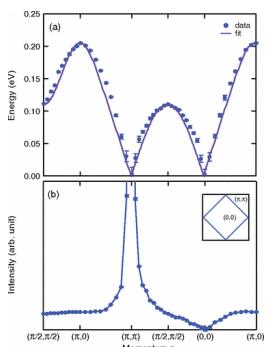
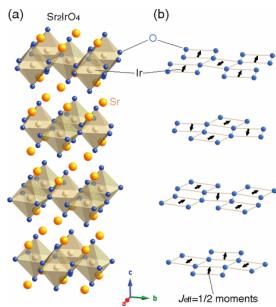


Blair W. Lebert, Kenneth D. Finkelstein, Christopher Pollock, Young-June Kim

Quest for doping-induced bulk superconductivity in Sr_2IrO_4

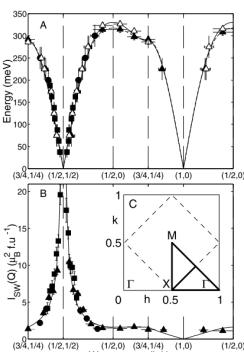
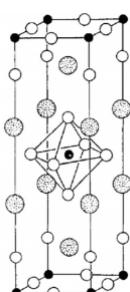
Similarity between structure and magnetism in Sr_2IrO_4 and La_2CuO_4

Bulk superconductivity not achieved to date – sample quality issues? New physics?



J. Kim et al. *Phys. Rev. Lett.* **108**, 177003

C.W. Chu et al. *Physica C* **514**, 290-313 (2015)
R. Coldea et al. *Phys. Rev. Lett.* **86**, 5377-5380 (2001)

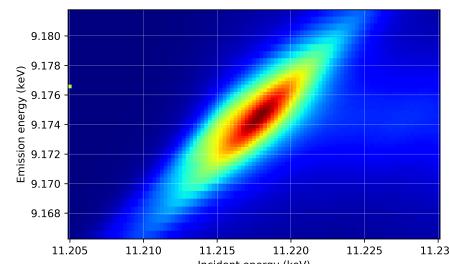


High energy resolution fluorescence detected x-ray absorption spectroscopy on $\text{Sr}_2\text{Ir}_{1-x}\text{Rh}_x\text{O}_4$

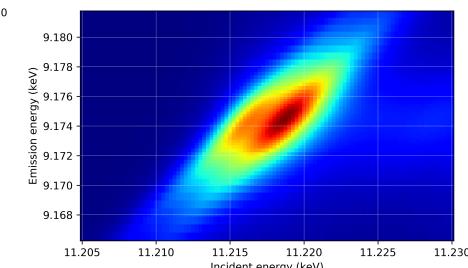
Probe evolution of unoccupied electronic structure with hole hoping

Performed on PIPOXS, 2A

HERFD-XAS allows higher resolution by circumvent core hole lifetime



Hole doping



See poster
for more details!