

Program: 5th ELSICS Conference

Energy Landscapes and Structure in Ion Conducting Solids (ELSICS)

08.-09. October 2026, Ulm

Haus der Begegnung, Ulm

Thursday, 8th October 2026

Time	Talk #	Nr.	Name and Title
12:00 – 12:30	Small Welcome Lunch		
12:30	Welcome remarks		Chairman: Karl-Michael Weitzel
			Interface Phenomena
13:00 – 13:40	Invited # 1	T1	Igor Lubomirsky Quantitative determinations of the charge trapped at the grain boundary of ionic conductors
13:40 – 14:05	Contr. #1	T2	<i>Qian Ma (Jooss group)</i> Atomic-Scale TEM Insights into Cation Diffusion in Strontium Titanate (SrTiO ₃)
14:05 – 14:45	Invited # 2	T3	Patricia Abellan Alternative Scan Patterns to Mitigate Radiation Damage and charging effects in Beam Sensitive Battery Materials
14:45 – 15:15	Coffee Break		
			Theory
15:15 – 15:55	Invited # 3	T4	Jörg Neugebauer Towards a Unified Framework for Ion Conducting Solids, Electrochemistry, and Semiconductor Physics
15:55 – 16:20	Contr. #2	T5	Darius Hübner (Jacob group) Development and implementation of novel computational methods for the modeling of grain boundaries

16:20 – 16:45	Contr. #3	T6	<i>Andreas Heuer</i> Energy Landscape Exploration from Model Glass Formers to Alkali Silicates
16:45 – 17:25	Invited # 4	T7	<i>Christian Dreßler</i> <i>Description Is Not Understanding: From Molecular Trajectories to Atomistic Mechanisms of Ion Transport</i>
Evening	Dinner (on your own)		

Friday, 9th October, 2026

Time	Name	Nr.	Title
			NMR
8:30 – 9:10	Invited # 5	T8	Jörn Schmedt auf der Günne Structure and dynamics of solid-ion conductors using 3D-printed NMR hardware and computational chemistry
9:10 – 9:35	Contr. #4	T9	<i>Mohammad A. Badragheh (Vogel group)</i> Activation-Energy Distributions in Lithium Borate and Silicate Glasses by ^7Li NMR
9:35 – 10:00	Contr. #5	T10	<i>Martin Wilkening</i> <i>Watching Ions Move: Advanced NMR Spectroscopy for Functional Materials</i>
10:00 – 10:30	Coffee break		
			APT
10:30 – 11:10	Invited # 6	T11	Shelly Conroy tba
11:10 – 11:35	Contr. #6	T12	Cynthia Volkert Atom Probe Tomography of Brittle Ion Conductors
11:35 – 12:00	Contr. #7	T13	Yujun Zhao Beyond the Surface: Unraveling Hydrogen–Metal Interactions in Electrocatalysis and Hydrogen Storage

12:00 – 13:00	Lunch		
13:00 – 14:00	Poster Session and Discussion		
	Transport		
14:00 – 14:40	Invited # 7	T14	Takahisa Omata Modulation of the Energy–Entropy Landscape through Lattice Dynamics: Insights from Proton-Conducting Phosphate Glasses
14:40 – 15:05	Contr. #8	T15	Melanie Fritz, Mika Siemonsen (Weitzel group) Charge Carrier Transport in Ion Conductors and Mixed Ion Electron Conductors
15:05 – 15:30	Contr. #9	T17	Reona Miyazaki Ion conduction properties of Li ⁺ -rich NaI-NaBH ₄ -LiI
15:30 – 16:00	Coffee break		
16:00 – 16:40	Invited # 8	T18	Sumit Chakraborty Some strategies for the determination of multispecies and multicomponent diffusion in silicate melts
16:40 – 17:05	Contr. #10		Timo Kassubek (Weitzel group): Proton mediated five orders of magnitude increase of electrical conductivity in SrTiO ₃
17:05 –	Closing Remarks		Karl-Michael Weitzel