

PRISMA+ Colloquium

Nov. 2, 2023 at 1 p.m.
Lorentz-Raum, 05-127, Staudingerweg 7

Robert Svoboda
UC Davis, USA

Detection of Solar and Supernova Neutrinos with the Future DUNE Experiment

The Far Detectors for the Deep Underground Neutrino Experiment (DUNE) are currently under construction at the Sanford Underground Research Facility (SURF), set to begin operations in about four years. While designed primarily to reconstruct GeV-scale neutrino interactions to look for CP violation, some unique properties of argon make solar and supernova burst neutrino measurements particularly interesting. I will discuss why this is so interesting, why an argon detection media is so unique, and what could be the limiting backgrounds.

Link to Presentation Slides: <https://docs.google.com/presentation/d/1rSApQOsGt0T87oIMUTKhVMMJq0kXr0G9/edit?usp=sharing&ouid=103217522426961737580&rtpof=true&sd=true>