



The Abdus Salam
**International Centre
for Theoretical Physics**



Workshop on Approaches to Quantum Gravity in de Sitter space

DESCRIPTION:

The physics of quantum gravity in de Sitter space, namely with positive cosmological constant and therefore relevant for quantum cosmology in the real world, remains to date a rather mysterious subject, despite its significance and despite the tremendous progress made in anti de Sitter space. The very questions one should ask in de Sitter space and the correct framework for quantum gravity are currently debated.

MORE INFORMATION:

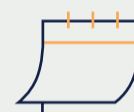
This workshop aims to discuss modern approaches to quantum gravity in de Sitter space, including:

- Canonical quantization
- Inclusion of observers
- Holography
- The double-scaled SYK model
- Low-dimensional solvable models of gravity, such as JT and 3d gravity
- Von Neumann operator algebras

The workshop will have a light but focused schedule with a few talks per day, including both pedagogical and more technical parts, leaving ample time to spontaneous discussions and thus fostering new collaborations.

SPEAKERS:

D. Anninos, King's College London, UK
P. Betzios, Gent University, Belgium
P. Creminelli, ICTP, Italy
D. Galante, King's College London, UK
V. Godet, LPTHE Paris, France
K. Jensen, University of Victoria, Canada
V. Narovlansky, IAS Princeton, USA
A. Speranza, Amsterdam University, Netherlands
E. Urbach, IAS, Princeton, USA
J. Van der Schaar, Amsterdam University, Netherlands
Z. Yang, Tsinghua University, China



22 - 24 October 2025



Trieste, Italy



**Deadline:
14 September 2025**

DIRECTORS:

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O. Mamroud, SISSA, Italy
L. Pando Zayas, University of Michigan, USA
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LOCAL ORGANISER:

B. Acharya, ICTP, Italy

FURTHER INFORMATION:



E-mail: smr4086@ictp.it

Web: <https://indico.ictp.it/event/10851/>

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.

iGAP

