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## Measuring spin excitations in insulating and superconducting cuprates by soft x-ray RIXS

*Friday, 16 September 2011 14:50 (30 minutes)*

Resonant inelastic x-ray scattering (RIXS) offers a unique view on local and collective excitations in strongly correlated materials, complementary to established techniques like neutrons, optics, or photoemission. The commissioning at the Swiss Light Source of the high-resolution ( $E/\Delta E \sim 10^4$ ) SAXES soft x-ray spectrometer opened the way to measurements of the full spin wave spectrum in the cuprates, and the accurate evaluation of crucial model parameters. I will discuss RIXS data for the paradigmatic AFM parent compound  $\text{SrCuO}_2\text{Cl}_2$  and, for  $\text{Bi-2212}$ , the evolution of the magnetic excitations into the superconducting part of the phase diagram.

### Please specify the session

RIXS

### Please specify poster or talk

Talk

**Primary author:** Prof. GRIONI, Marco (EPF Lausanne, Switzerland)

**Presenter:** Prof. GRIONI, Marco (EPF Lausanne, Switzerland)

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