JULY 9

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TITLE:

Aspects of holographic axion dynamics

ABSTRACT:

In this talk I will discuss the dynamics of bulk axions, which in holography are dual to the topological density operator. I will focus on phenomenological Einstein-Axion-Dilaton models, and discuss solutions with a non-trivial axion profile in the bulk. In some cases, the axion backreaction on the metric may trigger instabilities. In the second part of the talk I will discuss the holographic two-point function of the topological density operator, I will show how to relate it to the spectral data (masses and decay constant of pseudoscalar bound states) and I will discuss the importance of contact terms.