

# JOINT TUFTS/MIT COSMOLOGY SEMINAR

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## *Discovering New Physics with Cosmological Data Sets*

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Measurements of the Cosmic Microwave Background and the large-scale structure of the universe have made it possible to determine with great precision the universe's inventory, as well as properties of its initial conditions. However, there are profound questions that remain unanswered. Cosmological observations and galaxy dynamics seem to imply that all matter in the universe is composed of dark matter, which is not accounted for by the Standard Model of particles. The particle nature of dark matter is one of the most intriguing puzzles of our time. The wealth of knowledge which is and will soon be available from cosmological surveys will reveal new information about our universe. I will discuss how we can use new and complementary data sets to identify new physics at different scales.

**Tuesday, March 16, 2021, 2:30 pm**

Zoom link will be distributed to joint cosmology seminar mailing list. If not subscribed see <https://cosmos.phy.tufts.edu/mailman/listinfo/cosmology-seminar>

**Massachusetts Institute of Technology**