Contribution ID: **106** Type: **Parallel Flash talk**

Constraints on neutrino non-standard interactions: From neutrino oscillations to precision cosmology

Friday, 19 February 2021 11:45 (5 minutes)

Neutrino non-standard interactions (NSIs) have been actively investigated both theoretically and experimentally in the past. Yet null signals of any new physics at colliders and from low-energy precision measurements have gradually motivated the investigation of new physics model-independently. Effective Field Theories (EFTs) provide such a systematic and model-independent framework. In this talk, working within the EFT framework, I will present our recent results on both neutral- and charge-current neutrino NSIs from neutrino oscillation experiments [1] and precision cosmology [2].

Refs:
[1] https://arxiv.org/abs/2011.14292
[2] https://arxiv.org/abs/2101.10475

Collaboration name

Primary author: DU, Yong (ITP CAS)

Co-authors: LI, Hao-Lin (Institute of Theoretical Physics, Chinese Academy of Science); TANG, Jian (Sun Yat-Sen University); VIHONEN, Sampsa (Zhongshan University); YU, Jiang-Hao (Institute of Theoretical Physics, Chinese Academy of Science)

Presenter: DU, Yong (ITP CAS)

Session Classification: Non Standard Interactions