



Contribution ID: 58

Type: **Oral presentation**

## The SNO Experiment

*Thursday, 8 September 2016 10:55 (25 minutes)*

The SNO experiment was a highly successful experiment that ran from 1999 until 2006. The use of heavy water as a neutrino detection material allowed for the measurement of solar neutrinos in both a charged current channel and a unique neutral current channel. Simultaneous measurements in both channels allowed SNO to demonstrate neutrino flavour change as the solution to the solar neutrino problem and provided a key signature for the discovery of neutrino oscillations. The 2015 Nobel prize was in part awarded to Arthur B. McDonald for his leadership of SNO as these measurements were made. Results from SNO and the varied methods used to obtain them will be reviewed and prospects for future SNO results will be discussed.

### Registered

Yes

**Primary author:** MCCAULEY, Neil Kevin

**Presenter:** MCCAULEY, Neil Kevin

**Session Classification:** Cherenkov detectors in astroparticle physics

**Track Classification:** Cherenkov detectors in astroparticle physics