## JOINT TUFTS/MIT COSMOLOGY SEMINAR

## The Asymmetric Universe Mohammad Hossein Namjoo Harvard-Smithsonian Center for Astrophysics

There are some evidences for a hemispherical asymmetry at very large scales on CMB, as indicated by Planck collaboration. In this talk, I will focus on what theoretical lessons we can learn from this observation. Specifically, I will discuss the long mode modulation as a possibility of explaining this asymmetry and point out some general remarks on this idea, such as a consistency condition between the generated hemispherical asymmetry and the non-Gaussianity. Finally, I will discuss how the CMB polarization data can shed light on the original source of the asymmetry.

Tuesday, February 23, 2016, 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