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Testing CPT invariance with the neutrino solar sector

Monday 28 August 2023 17:00 (15 minutes)

CPT invariance is a key pillar in our description of nature. Neutrinos, as elementary particles, provide a unique opportunity to test this fundamental symmetry. In this talk, I will discuss how next-generation solar neutrino and medium-baseline reactor experiments will allow constraining (or proving) CPT violation with unprecedented confidence. Moreover, I will discuss how non-standard neutrino interactions could mimic CPT-violating signatures and the prospects to disentangling both scenarios.

Submitted on behalf of a Collaboration?

No

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