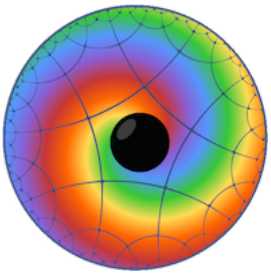

Contribution ID: **66** Type: **not specified**

Electron-Phonon interactions, MIT and Holographic Massive Gravity

Wednesday, 15 April 2015 16:50 (30 minutes)

Massive gravity is holographically dual to ''realistic" materials with momentum relaxation. In its fully covariant formulation it in fact provides an holographic effective description for electron-phonon interactions. I will show how phonons' degrees of freedom are enconded in massive gravity and which are the interesting phenomenological features concerning the transport properties of the dual theory. In particular non-linear interactions in the phonons-sector can provide a metal-insulator crossover and a pinned response in the optical Conductivity.

Presenter: BAGGIOLI, Matteo

Session Classification: Parallel Session