



Contribution ID: 59

Type: talk

Neutrino physics with the SNO+ detector

Thursday 19 September 2013 16:19 (19 minutes)

SNO+ is a multi-purpose neutrino experiment in the final phase of construction at SNOLAB. It is the successor to the SNO experiment that replaces heavy water with liquid scintillator in the detector. Its main scientific goal is to search for neutrinoless double beta decay. In addition, SNO+ will detect and study low energy solar neutrinos, anti-neutrinos from nearby reactors and from the Earth's natural radioactivity; SNO+ will also look for neutrinos from supernovae. SNO+ will use Te-loaded organic liquid scintillator to search for neutrinoless double beta decay. The main advantage of SNO+ is the possibility of loading large quantities of double beta decay isotope in the detector, achieving very good sensitivity. This talk will present the physics goals and current status of the project.

Author: FATEMIGHOMI, nasim (Queen's University)

Presenter: FATEMIGHOMI, nasim (Queen's University)

Session Classification: Working Group 2

Track Classification: Working Group 2