

# JOINT TUFTS/MIT COSMOLOGY SEMINAR

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## *Wave function of the Universe, Wheeler-DeWitt equation and inflation*

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We study the Wheeler-DeWitt equation in the Born-Oppenheimer approximation, when the macroscopical geometrical degrees of freedom are treated semiclassically and other degrees of freedom are treated as quantum. A general equation, describing the lowest order corrections coming from quantum gravitational effects to the spectrum of cosmological scalar fluctuations is obtained. These corrections are explicitly estimated for the case of a de Sitter evolution.

Tuesday, September 24, 2013, 2:30 pm  
Robinson Hall, Room 250  
Tufts University

Refreshments at 2:00 in Knipp Library, Room 251