

# JOINT TUFTS/MIT COSMOLOGY SEMINAR

---

## *B-modes from the Early Universe and the Milky Way*

Raphael Flauger  
UCSD

The cosmic microwave background contains a wealth of information about cosmology as well as high energy physics. It tells us about the composition and geometry of the universe, the properties of neutrinos, dark matter, and even the conditions in our universe long before the cosmic microwave background was emitted. I will begin with an outlook what we may hope learn from current and future CMB experiments with a focus on the search for primordial gravitational waves. One of the main challenges for this endeavor is polarized emission from dust in our Milky Way. I will discuss results from our attempts to model and better understand this emission with the help of MHD simulations.

Tuesday, February 19, 2019, 2:00 pm  
Jefferson Lab room 256  
Harvard University

Refreshments immediately before, outside Jefferson Lab room 472