

## Rare-event searches and other applications with xenon detectors

*Tuesday, 19 May 2026 09:15 (30 minutes)*

Xenon-based detectors have become a central tool in rare-event physics, with liquid xenon playing a leading role in the search for dark matter and shaping a generation of ultra-low-background detector technologies. In this talk, I will survey the current landscape of xenon experiments through the lens of rare-event searches, with emphasis on the dark matter programs and the technical developments they have driven. I will also discuss neutrino physics efforts and highlight other xenon-based experiments that build on the expertise developed for dark matter detection. I will close by connecting these searches to wider applications of xenon-based technologies beyond fundamental physics.

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**Session Classification:** Overview and DM

**Track Classification:** Overview