JOINT TUFTS/MIT COSMOLOGY SEMINAR

A Cosmology with Finite Matter

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We propose a potentially viable alternative cosmology with an inhomogeneous matter density that is a spatial delta function at t=0 and integrates to a finite total mass. Dark energy is treated as an effective potential undergoing transitions to an ultimate zero vacuum energy ground state. As the scale of inhomogeneity goes to infinity the model approaches the standard homogeneous and isotropic matter density. The finiteness of the total mass eliminates infinite cloning and avoids other problematic features of the standard cosmology and suggests solutions to other long-standing puzzles. Consistency with general relativity is discussed.

Tuesday, April 23, 2013, 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