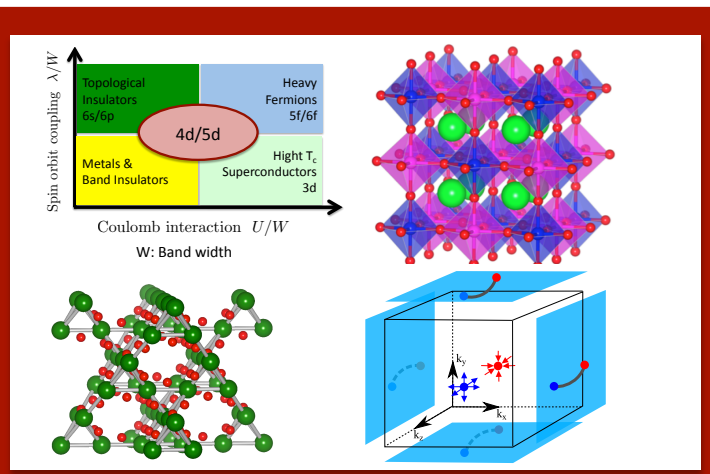
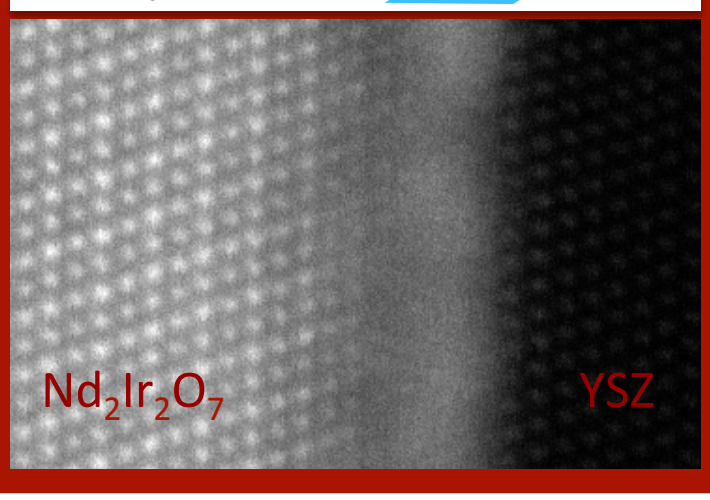
Spin-Orbit Coupling and Magnetism in Correlated Transition Metal Oxides

May 3 – 7 , 2015

THE OHIO STATE UNIVERSITY





Tutorials: May 3, 2015

Lectures are specifically aimed at graduate students and post-doctoral scholars.

Workshop: May 4-7, 2015

The workshop aims to bring scientists with diverse expertise working on the interplay of spin-orbit coupling and correlations in transition metal oxides, which leads to novel metallic, magnetic and topological states. The topics covered will include recent advances in materials, measurements, phenomena, theory and computation.

Invited Speakers (Confirmed):

James Analytis, U California Berkeley
Ryotaro Arita, RIKEN
Silke Biermann, Centre de Physique Theorique
Gang Cao, U Kentucky
Jacques Chakhalian, U Arkansas
Jinguang Cheng, Institute of Physics CAS
Daniel Dessau, U Colorado
Craig Fennie, Cornell U
Daniel Haskel, APS Argonne National Laboratory
Harold Hwang, Stanford U
George Jackeli, Max Planck Institute
Hae-Young Kee, U Toronto
Bernhard Keimer, Max Planck Institute
Daniel Khomskii, U Cologne
Bumjoon Kim, Max Planck Institute
Yong Baek Kim, U Toronto
Young Lee, Stanford U
John Mitchell, Argonne National Laboratory
Arun Paramekanti, CIFAR, U Toronto
Natalia Perkins, U Minnesota
Tanusri Saha Dasgupta, S. N. Bose Centre
Sergej Savrasov, U California Davis
Kyle Shen, Cornell U
Susanne Stemmer, U California Santa Barbara
Hidenori Takagi, Max Planck Institute
Jean-Marc Triscone, U Geneva
Kentaro Ueda, U Tokyo
Ashvin Vishwanath, U California Berkeley
Jiaqiang Yan, U Tennessee Knoxville

Tutorial Instructors:

- **Ryotaro Arita**, RIKEN
  - Electronic Structure of Correlated Oxides
- **Gang Cao**, U Kentucky
  - Correlations and Spin-Orbit Coupling: Survey of Experiments on Iridates
- **Yong Baek Kim**, U Toronto
  - Correlated Quantum Phenomena in the Strong Spin-Orbit Regime
- **Jean-Marc Triscone**, U Geneva
  - Interfacial Effects in Novel Oxide Heterostructures

Organizers:

Nandini Trivedi, Mohit Randeria, Patrick Woodward, Rolando Valdés Aguilar, Yuan-Ming Lu
Physics Department, The Ohio State University

Information: Jaimie Mollison - mollison.4@osu.edu
http://cem.osu.edu/news/soc-u

This workshop is supported by the Institute for Complex Adaptive Matter, the Center for Emergent Materials, an NSF MRSEC, the DOE, and the Gordon and Betty Moore Foundation,
with additional support from the Department of Physics, the Institute for Materials Research and the Women's Place at OSU.