

Status of the RENE Experiment

miércoles, 6 de mayo de 2026 10:00 (40)

The Reactor Experiment for Neutrinos and Exotics (RENE) is a new short-baseline reactor antineutrino experiment designed to explore the parameter space relevant to the reactor antineutrino anomaly. Its primary objective is to test the existence of sterile neutrino oscillations around $\Delta m_{412}^2 \sim 2 \text{ eV}^2$, a region where previous experiments have reported both exclusions and possible hints. RENE combines a dedicated detector setup with detailed simulation studies to achieve high sensitivity in this domain. By providing fresh measurements, the experiment aims to clarify outstanding questions in reactor antineutrino physics and contribute to the broader understanding of neutrino properties. This presentation will summarize the current status and scientific goals of RENE.

Presenter(s) : Prof. YANG, Byeongsu