Contribution ID: **104** Type: **Plenary/Parallel talk**

Constraints on dark interactions with the EFTofLSS and BOSS

Tuesday 23 August 2022 14:30 (20 minutes)

I will describe recent developments on the nonlinear modelling of LSS, in the context of momentum-exchange interacting dark energy. I will review the Dark Scattering model and show how it can alleviate the current S_8 tension between early and late-Universe data. I will present new constraints on this interaction from a likelihood analysis of the BOSS DR12 power spectrum multipoles, while briefly describing the EFT-based model and likelihood used in the analysis. I will show a hint of a detection of this dark coupling, driven by the preference of late-time data for a lower amplitude. If confirmed, this result could restore concordance between the early and the late Universe.

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