JOINT TUFTS/MIT COSMOLOGY SEMINAR

Inflation as a cosmological collider Xingang Chen Harvard

Inflation may be viewed as a particle collider during which particles with masses up to the Hubble scale of inflation are created spontaneously. The energy scale is much higher than any terrestrial colliders can possibly achieve. We study how these particles leave their imprints in the density perturbations, so that we may read their spectra and interactions by studying the distribution of the contents of our universe in large scales. Some of these imprints also directly record the scale factor of the primordial universe as a function of time, serving as a direct evidence for the inflation scenario.

Wednesday, September 25, 2019, 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