

School on AdS/CMT Correspondence

Instituto de Física Teórica - UNESP, São Paulo, Brasil

March 27 - April 7, 2017



This school will provide students with a panorama of current theoretical problems in condensed matter systems and the tools used to attack them, with a special emphasis on holographic techniques. The first week of the school will contain introductory lectures to GR, AdS/CMT, and effective field theories, setting the foundation for the lectures of the second week on more advanced topics.

Familiarity with quantum field theory will be assumed. Some familiarity with supersymmetry, condensed matter theory and general relativity will be helpful, although an effort will be made to review the necessary material in these areas. *There is no registration fee and limited funds are available for travel and local expenses.*

Organizers:

Sean Hartnoll (Stanford U.), **Horatiu Nastase** (IFT-UNESP), **Diego Trancanelli** (USP)

Lecturers:

First week

Oscar Dias (Southampton U., UK): GR with a view towards AdS/CMT

Sean Hartnoll (Stanford U., USA): Black holes and strange metals

Hong Liu (MIT, USA): Effective field theories for non-equilibrium systems

Second week

Shamit Kachru (Stanford U., USA): Supersymmetry, duality, and metallic criticality

David Tong (U. of Cambridge, UK): QFT dualities for condensed matter physics

Jan Zaanen (Leiden U., NL): QFT challenges in condensed matter physics



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The application deadline is January 13, 2017

The online application form and more information can be found at:

www.ictp-saifr.org/adscmt2017