

JOINT TUFTS/MIT COSMOLOGY SEMINAR

Effective field theory for axion monodromy inflation

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Axion monodromy inflation was first developed in the context of string models in order to evade apparent constraints on inflation with super-Planckian field ranges. In this talk I will describe the general effective field theory for these models, in terms of a massive tensor gauge field, which highlights how slow-roll inflation is protected from a wide class of quantum gravity corrections. Current bounds on CMB tensor modes push the theory into a strongly-coupled regime, which has two phases consistent with observation: standard slow-roll inflation with a flattened potential, or a variant of “k-fation” in which lowering the tensor power is correlated with enhanced non-Gaussianity.

Tuesday, February 6, 2018, 2:30 pm
574 Boston Ave, Room 310
Tufts University

Refreshments at 2:00 outside room 304