

## 5a Reunión de Usuarios de Luz Sincrotrón



Contribution ID : **89**

Type : **Poster**

### **RIXS calculations in $\text{FeTe}_{1-x}\text{Se}_x$ system.**

*Thursday, 13 August 2015 17:30 (1:00)*

#### **Abstract content**

We present calculations for resonant inelastic x-ray scattering RIXS in  $\text{FeTe}_{1-x}\text{Se}_x$ . We performed these calculations using a real space multiple scattering approach, which allows us to consider explicit compositional disorder. We approximate the RIXS spectra as a convolution between X-ray absorption (XAS) and X-ray emission (XES), using the ab-initio FEFF code. We can reproduce an experimentally observed change of hybridization, in the area of the pre-edge (XANES), between states d-Fe and p-Chalcogen (p-Se, p-Te).

#### **Summary**

**Primary author(s) :** Mr. MULATO GÓMEZ, Diego Fernando (Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional); Dr. MUSTRE DE LEÓN, José (Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional)

**Presenter(s) :** Mr. MULATO GÓMEZ, Diego Fernando (Centro de Investigación y de Estudios Avanzados del Instituto Politécnico Nacional)

**Session Classification :** Posters II