Speaker of Session 24

ENERGY IMPACT ON SUPERCONDUCTORS

Dr. Hyun-Jung Lee is a research fellow at Korea Advanced Institute of Science and Technology (Daejeon, Korea). Her research field is theoretical condensed matter physics. She received her PhD from University Augsburg (Augsburg, Germany) in 2007. After her PhD she moved to APCTP at Pohang University of Science and Technology(Pohang, Korea) where she joined the junior research group of Prof. Xin Wan to study the topological Anderson insulator by means of the Chern number calculations. She moved to Korea Institute for Advanced Study (Seoul, Korea) in 2010, where she performed research on the coexistence between antiferromagnetism and superconductivity in heavy-fermion superconductor CeRhIn5. She was also involved in research on doped Mott insulators and Kondo lattices within the dynamical mean field theory using the numerical renormalization group approach as an impurity solver. She moved to Korea Advanced Institute of Science and Technology in 2014 to join a STM (Scanning Tunneling Microscopy) experimental group of Prof. Jhinhwan Lee, where she simulates the temperature dependence of quasiparticle interference (QPI) image in iron-based superconductor to clarify the role of magnetic impurities in structural, magnetic and superconducting phase transitions observed in iron-pnictides.