



# Strongly Coupled Coulomb Systems 2022

## Thursday 28 July 2022

### Developments in Theoretical Methods and Numerical Techniques: 1 (Chair: Tobias Dornheim) (17:00 - 18:00)

time	[id] title	presenter
17:00	[55] Classical Coulomb bridge functions in classical and quantum plasma liquids	TOLIAS, Panagiotis
17:20	[56] Development of a new Quantum Trajectory Molecular Dynamics Framework	SVENSSON, Pontus
17:40	[57] Speeding up X-ray-matter molecular dynamics simulation tool XMDYN with tree algorithms	STRANSKY, Michal

# Friday 29 July 2022

## **Developments in Theoretical Methods and Numerical Techniques: 2 (Chair: Michael Bonitz) (09:00 - 10:45)**

time	[id] title	presenter
09:00	[46] The dynamic nature of high-pressure ice VII and a theory for dynamic phases behind it	LI, Xin-Zheng
09:50	[47] Stochastic Vector Techniques for Strongly Coupled Coulomb Systems	BAER, Roi
10:25	[48] Electronic stopping in warm dense matter using Ehrenfest dynamics and time-dependent density functional theory	KONONOV, Alina

## **Developments in Theoretical Methods and Numerical Techniques: 3 (Chair: Ronald Redmer) (11:15 - 12:30)**

time	[id] title	presenter
11:15	[49] Like-charge attraction in one- and two-dimensional Coulomb systems	TELLEZ, Gabriel
11:50	[50] Thermodynamic and transport properties of plasmas: numerical simulations and benchmarks from analytical theory	RÖPKE, Gerd
12:10	[51] Analyzing XC functionals for electronic structure calculations at WDM parameters	MOLDABEKOV, Zhandos