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## Easing the $\sigma_8$ -tension with $\nu$ -DM interactions

*Friday 4 June 2021 15:30 (6 minutes)*

The  $\sigma_8$ -tension of Planck data with weak lensing and redshift surveys is one of the main problems with the  $\Lambda$ CDM model of cosmology. We show that the tension can be alleviated by introducing an interaction between dark matter and neutrinos. We model the interaction using a linear Boltzmann treatment, introducing a novel implementation that for the first time uses the full massive neutrino hierarchy. We also provide upper limits on the interaction cross-section between neutrinos and dark matter.

### arXiv number (if applicable)

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**Author:** MOSBECH, Markus Rasmussen (The University of Sydney)

**Presenter:** MOSBECH, Markus Rasmussen (The University of Sydney)

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