

LUDWIG-MAXIMILIANS-UNIVERSITÄT MÜNCHEN

ARNOLD SOMMERFELD CENTER FOR THEORETICAL PHYSICS



Sommerfeld Theory Colloquium

Prof. Elias Kiritsis

Crete University

Lorentz Violations, Gravity Dissipation and Holography

Lorentz non-invariance in quantum field theory is reconsidered as well as its interplay with gravity, string theory, diffeomorphism invariance and changing reference frames. We clarify these issues, and argue that Lorentz violation is always an environmental effect. We provide a holographic view of the breaking, and its connection to Horava-Lifshitz type of gravitational theories. We also argue that dissipation is always a signal of Lorentz violation. We provide calculations of dissipation at strong coupling.

Wednesday, 16 May 2012, 16:15h, Room A348/349, Theresienstr. 37