

Speakers of the Summer School 2025 ‘Icy Moons: Chemistry and Technology’, September 2-4, 2025

Overview:

	Tuesday 2		Wednesday 3		Thursday 4
			Session 2 (Theory, AI)		Session 4 (Technology ...)
		9:00h	Homa Saeidfirouzeh (45min)	9:00h	Nozair Khawaja (45min)
		9:50h	Thomas Gatter/Richard Golnik (20min)	9:50h	Anatolii Spesyvyi (30min)
		10:15h	Coffee break (20min)	10:20h	Coffee break (20min)
		10:35h	Thomas Gatter (20min)	10:40h	Miroslav Polášek (30min)
		10:55h	Nico Domschke (20min)	11:15	Ilia Zymak (30min)
	Session 1 (Astrobiology)	12:00h	Lunchbreak	11:50h	Final Conclusions (10min)
14:00h	Bernd Abel (5min)		Session 3 (high-res MS for space applications)	12:00h	Lunch
14:10h	Martin Ferus (45min)	13:50h	Jan Zabka (10min)		
15:00h	Julie Nekola Nováková (40min)	14:00h	Christelle Briois (45min)		
15:45h	Coffee break(20min)	14:50h	Marina Carmona Ruiz (30min)		
16:10h	Maryse Napoleoni (40min)	15:20h	Coffee break (20min)		
17:00h	Laura Selliez (30min) zoom	15:45h	Michaela Malečková (30min)		
		16:15h	Marshall Seaton (45min), zoom		
18:00h	Get together (Cobolis)	17:00h	Ricardo Arevalo (45min, zoom), to be confirmed		
		18:00h	Dinner (Catering)		

Program:

Session 1 (Astrochemistry and -biology), Tuesday 2

Chair: B. Abel

- | | |
|---------------------------|---|
| 14:00h | Bernd Abel (Leipzig, HIPC): <i>Welcome Address and Opening Remarks</i> |
| 14:10h
<i>Approach</i> | Martin Ferus (HIPC): <i>Asteroid Impacts, Meteor Plasmas, and CubeSat Spectroscopy: A Laboratory-to-Space Approach</i> |
| 15:00h | Julie Nekola Nováková (Charles University, Prague): <i>Habitats under the ice: Expectations and Earth-based analogs</i> |
| 15:45h | Coffee Break |
| 16:10h
<i>moons</i> | Maryse Napoleoni (FU Berlin): <i>Laboratory experiments for interpreting impact ionization mass spectra at icy ocean moons</i> |
| 17:00h | Laura Selliez (Orleans): <i>High-resolution mass spectrometry for future space missions (prelim.)</i> |
| 18:00h | Get Together (Cobolis) |

Session 2 (Theory, AI) , Wednesday 3

Chair: M. Ferus

9:00h	Homa Saeidfirouzeh (HIPC): <i>Moons in Focus: The Power of AI-Driven Spectroscopy in Planetary Science</i>
9:50h	Thomas Gatter/Richard Golnik (Leipzig): <i>Isotope Tracing in Chemical Networks</i>
10:15h	Coffee Break
10:35h	Thomas Gatter (Leipzig): <i>Graph Rewriting Systems and Chemistry</i>
10:55h	Nico Domschke (Leipzig): <i>Agnostic Fragmentation Modelling</i>
12:00h	Lunch Beak

Session 3 (high-res MS for Space Appliations), Wednesday 3

Chair: J. Zabka

13:50h	Jan Zabka (HIPC): <i>Short Introduction into the session and historic remarks</i>
14:00h	Christelle Briois (CNRS Orleans): <i>CosmOrbitrap development, and the LDMS-CosmOrbitrap development (CORALS and CRATER)</i>
14:50h	Marina Carmona Ruiz (FU Berlin, Orleans): <i>Calibration of hypervelocity ice grain space detectors by orbitrap-HRMS</i>
15:20h	Coffee Break

15:45h	Michaela Maleckova (HIPC): <i>HANKA: CubeSat Space Dust Analyser</i>
16:15h	K. Marshall Seaton (LASP Boulder): <i>Experimentally replicating salt-rich ice grain sampling at ocean worlds impact ionization mass spectrometry</i>
17:00h	Ricardo Arevalo (Maryland): <i>Potential of Orbitraps in Space Applications (prelim. title)</i>
18:00h	Dinner

Session 4 (Technology and novel approaches), Thursday 4

Chair: B. Abel

9:00h	Nozair Khawaja (FU Berlin): <i>Plume Plumbing - Exploring the Habitability of Ocean Worlds</i>
9:50h	Anatolii Spesyvyi (Leipzig): <i>Charge detection mass spectrometry for dust detection in space and laboratory</i>
10:20h	Coffee Break
10:40h	Miroslav Polášek (HIPC): <i>Experimental and theoretical study of the chemical processes in the planetary atmospheres</i>
11:50h	Ilia Zymak (HIPC/ELI): <i>Laboratory and in-situ experiments in the radiation environment of Jupiter</i>
11:50h	B. Abel (Leipzig, HIPC): <i>Concluding Remarks</i>
12:00h	Lunch