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The CHANDLER Reactor Neutrino Detector

CHANDLER is an antineutrino detection technology based on plastic scintillating cubes. We deployed our prototype MiniCHANDLER detector 25 meters from a commercial nuclear reactor core for a four month run, and we observed a significant inverse beta decay signal with no overburden and minimal shielding. This poster will discuss the technology and present the technical details of data analysis and result from this prototype deployment.

Mini-abstract

Observation of reactor antineutrinos with a rapidly-deployable surface-level detector

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