Contribution ID: **37** Type: **not specified**

300kg CsI Detector for Coherent Elastic Neutrino-Nucleus Scattering (CICENNS)

Wednesday, 13 November 2024 17:00 (15 minutes)

Coherent elastic neutrino-nucleus scattering (CEvNS) is the primary and enhanced interaction process for low-energy neutrinos with matter. To precisely study neutrino physics via this process, we are constructing an array of scintillation crystal detectors with a total mass of 300 kg of CsI(Na), named CICENNS. This detector will be installed at the China Spallation Neutron Source (CSNS) and make a precise measurement of the CEvNS signal as well as efficient searches for new physics using ˜30 MeV neutrinos from pion and muon decays at rest. In this talk, I will present the progress and expected results of the CICENNS experiment.

Primary author: AN, Fengpeng (Sun Yat-sen University)

Presenter: AN, Fengpeng (Sun Yat-sen University)

Session Classification: Neutrino properties