



IMS Materials Summer School 2017



Priscila F. S. Rosa
Condensed Matter and Magnet Science
Los Alamos National Laboratory

A Tour of Single Crystal Growth: From Rock Candy to Heavy-fermion Materials

Thursday, July 27, 2017

1:00 - 2:00 - Physics Auditorium

Physics Auditorium (TA3-215-182)

Abstract: The synthesis of materials that otherwise would not exist in nature opens new avenues of research and furthers our understanding. In this talk, I will present an overview of methods for synthesizing intermetallic single crystals, with a focus on the flux technique. We will start by understanding how rock candy is grown, and then we will move to more complex materials in which electron-electron interactions become important.

Bio: Priscila F. S. Rosa is an early-career scientist in the Condensed Matter and Magnet Science (CMMS) group at LANL. Her areas of interest include the synthesis of novel correlated materials (e.g. unconventional superconductors and magnets, and topological insulators) and their study under extreme environments (low temperatures, high magnetic fields, and high applied pressures). Her synthesis and characterization efforts resulted in over 45 peer-reviewed publications.

Priscila has a PhD in physics from the University of Campinas, Brazil followed by a postdoc at the University of California at Irvine. Priscila became a LANL Director's Fellow postdoc in 2015 and joined Los Alamos as staff last October.

The IMS Materials Summer School focuses on Materials Science at Los Alamos National Laboratory and is designed to expose our visitors to the broad range of great materials science performed at the Lab. Through the course of **seven talks** and **three site visits**, students will have a unique opportunity to learn about LANL directly from our **top scientists** and participate in **facility tours**.

For general information contact:

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