



Recent progress in ab initio phonon calculations

Main auditorium (Aula), May 9 2023, 11 a.m. (hybrid form)

11:00 – opening

11:05-11:45 Dominik Legut (Technical University, Ostrava)

Phonons, anharmonicity, and electron correlations in actinides

11:45-12:15 Mariana Derzsi (Slovak University of Technology, Trnava)

Phase stability of PdO₂: The role of temperature and electron correlations

12:15-12:45 Sylwia Gutowska (AGH University of Science and Technology)

Electronic structure, phonons and superconducting gap of Pb-Bi alloy

12:45-13:05 Surajit Basak (Institute of Nuclear Physics)

Ab initio study of the chiral phonons

13:15-14:00 lunch

14:00-14:30 Paweł T. Jochym (Institute of Nuclear Physics)

High efficiency sampling of probability distributions

14:30-14:50 Kamil Tokar (Slovak University of Technology, Trnava)

Dynamical properties of isolated silver difluoride 1D structure under strain

14:50-15:10 Svitlana Pastukh (Institute of Nuclear Physics)

Mechanism of the structural phase transition in Cu₂P₂O₇

15:10-15:30 Gabriel Kuderowicz (AGH University of Science and Technology)

Strong electron-phonon coupling and superconducting gap in Heusler-type superconductor ScAu₂Al

15:30-15:50 Krzysztof Parlinski (Institute of Nuclear Physics)

Anharmonicity and heat conductivity

Organizing Committee:

Przemysław Piekarczyk

Paweł T. Jochym

Jan Łażewski

Svitlana Pastukh

Małgorzata Sternik