

CORE-CM SEMINAR
Michigan State University

Dr. Linda Young
Argonne National Laboratory

Perspectives on ultrafast x-ray studies at DOE light sources

An ongoing scientific quest has been to observe phenomena on their natural length and time scales. X-rays shrink the length scale to atomic and molecular dimensions and provide access to elemental, chemical and orientational information via absorption spectroscopies. However, accessing the ultrafast timescales associated with atomic and molecular dynamics remains a challenge. While synchrotron light sources readily span wavelengths from 100 to 1 Angstrom and produce pulses of ~100 picosecond duration, the recent advent of x-ray free electron lasers has nurtured exploration of femtosecond dynamics. In this talk, I will describe advances in both synchrotron and FEL methodologies that further our quest to visualize structure and function at the level of atoms and electrons in complex systems.

Thursday, April 10, 2014
12:00 PM
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Prof. Chong-Yu Ruan – Host