



Contribution ID: 356

Type: not specified

Sterile neutrino searches at short distance from nuclear reactors

Thursday, 6 September 2018 12:00 (30 minutes)

The publication of the reactor antineutrino anomaly has revived the search for a sterile neutrino state at the 1 eV mass scale. A large experimental program is ongoing to search for a new oscillation pattern in the disappearance of electronic antineutrinos at short distance from nuclear cores. We will review the different measurements with emphasis on the complementary detection technologies and discuss the new limits already set on the sterile neutrino. In parallel to the experimental efforts, the prediction of the antineutrino spectra emitted by the reactors, at the origin of the reactor anomaly, is also under scrutiny in the community. A review of the uncertainties and potential biases of the prediction will be presented.

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Session Classification: Plenary