

# From Dark Matter Particle Phenomenology to Astrophysical Structure Formation

*Thursday 26 March 2020 08:15 (15 minutes)*

Constraining the particle properties of dark matter from astronomical observables requires detailed forward modeling that can connect those two regimes. I will discuss recent progress in implementing generic dark matter phenomenology (e.g. cut-offs in the power spectrum, self-interactions) into models of structure and galaxy formation - in particular in the context of fast and flexible semi-analytic models. I will focus on the range of observable quantities that can be predicted by such models, and the precision and robustness that can be achieved.

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