

NUCLEAR SEMINAR SERIES

Dr. Reto Trappitsch

Lawrence Livermore National Laboratory

Monday, October 28

4:00 pm - Rm 184 NSH

Understanding the origin of our solar system and beyond by analyzing meteorites and stardust

Our solar system formed roughly 4.5 billion years ago from the products of various prior nucleosynthesis processes. While primitive meteorites contain a record of this mixture, they also contain unaltered stardust particles. These particles represent bona-fide grains that formed in the outflows of dying stars and recording their parent stars nucleosynthetic fingerprint.

In this talk I will present recent isotopic measurements of meteorites and stardust that inform our understanding of the formation of the solar system. I will also discuss ongoing efforts to understand stellar nucleosynthesis and galactic chemical evolution.



INSTITUTE FOR STRUCTURE
AND NUCLEAR ASTROPHYSICS