

# JOINT TUFTS/MIT COSMOLOGY SEMINAR

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## *Beyond the CMB: The EFT of Large Scale Structure*

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The next hope to constrain cosmological parameters observationally is in surveys of the large scale structure (LSS) of the universe. LSS has the potential to rival the CMB in cosmological constraints because the number of modes scales like the volume, but the nonlinear clustering due to gravity makes it more difficult to extract primordial parameters. In order to take full advantage of the constraining power of LSS, we must understand it in the quasi-nonlinear regime. The effective field theory (EFT) of LSS provides a consistent way to perturbatively predict the clustering of matter at large distances. In this talk, I will discuss the status of the EFT of LSS and present recent work describing the inclusion of baryons in the EFT approach, including comparisons to N-body simulations.

Tuesday, November 3, 2015, 2:30 pm  
Cosman Seminar Room  
Center for Theoretical Physics  
Building 6C, Room 6C-442  
Massachusetts Institute of Technology

Refreshments at 2:00 in the same room