



Contribution ID: 38

Type: **not specified**

Torsional Newton-Cartan geometry in Lifshitz holography and non-relativistic field theories

Friday, April 17, 2015 10:50 AM (30 minutes)

I will discuss recent progress in understanding Lifshitz holography, including the appearance of torsional Newton-Cartan geometry on the boundary. The coupling of non-relativistic field theories to such a geometry will be considered, along with the corresponding symmetry structure for the case of a flat Newton-Cartan background. We will show that, depending on the details of the action, such actions can have various degrees of global space-time symmetries ranging from Lifshitz to Schroedinger. On the holographic side, we show that the Lifshitz vacuum is the perfect dual of flat Newton-Cartan spacetime, exhibiting the same symmetries.

Presenter: OBERS, Niels

Session Classification: Morning session