne “Characterizing home-built chirped-pulse spectrometers for complex molecules of astrophysical interest”

Matin Kaufmann “Spectroscopy of molecular glow discharge products using REMPI”

Christian Kranhold “Semiconductor- & Metallic-Behavior of Iron(II) Sulfides: A Multi-Wavelengths Study”

Fabian Peterß “Mid Infrared CW Cavity Ring Down Spectroscopy in a Supersonic Jet”

Gael Rouillé “Gas-phase condensation of carbonated silicates”

Karel Vávra “Rotational Spectrum of Vinyl Isocyanate”

Program, Day 3 (24.11.2021). Exoplanetary atmospheres and extraterrestrial life

Session 1.

09:00 – 09:45 Invited talk. **Christiane Helling** “Physics and Chemistry of planetary atmospheres” ([online](#))

09:45 – 10:30 Invited talk. **Paul Molliere** “Modeling and Characterization of Cloudy Exoplanet Atmospheres” ([online](#))

10:30 – 11:00 Coffee break

11:00 – 11:20 Contributed talk. **Dominic Samra** “Mineral Snowflakes on Exoplanet and Brown Dwarf Atmospheres”

11:20 – 12:05 Invited talk. **Jeroen Bouwman** “Observational constraints on dust processing in circumstellar media and exoplanetary atmospheres” ([online](#))

12:05 – 13:05 Discussion on laboratory experiments relevant to exoplanetary atmospheres.

13:05 – 13:15 Final remarks. **Cornelia Jäger**

13:15 – 14:30 Lunch

14:30 Departure to Jena