Workshop on Holography for Astrophysics and Cosmology

Stockholm, 19 - 22 October 2022

Topics

We gather world experts working on applications of gauge/gravity duality to astrophysical and cosmological phenomena.

We will hear how holography is applied in the context of **neutron stars**, where the density is too large for the use of lattice simulations, but not large enough for perturbation theory to be applicable. We will learn about the production of gravitational waves in the early universe, when a first-order **phase transition** of a strongly coupled extension of the Standard Model would lead to imprints in the **gravitational wave signal**.

This program will consist of several one and a half hour talks by the invited speakers, plus a small number of additional selected contributions from other participants. This format is aimed to foster discussions and fruitful collaborations.

Invited Speakers:

Francesco Bigazzi
Nick Evans
Carlos Hoyos
Thomas Konstandin
David Mateos
Kostas Skenderis
Aleksi Vuorinen
Ivonne Zavala

Organizers:

Antón Faedo
Oscar Henriksson
Matti Järvinen
Ronnie Rodgers
Javier Subils

Place:

Nordita (SU & KTH)
AlbaNova University Center,
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NORDITA
The Nordic Institute for Theoretical Physics

apctp

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