

Research at High Pressure

Gordon Research Seminar

luglio 16 - 17, 2022

Holderness School

Display your poster at the board # and session indicated below. If your name does not appear in the list and you intend to bring a poster, please contact the conference chair to see if there is space for your poster to be accommodated.

Displaying 54 of 54 posters

#	Session	Name	Affiliation	Poster Title
1	All Days	Hari, Anirudh	Johns Hopkins University	In situ X-ray diffraction of Al ₂ O ₃ during laser compression and release
2	All Days	Ly, Kevin	University of Illinois at Urbana-Champaign	Stability and distortion of fcc-LaH ₁₀ with path-integral molecular dynamics
3	All Days	Hilberer, Antoine	ENS Paris-Saclay	Quantum Diamond Magnetometry for High Pressure Superconductivity
4	All Days	Safari, Fatemeh	University of Utah	New perspectives of Stabilizing High-pressure Polymorphs under Ambient Conditions
5	All Days	Manayil Marathamkottil, Abdul Haseeb	University of Illinois at Chicago	Structural Properties of Lanthanum-based Ternary Hydrides
6	All Days	Briggs, Richard	Lawrence Livermore National Laboratory	Investigating the Relationship Between Microstructure and Dynamic Response Using X-ray Free-Electron Lasers (XFELs)
7	All Days	Sayre, Dean	University of Nevada, Las Vegas	Transitioning the transition metal dichalcogenide TcS ₂ , making the 4d behave like a 3d.
8	All Days	de Toledo Poldi, Eduardo	University of Illinois at Chicago	X-ray studies on the structure and magnetism of the honeycomb cobaltate Na ₃ Co ₂ SbO ₆ under pressure
9	All Days	Cooke, Peter	University of Edinburgh	Calculating the Raman Signal Beyond Perturbation Theory for a Diatomic Molecular Crystal
10	All Days	Geng, Nisha	University at buffalo	Si and P Doped H ₃ S Under Pressure
12	All Days	Tao, Shuo	Physics Department, Rutgers University-Newark	Route leading to exotic silicon allotropes and compounds

#	Session	Name	Affiliation	Poster Title
13	All Days	Kaa, Johannes	TU Dortmund / European XFEL	Towards time-resolved XES measurements from X-ray heated melts in a DAC at the HED instrument of the European XFEL
14	All Days	Comboni, Davide	ESRF: European Synchrotron Radiation Facility	High-pressure behavior and pressure-driven phase transitions in hydrated borates
15	All Days	van de Bund, Sebastiaan	University of Edinburgh	PIMD calculations of the broken symmetry transition in hydrogen isotopes with a machine-learned interatomic potential
16	All Days	berrada, meryem	University of Western Ontario	Resistivity of Solid and Liquid Fe-Ni-Si with Applications to the Cores of Earth, Mercury and Venus
17	All Days	Schacher, Daniel	University of Nevada, Las Vegas	Electronic structure and phase transitions in RuO ₂ (subject to change)
18	All Days	Sun, Yuanhui	California State University, Northridge	Chemical templates that assemble the metal superhydrides
19	All Days	Kovacevic, Tanja	U.C. Berkeley	Rock and Ice Miscibility Deep Within the Interiors of Water Worlds
20	All Days	Smith, Gregory Alexander	University of Nevada, Las Vegas	Determining clathrate-like yttrium hydride stoichiometries at megabar pressures
21	All Days	Pantell, Hadley	University of Rochester	Viscosity Estimates in the Vicinity of Liquid Phase Transitions in SiO ₂
22	All Days	Lamichhane, Anmol	University of Illinois Chicago	High pressure investigations of the C-S-H superconductor
23	All Days	Racioppi, Stefano	State University of New York at Buffalo	Quantum Stabilization of Helium Intercalated A-site Vacant Perovskites Under Pressure
24	All Days	Sinha, Shubham	University of Florida	Superconductivity in Chemically substituted MoB ₂
25	All Days	Hinton, Jasmine	University of Nevada, Las Vegas	Electronic and lattice dynamic studies of Cd
26	All Days	Stevenson, Michael	University of Rostock	Phase Changes in Dynamically Compressed Water
27	All Days	White, Melanie	University of Nevada Las Vegas (UNLV)	Investigation of high pressure phases of ruthenium dioxide.

#	Session	Name	Affiliation	Poster Title
28	All Days	Poreba, Tomasz	European Synchrotron Radiation Facility	Structural evolution of polyiodides at high pressure
29	All Days	Yu, Shidong	Nanyang Technological University	Prediction of potassium host minerals in Earth's deep mantle from first-principles calculations
30	All Days	Heighway, Patrick	University of Oxford	Slip competition and rotation suppression in tantalum and copper during dynamic uniaxial compression
31	All Days	de Villa, Kyla	UC Berkeley	Superionic Phases of H-C-N-O Compounds at Planetary Interior Conditions: An Ab Initio Study of Thermodynamic and Transport Properties
32	All Days	Sobczak, Szymon	Adam Mickiewicz University, Wieniawskiego 1, 61-712 Poznan	High-pressure method for sustainable disulfide metathesis
33	All Days	Rao, Rishi	Rutgers	High Ferroelectricity in Oxynitrides
34	All Days	Wang, Xiaoyu	University at Buffalo	Microscopic Diamond Anvil: Superconducting Carbon Allotropes via First Principle Calculations
35	All Days	Salzbrenner, Pascal	Materials Theory Group, Department of Materials Science and Metallurgy, University of Cambridge	AIRSS Feels the Heat
36	All Days	Sasaki, Misaki	Osaka University	Search for superconductivity of iron hydrides synthesized under high temperature and high pressure
37	All Days	Bolduc, Kimberly	University of Massachusetts Amherst	Developing Methods for Chemical Synthesis Using Shockwaves
38	All Days	Jensen, Scott	University of Illinois at Urbana-Champaign	Machine-learned interatomic potentials of dense hydrogen from diffusion Monte Carlo
39	All Days	Chakraborti, Amrita	Universität Bayreuth	Superhard boron carbide: New insights into anomalous dynamic failure and how to reinforce it
40	All Days	Henry, Laura	CEA	Martensitic transitions in elemental metals: experimental and modeling approaches.

#	Session	Name	Affiliation	Poster Title
41	All Days	Witt, William	University of Cambridge	Mechanical and thermodynamic principles for simulating nonhydrostatic environments
42	All Days	Rabello, Aryella	São Paulo University	Fe ₁ +dGa ₃ : disorder-order phase transitions induced by pressure
43	All Days	Muhammad, Hermann	ESRF	Liquid-liquid transition and melting curve of phosphorus
44	All Days	Laranjeira, Jorge	Universidade de Aveiro	3D C60 fullerite Clathrate Structure
45	All Days	Conway, Lewis	University of Cambridge	Rules of Formation of H-C-N-O Compounds at High Pressure, the Fates of Planetary Ices and Visualising Stoichiometrically Diverse Data
46	All Days	Salke, Nilesh	University of Illinois Chicago	High-pressure studies on non-centrosymmetric superconductor BiPd
47	All Days	Huston, Larissa	Los Alamos National Laboratory	The effect of compression rate on the phase transitions, lattice strain and deformation mechanisms of titanium
48	All Days	Frost, Mungo	SLAC National Accelerator Laboratory	High Pressure Viscometry by Differential Dynamic Microscopy
49	All Days	Badin, Matej	Comenius University in Bratislava	Nucleating a Different Coordination in a Crystal under Pressure: A Study of the B1-B2 Transition in NaCl by Metadynamics
50	All Days	Tzifas, Ioannis	GSI Heavy-ion accelerator facility-Helmholtz centre	Combining High-Pressure and Irradiation Experiments with relativistic heavy ion beams
51	All Days	Perez, Tyler	Johns Hopkins University	Novel Experiments to Measure Viscosity of Minerals at the Conditions of Planetary Interiors
52	All Days	Hilleke, Katerina	University at Buffalo	Chemical Pressure in the Structures of Superconducting Metal Superhydrides: Stabilization and Design
53	All Days	Dunning, Samuel	Carnegie Institution for Science	Strategies for the formation of ordered, functionalized nanothread polymers
54	All Days	Moeller, Christoph	Universität Potsdam	Pressure anomaly of the ATP hydrolysis rate facilitates life of extremophiles

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55	All Days	Grande, Zachary	University of Nevada, Las Vegas	Exploration of ice X under static compression