

NUCLEAR SEMINAR SERIES

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Monday, November 25

4:00 pm - Rm 184 NSH

Radiation Detection in the Post- WIMP Era

If it is a major component of cold dark matter, the Weakly Interacting Massive Particle (WIMP) has proven to be extremely difficult to directly detect. Despite this difficulty, the science of WIMPs has driven extraordinary detector developments, especially in the area of phonon-sensing devices. I will discuss how the physics of WIMPs has driven these phonon technologies over the last 10 years—allowing advancements like superlative particle-discrimination performance and an unprecedented new access to the ultra-low energy recoil spectra. These advancements have a wide range of applications from neutrino detection to probing the properties of nuclear levels.



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