Contribution ID: 17

Type: not specified

EXO-200

Saturday 23 January 2010 11:50 (20 minutes)

EXO-200 (Enriched Xenon Observatory - 200kg) is an underground double-beta decay experiment that uses 200kg of Xenon isotopically enriched to 80% in Xenon-136. The Xenon is contained in an ultra-low back-ground TPC where there is simultaneous collection of scintillation light (using Large Area Avalanche Photo-diodes (LAAPD's)) and ionization charge in order to significantly enhance the energy resolution. EXO-200 should measure the, as yet unobserved, two neutrino double-beta decay mode as well as achieve competitive sensitivity for the neutrinoless double-beta decay mode of Xenon-136. EXO-200 is currently undergoing final construction and commissioning. R&D is being conducted towards the construction of a ton-class detector.

Presenter: AUGER, Martin

Session Classification: Student talks