

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Edward Wilson-Ewing

University New Brunswick

Emergent Cosmology from Quantum Gravity Condensates

In this talk, I will explain how large-scale cosmological dynamics can be obtained from the hydrodynamics of condensates of quanta of geometry in the group field theory approach to quantum gravity. The correct Friedmann equations are recovered in the classical limit, and quantum gravity corrections arise in the high-curvature regime causing a bounce which generically resolves the big-bang and big-crunch singularities.

Wednesday, 16 October 2019, 16:15h, Room A348, Theresienstr. 37/III