



ARNOLD SOMMERFELD
CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Wednesday, 18th November 2020

at 16.15 h

Prof. Andreas Karch
(University of Texas at Austin)

Branes, Islands, and Massive Gravitons

Quantum Gravity in Anti-de Sitter space coupled to a non-gravitating bath has been the setting for novel approaches to the black-hole information paradox. Works from 2 decades ago in the context of Randall-Sundrum braneworlds makes it clear that this system necessarily describes massive gravitons: as soon as one couples AdS gravity to a bath, the graviton gets a mass. These two phenomena are intrinsically linked. We'll review old work that led to this conclusion, and present novel results that elucidate the role of the graviton mass in the determination of the Page curve for evaporating AdS black holes.

For ZOOM access information, please contact Michael Haack: michael.haack@lmu.de

Prof. Ilka Brunner