

Theoretical Physics Seminar

Monday, December 9, 2019 / Pupin Hall Theory Center, 8th Floor / 2:10 PM

Mikhail Ivanov - NYU

"Precision cosmology with large-scale structure"



In the first part of the talk I will review nonlinear cosmological perturbation theory and show how it can be used to measure cosmological parameters independently of the Planck CMB data. The second part of my talk will be devoted to the probability distribution function of the dark matter density field. I will present a first systematic non-perturbative calculation of this statistic and discuss its potential as a cosmological probe.