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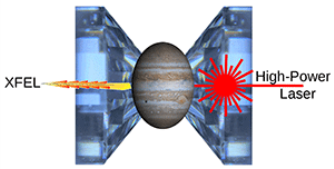

9th Joint Workshop on High Pressure, Planetary and Plasma Physics (HP4)

Thursday, September 09 2021

Session 1		Chair: Ronald Redmer
09:00	Sanchez Valle	Welcome
09:05	Kimura (invited)	Fluid-like elastic response of superionic NH_3 in Uranus and Neptune
09:50	French	Ab initio simulations of molecular mixtures under shock compression
10:20	Coffee break	
10:40	Bethkenhagen (invited)	Exploring the deep interior of ice giants with shock-compression
11:10	Mondal	High-pressure ammonia hydrates in mini-Neptune exoplanets
11:40	Nettelmann	Update on thermal evolution models and Love numbers of ice giants
12:10	Wong (invited)	Double-diffusive convection in the subsurface oceans of mid-sized icy satellites
12:40	Lunch break	
Session 2		Chair: Nicola Tosi
14:10	Wagner	Tidal deformation of Venus inferred from interior structure modeling
14:40	Baumeister	An improved machine-learning model to infer the interior structure of exoplanets
15:10	Nettelmann	How to clean astronomical data to get more accurate Love-numbers
15:40	Coffee break	
16:00	Kite (invited)	Interior-atmosphere exchange on exoplanets: How "Earth cousins" define new targets for planetary materials research
16:45	Unterborn (invited)	Exoplanet Compositional Diversity: A New Frontier for High Pressure Geoscience

Blue indicates online talks

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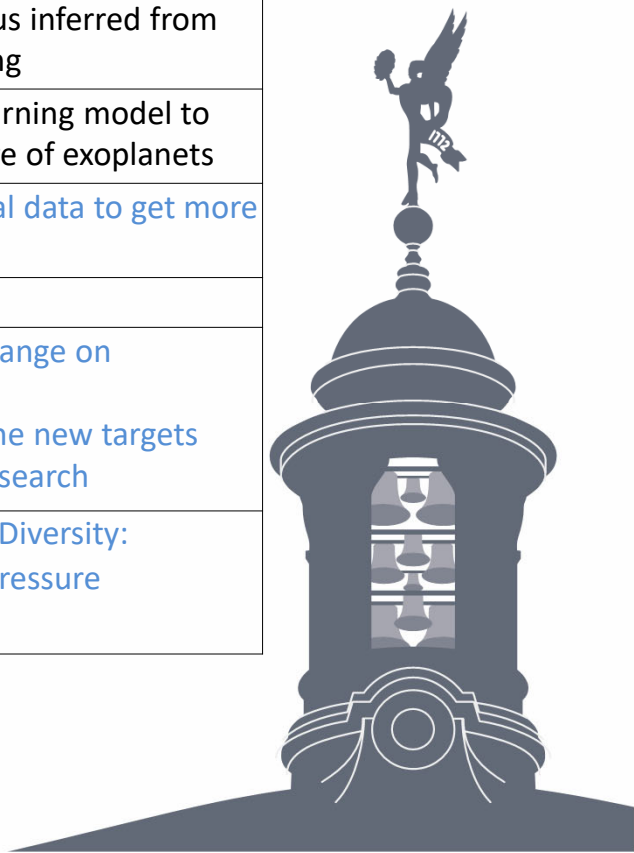

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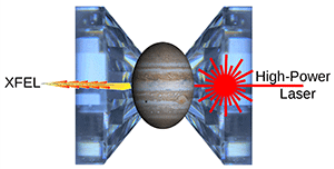
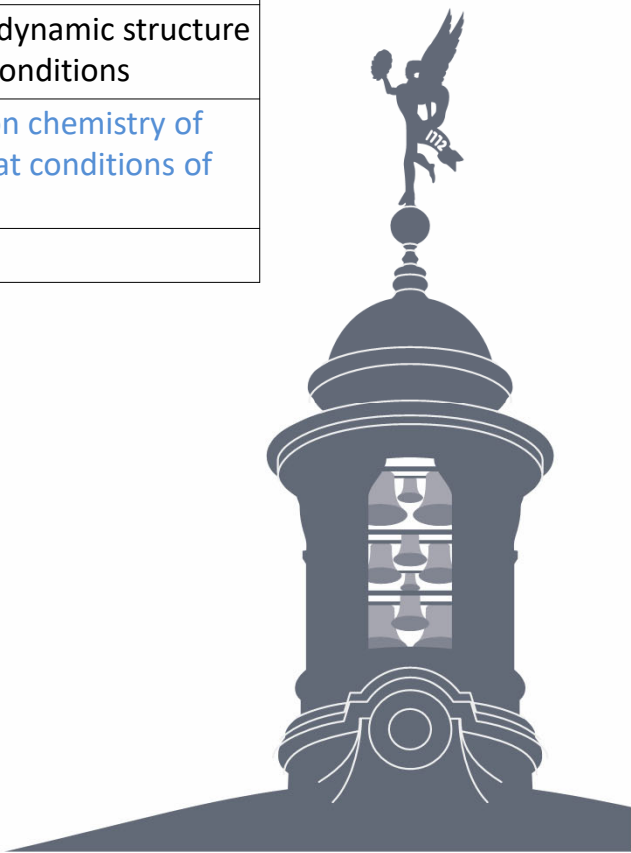


9th Joint Workshop on High Pressure, Planetary and Plasma Physics (HP4)

Friday, September 10 2021

Session 3		Chair: Dominik Kraus
09:00	Trybel (invited)	Ice-VII to ice-X transition: Proton dynamics and hydrogen bond symmetrization
09:45	Stevenson (invited)	Phase Changes in Dynamically Compressed Water
10:30	Coffee break	
10:50	Husband (invited)	XFEL heating of high pressure ices: new techniques to simulate planetary interior conditions in the laboratory
11:20	Yuan	Thermal conductivity of $CaSiO_3$ perovskite at high pressure and temperature determined by machine learning potentials
11:50	Buakor	Dynamic compression experiments of (Mg,Fe)O solid solution at free electron lasers
12:20	Lunch break	
Session 4		Chair: Carmen Sanchez Valle
13:50	Langhammer	Modelling magma viscosity
14:20	Schörner	Transport properties and dynamic structure of iron near Earth's core conditions
14:50	Dubrovinsky	Experimental constrains on chemistry of iron, oxygen, and carbon at conditions of deep planetary interiors
15:20	Redmer	Farewell



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