JOINT TUFTS/MIT COSMOLOGY SEMINAR

Anti-Brane Induced Inflation

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Brown

Anti-branes are a widely used tool in constructing our universe in string theory, notably used for generating a small positive cosmological constant. In this talk, I will show how the supergravity description of anti-branes naturally leads to a period of inflation, occurring due to the backreaction of an anti-brane on the string theory bulk geometry. In this context, a would-be "eta-problem" in fact becomes an "eta-solution," with inflation being generated by perturbative corrections to the Kahler potential. To cover this broad topic I will review supersymmetry and its breaking in string theory and supergravity, the physics of anti-branes, and the interplay of all of this with ""moduli stabilization". Talk based on 1609.00364, 1601.03409, and 1712.xxxx.

Tuesday, November 14, 2017, 2:30 pm

574 Boston Ave, Room 316

Tufts University

Refreshments at 2:00 outside room 304