

IsoDAR and DAE δ ALUS

Tuesday 26 August 2014 15:30 (20 minutes)

IsoDAR is an innovative experimental concept to use a high power, low energy cyclotron to produce a source of electron antineutrinos. Such an intense source, when combined with a liquid scintillator based detector, can provide a direct probe of the reactor antineutrino anomaly and, in general, a definitive test of the sterile neutrino. Further, IsoDAR can distinguish between one and two sterile neutrinos in many cases as well as collect a large sample of antineutrino-electron elastic scattering events. The experiment will be introduced within the context of the DAE δ ALUS program for measuring CP violation in the neutrino sector and recent progress will be discussed.

Primary author: Prof. CONRAD, Janet (MIT)

Presenter: Prof. CONRAD, Janet (MIT)

Session Classification: Neutrinos and related astrophysical implications

Track Classification: 3) Neutrinos and related astrophysical implications