



Contribution ID: 1

Type: **Invited**

Observation of Supernova Neutrino Bursts via CEvNS

Sunday 10 November 2019 09:00 (20 minutes)

Coherent elastic neutrino-nucleus scattering (CEvNS) is a neutral-current process in which a neutrino scatters off an entire nucleus, depositing a tiny recoil energy. The process is important in core-collapse supernovae and also presents an opportunity for detection of a burst of core-collapse supernova neutrinos in low-threshold detectors designed for dark matter detection. Here we present an ongoing study of prospects for supernova burst detection via CEvNS in existing and future large-scale detectors.

Author: SMITH, Adryanna (Duke University)

Co-author: Dr SCHOLBERG, Kate (Duke University)

Presenters: SMITH, Adryanna (Duke University); Dr SCHOLBERG, Kate (Duke University)

Session Classification: New detectors and applications