JOINT TUFTS/MIT COSMOLOGY SEMINAR

Quantum Excitations in Time-Dependent Backgrounds

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We give a technique for calculating the occupation number of quantum fields in time-dependent backgrounds by using the relation between one-dimensional quantum oscillators and two-dimensional classical oscillators. We illustrate our method by giving closed analytical results for the time-dependent spectrum of occupation numbers during gravitational collapse in 3+1 dimensions.

Tuesday, March 12, 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