



Contribution ID: 422

Type: **Presentation**

The NEXT Experiment

Thursday, 3 August 2017 15:00 (15 minutes)

For experiments searching for neutrinoless double beta decay, rejection of backgrounds from radioactivity will be pivotal for success. Gaseous xenon TPC detectors offer unique background rejection capabilities over solid- and liquid-phase technologies. The NEXT-NEW detector is presently operating in the Laboratorio Subterráneo de Canfranc (LSC), and will be followed by the NEXT-100 neutrinoless double beta decay search. This talk will describe the status of the NEXT program and present some early data from NEXT-NEW. It will also describe R&D towards ultra-low-background xenon gas detectors, including the development of a barium daughter tagging scheme based on single molecular fluorescence imaging.

Primary author: Dr JONES, Benjamin (UTA)

Presenter: Dr JONES, Benjamin (UTA)

Session Classification: Neutrino Physics

Track Classification: Neutrino Physics