



UTA Center for Advanced Detector Technologies **Special Seminar**

Weds 04/16/25, 2.30-3.30pm

Chemistry and Physics Building, Room 303



In Pursuit of Particle Dark Matter: Recent results from LZ and plans for XLZD

Kimberly Palladino, University of Oxford

The search for dark matter is one that occupies experts across multiple physics and astrophysics disciplines. Here, the direct detection technique utilizing liquid xenon time projection chambers to search for heavy particle dark matter will be put into context, and the new upper limits from the LZ experiment will be detailed. Plans for a future detector, XLZD, which will be a true rare event observatory bringing together the XENON, LZ, and DARWIN teams and others for a 60t target will also be discussed.