17th Patras Workshop on Axions, WIMPs and WISPs

Contribution ID: 31

Type: Talk



Wednesday 10 August 2022 11:10 (20 minutes)

LUX-ZEPLIN (LZ) is a dark matter direct detection experiment located at the Sanford Underground Research Facility in Lead, South Dakota. At the heart of the detector is a dual-phase time projection chamber containing 7 tonnes of active liquid xenon. During its 1000-day science run, LZ aims to achieve unprecedented sensitivity to Weakly Interacting Massive Particles (WIMPs) down to a WIMP-nucleon spin-independent cross section of about $1.4 \times 10^{-48} \rm cm^2$ for a 40GeV/c² mass WIMP. In this talk, I will give an overview of the LZ experiment and report on its status and performance during its first science run.

Primary authors: LUX-ZEPLIN COLLABORATION; FRUTH, Theresa (UCL)

Presenter: FRUTH, Theresa (UCL)

Session Classification: Contributed talks