

Reactor Antineutrino Oscillations and Geoneutrinos in SNO+

Friday, 21 June 2024 17:30 (2 hours)

SNO+ is a neutrino detector located 2 km underground in SNOLAB, Canada, whose main goal is to search for neutrinoless double-beta decay. In addition, being about 240 to 350 km away from three large nuclear power plants, it is well situated to measure neutrino oscillation parameter Δm_{21}^2 . Analyses of antineutrino signals, including the observation of geoneutrinos in SNO+ (first measurement in the Western Hemisphere and in the North American plate), are underway. This poster presents an overview of the oscillation analysis being performed at SNO+, with projections for the sensitivities to Δm_{21}^2 , θ_{12} , and the geoneutrino flux.

Poster prize

No

Given name

Sofia

Surname

Andringa

First affiliation

LIP

Second affiliation

Institutional email

sofia@lip.pt

Gender

Female

Collaboration (if any)

SNO+

Primary authors: ZUMMO, Anthony (University of Pennsylvania); PAGE, James (University of Sussex); LEBANOWSKI, Logan (University of California, Berkeley); ANDRINGA, Sofia (LIP); PARKER, William (University of Oxford)

Presenter: ANDRINGA, Sofia (LIP)

Session Classification: Poster session and reception 2

Track Classification: Geo neutrinos