

# ICTP Workshop on String Theory, Holography, and Black Holes



**23 - 27 October 2023**  
**An ICTP Meeting**  
**Trieste, Italy**

Further information:  
<http://indico.ictp.it/event/10222/>  
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The goal of this meeting is to discuss and consolidate recent advances in the vibrant research fields of string theory, holography, black hole physics, and cosmology. We will address important open problems through an active program of talks by well recognized scientific leaders in the field. In addition, we will organize an open discussion forum for researchers with close ties to the countries from the Balkan region and other parts of Eastern Europe in which we plan to brainstorm about future activities of the existing SEENET-MTP network, and other networking collaborations that will enhance the development of fundamental theoretical physics in these countries.

The workshop will have a series of review talks related to holography, string theory, black holes, as well as their interplay with topics in cosmology and particle physics. The aim will be to provide an overview of the recent developments and open challenges in these fields of fundamental physics while at the same time encouraging the participation of students and researchers with a wide spectrum of scientific interests (such as the ones in the Eastern European region). In addition to the review talks we plan a few shorter research presentations focused on new results and recent developments.

## Topics:

- Black hole microstates in string theory and AdS/CFT
- Precision holography, string theory and supersymmetric localization
- Bounds on effective theories of gravity and interplay with bootstrap ideas in QFT
- Holography for non-AdS space-times
- Advances in strongly coupled QFT

*We also envision ample time for discussion and informal interactions between the participants as well as a gong-show event for junior participants.*

## How to apply:

Online application:  
<http://indico.ictp.it/event/10222/>

Female scientists are encouraged to apply.

## Grants:

A limited number of grants are available to support the attendance of selected participants, with priority given to participants from developing countries. There is no registration fee.

## Directors:

**I. ANTONIADIS**, LPTHE - CNRS - Sorbonne University  
**N. BOBEV**, Institute for Theoretical Physics, KU Leuven  
**G. DJORDJEVIC**, University of Nis  
**M. GUICA**, CEA, Saclay  
**K. PAPADODIMAS**, CERN

## Local Organiser:

**J.E. MIRO**, ICTP

## Speakers:

**D. ANNINOS**, King's College London, UK  
**E.-M. BABALIC**, NIPNE, Romania  
**I. BENA**, IPhT, France  
**N. BILIĆ**, Rudje Bošković Institute, Croatia  
**M. ČUBROVIĆ**, Institute of Physics Belgrade, Serbia  
**M. CVETIČ**, University of Pennsylvania, USA  
**G. DVALI**, LMU, Germany  
**K. HRISTOV**, University of Sofia and INRNE, Bulgaria  
**L. ILIESIU**, Stanford University, USA  
**S. GROZDANOV**, The University of Edinburgh, UK  
**Z. KOMARGODSKI**, Simons Center for Geometry and Physics, USA  
**I. PAPADIMITRIOU**, University of Athens, Greece  
**A. PETKOU**, Aristotle University, Greece  
**S. PUFU**, Princeton University, USA  
**A.-M. RACLARIU**, University of Amsterdam, Netherlands  
**M. TOMASEVIC**, Ecole Polytechnique, France  
**D. VAN DEN BLEEKEN**, Bogaziçi University, Turkey  
**T. VETSOV**, University of Sofia, Bulgaria

## Deadline:

**31 July 2023**



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