Department of Theoretical Physics



Bhuvnesh Jain University of Pennsylvania

Galaxy surveys and the possible breakdown of the standard model of cosmology

Friday, 10 January 2020, 11:30 Room A304

I will show tests of the dark energy based cosmological model from a combination of galaxy and cosmic microwave background surveys. We live in interesting times: the current crisis over the expansion rate of the universe has far-reaching, but still largely unknown, implications for fundamental physics. Measurements of mass fluctuations provide a second probe of cosmology, and I will show results from the ongoing analysis of the Dark Energy Survey. I will discuss some possible theoretical resolutions to these puzzles, and the prospects for the coming years.

