Seminar

Resonant Inelastic X-ray Scattering from correlated electron systems and unconventional High-Tc Superconductors

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Venue: Room W563, Physics building, Peking University

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Abstract

Resonant inelastic X-ray scattering (RIXS) is a powerful bulk-sensitive photon-in / photon-out spectroscopic and scattering probe with elemental sensitivity for the electronic structure of condensed matter. It is a unique tool for studying low energy excitations in complex correlated systems, being direct-ly sensitive to charge-, orbital-, spin-, and lattice-degrees of freedom. Dedicated instrumentation for RIXS with ultra-high resolution in energy and momentum spaces has become available thereby enabling charac-terization of collective excitations such as orbitons, magnons and phonons. In this presentation I will give a brief introduction to RIXS technique and focus on the application in correlated electron systems and unconventional high-Tc superconductors. The status of the next-generation RIXS facility at Dia-mond Light Source will be also updated during the talk.

About the speaker