

Rotational holographic transport in AdS/CMT

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When the AdS/CFT duality is used to describe strongly interacting condensed matter system it is referred to as AdS/CMT. In this talk I will consider rotational holographic transport in strongly coupled 2+1 dimensional systems, from the point of view of 3+1 dimensional gravity in anti de-Sitter background. We consider the moment of inertia as a kind of transport coefficient, identified with the moment of inertia of a charged rotating black hole in AdS₄ background. In the low-temperature region, we find the behaviour of the density with temperature and angular velocity Ω , and find the behaviour of $\frac{1}{T} \frac{\partial I}{\partial \Omega}$ in the presence of charge.

Primary author: MEERT, Pedro (Instituto de Física Teórica - IFT - UNESP)

Presenter: MEERT, Pedro (Instituto de Física Teórica - IFT - UNESP)