



Institut de Minéralogie et de Physique des Milieux Condensés
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SÉMINAIRE

Vendredi 7 septembre, 10h30

*Salle de Conférence, 4ème étage, Tour 22-23, Salle 401
IMPMC, Université P. et M. Curie, 4, Place Jussieu, 75005 Paris*

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Geophysical Lab, Carnegie Institute of Washington

ENERGY FRONTIER RESEARCH USING HIGH-PRESSURE

Pressure is regarded as an emerging dimension of materials science. Contemporary high-pressure technique enables us to control statically pressure up to ~350 GPa which is compatible to the earth core limit. It enriches phase diagram of materials and thus unprecedented materials can be observed in experiments and predicted in theory, opening completely new dimension of materials research. In this talk, I will introduce recent researches in our Energy Frontier Research in Extreme Environments (Efree) center which is one of 46 Energy Frontier Research Centers (EFRC) of Department of Energy (DoE) in USA. At the later part of my talk, I will present some theoretical predictions using first principle calculations to be compared with experimental observations.