PHYSICS AND ASTRONOMY
SEMINAR

Dr.Yin-Zhe MA

University of British Columbia

"The Cosmic Peculiar Velocity Field"

Abstract

The peculiar velocity field is one of the important probe of large scale structure. Its prediction from linear perturbation theory of ΛCDM should be rigorous tested against observational data. I will lay out a method which can quantify the difference between the predicted velocity field from the density field and therefore directly test the gravitational instability diagram. By applying the hyper-parameter technique, we quantify the magnitude and direction of the bulk flow on scale of 50 Mpc/h, and test its consistency with LCDM prediction. I will present a method which can maximize the cosmological information one can obtain from the bulk flow study.

Friday, April 26, 2013
11:30 a.m.
Elliott Building
Room 162