High-Energy Resolution Emission and RIXS Spectroscopy for Everybody

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Inner-shell x-ray emission spectroscopy using an analyser energy bandwidth of ~1 eV is sensitive to electron-electron interactions and orbital splittings and preserves the advantages of the hard x-ray probe. When the photon excitation energy is tuned close to the threshold, the phenomenon known as x-ray resonant Raman or resonant inelastic x-ray scattering (RIXS) occurs. Emission and RIXS spectroscopy are a very powerful tools to study the electronic structure as well local geometry and coordination. The goal of ID26 is to offer these techniques to a broad and heterogeneous user community. Some examples will be presented in this talk and future developments on ID26 will be outlined.