

JOINT TUFTS/MIT COSMOLOGY SEMINAR

A new semiclassical picture of vacuum decay

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Perimeter

In this talk, I will present a real-time semiclassical numerical framework that is well suited for the study of decay of metastable (false) vacuum decay in scalar field theories. This framework extends existing Euclidean techniques to the many-bubble regime and can be used to compute: decay rates, bubble-bubble correlations, bubble nucleation pre-cursors, bubble wall fluctuations, etc. I will conclude with a discussion of potential cold atom experiments that could be used as quantum simulators of vacuum decay.

Tuesday, April 30, 2019, 2:30 pm
574 Boston Ave, Room 310
Tufts University

Refreshments at 2:00 outside room 304