

JOINT TUFTS/MIT COSMOLOGY SEMINAR

Quantization Of Linearized Gravity In Cosmological Vacuum Spacetimes

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Mathematically rigorous approaches to quantization of quantum fields in curved spacetimes have been developed for well over 30 years, mainly in what is called the algebraic approach. However, linearized gravity was not treated in this framework until very recently [CJ Fewster and DS Hunt, *Reviews in Mathematical Physics* 25, (2013) 1330003]. In this talk I will describe what the algebraic approach aims to achieve, starting with the scalar field, and then moving on to the problems that arise in treating linearized gravity. I will focus on the main ideas and also talk about some applications and open directions.

Tuesday, December 2, 2014, 2:30 pm
Robinson Hall, Room 250
Tufts University

Refreshments at 2:00 in Knipp Library, Room 251