Contribution ID: **507** Type: **Poster reactor**

NuLat: A Novel Design for a Reactor Anti-Neutrino Detector

NuLat is a new detector designed to study reactor anti-neutrinos at short baselines. NuLat is based on the Raghavan Optical Lattice (ROL), which uses segmented 6Li doped plastic cubical
cells, separated by air gaps to take advantage of total internal reflection. The first phase of NuLat contains 125 cubes (5x5x5), each 6.3 cm (2.5") on a side, while the full detector will contain 3375, for a 15x15x15 array. NuLat features excellent spatial and energy resolution, good background rejection, and sensitivity to inverse beta decays and oscillation patterns.

Authorship annotation

for the NuLat Collaboration

Session and Location

Monday Session, Poster Wall #208 (Ballroom)

Poster included in proceedings:

yes

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Track Classification: Poster (participating in poster prize competition)