JOINT TUFTS/MIT COSMOLOGY SEMINAR

Primordial black holes from domain wall networks Oriol Pujolas Universitat Autonoma de Barcelona

Domain wall (DW) networks are interesting probes of new physics with spontaneously broken discrete symmetries. They have a strong impact on cosmology, leading to abundant production of primordial Gravitational Waves (GWs) and Black Holes (PBHs). A detailed knowledge of these signals and how they depend on model parameters, however, represents a computational challenge. I will present a method to capture the GW and PBH yield and I will discuss some phenomenological implications. Within current uncertainties, the DW interpretation of the PTA signal cannot be ruled out by PBH overproduction.

Tuesday, September 24, 2024, 2:30 pm 574 Boston Ave, Room 402 Tufts University Refreshments at 2:00 outside the building, at the corner of Harvard St. and Boston Ave.