

# Structure Formation in the Universe

*Wednesday 29 March 2023 09:00 (30 minutes)*

In its most basic form, the highly successful  $\Lambda$ CDM cosmology can be encapsulated in six parameters. Once these parameters are specified, so too is a wide variety of phenomena, from fluctuations in the microwave background to the growth of structure to the evolution of the expansion rate of the Universe. I will review the predictions related to cosmological structure formation, focusing on areas where potential tensions have emerged: these include nonlinear scales at the earliest times and smallest mass scales and comparisons between measurements early and late in the Universe's history.

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**Session Classification:** SESSION 1: Cosmology and structure formation (CHAIR: Graciela Gelmini-UCLA)

**Track Classification:** Dark matter and structure in the Universe