



Contribution ID: 36

Type: **not specified**

## Search for coherent neutrino-nucleus scattering in the NEON experiment

*Wednesday 23 October 2024 16:50 (20 minutes)*

Since the COHERENT collaboration first observed coherent elastic neutrino-nucleus scattering (CEvNS) in 2017, interest in this phenomenon has surged, leading to numerous global efforts to detect reactor neutrinos via CEvNS. Launched in 2019, the NEON (Neutrino Elastic Scattering Observation with NaI(Tl)) experiment aims to observe CEvNS from reactor neutrinos. Following the successful development of a high-light-yield NaI(Tl) detector, data acquisition began in 2022 with the detector installed in the tendon gallery of Hanbit Nuclear Power Plant Unit 6 in Yeonggwang, South Korea. This presentation will provide an overview of the NEON experiment, detailing the detector configuration and operation, as well as its performance and the latest analysis results.

**Author:** Dr LEE, Hyun Su (Institute for Basic Science)

**Presenter:** Dr LEE, Hyun Su (Institute for Basic Science)

**Session Classification:** Parallel Session 6