



The Math/Stats Colloquium
Department of Mathematics and Statistics
San José State University



Elizabeth Miller
SLAC National Accelerator Laboratory
*Synchrotron Characterization
of Energy Materials:
From Optics to Operando Measurements*
APRIL 04, 2018, MH320

Abstract: Synchrotrons are a source of high-powered X-rays used to characterize materials, devices, proteins, and more. Complex optics and electronics are required to create these X-rays, which provide significant insights into the chemistry and structure of materials.

In this talk, an overview of synchrotron radiation and its use in studying materials for energy conversion and storage will be provided. Several case studies focusing on batteries will exhibit the power of synchrotron characterization and its application for *operando* experiments.

Background: Math for chemistry and physics. The necessary background knowledge in materials science will be explained in the talk.

About the speaker: Elizabeth (Beth) Miller is a postdoc at the Stanford Synchrotron Radiation Lightsource at SLAC. She received her Ph.D. in Materials Science & Engineering from Northwestern Univ. while researching solid oxide fuel cells. Her current research involves X-ray characterization of lithium-sulfur batteries.

SNACKS IN MH331B AT 2:30 PM

TALK STARTS AT 3:00 PM

For more information, see our full schedule at:

<http://www.math.sjsu.edu/~hsu/colloq/>