String Phenomenology 2023



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Axion-Photon Couplings in the String Landscape

Tuesday 4 July 2023 16:00 (15 minutes)

In this talk, I will review the construction of an ensemble of axion models arising from type IIB string theory on toric hypersurface Calabi-Yau threefold orientifolds. I'll explain some of the observational constraints on these string theory axions, coming from dark matter bounds as well as axion-photon coupling experiments. Finally, I'll explain a mechanism that suppresses axion-photon couplings compared to naive estimates, and present some preliminary data on these couplings.

Presenter: GENDLER, Naomi

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