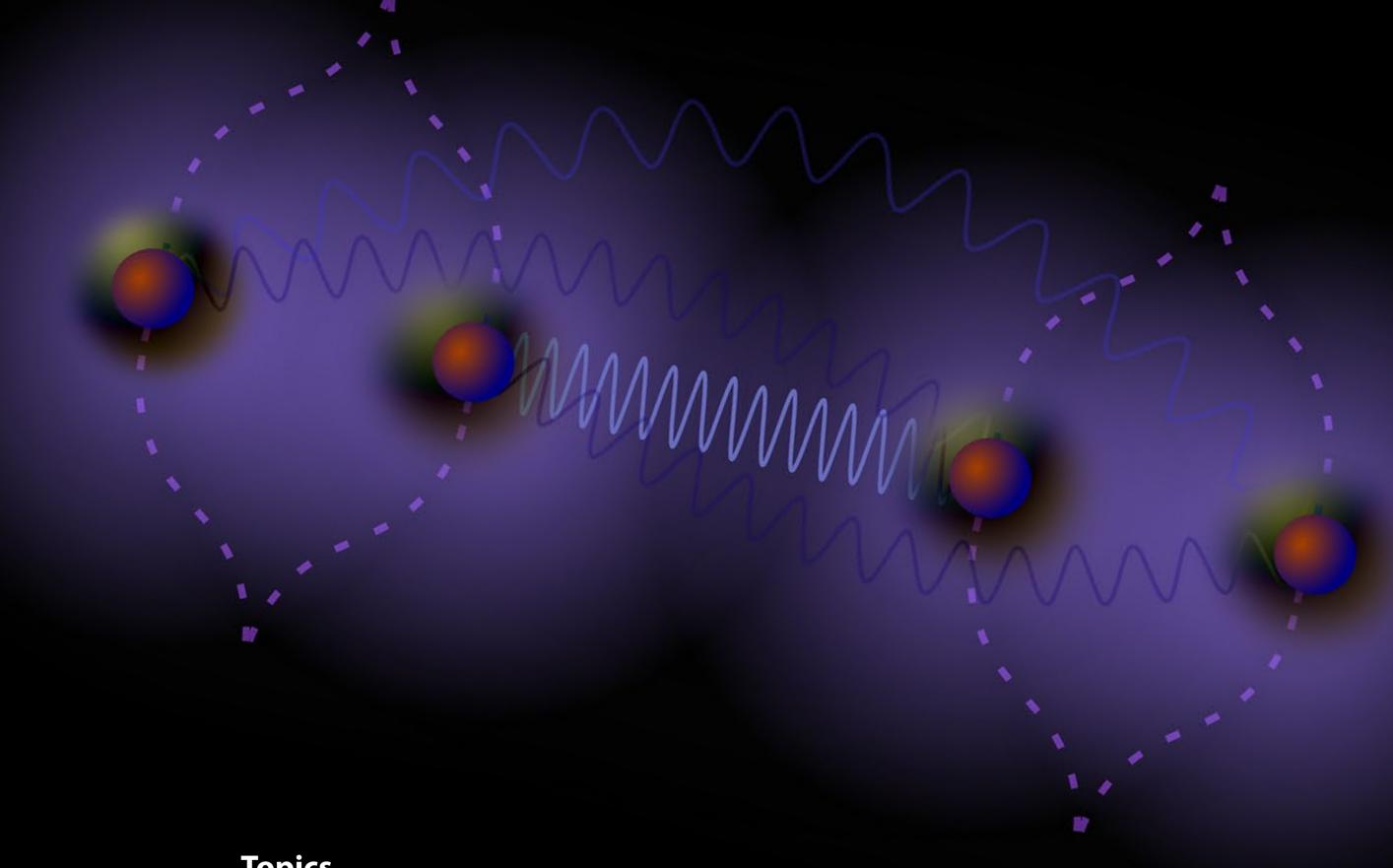


## **Testing Quantum Aspects of Gravity in a Laboratory**

28 March - 1 April 2022, Leiden, the Netherlands

## **Scientific Organizers**

- Anupam Mazumdar, University of Groningen
- Myungshik Kim, Imperial College
- Martin Plenio, Ulm University
- Sougato Bose, University College London



## **Topics**

- **Creating Macroscopic Superposition with** Large Masses and Long Coherence Time Scale
- Ground State Cooling, Mitigating External and Internal Decoherence
- Witnessing Quantum Nature of Gravity
- Mitigating Gravity Gradient and Relative **Acceleration Noise**
- **Constraining Theories of Quantum Gravity**



The Lorentz Center organizes international workshops for researchers in all scientific disciplines. Its aim is to create an atmosphere that fosters collaborative work, discussions and interactions. For registration see: www.lorentzcenter.nl

> A prototype experimental protocol that possibly could provide a way to test the quantum nature of gravity. Image by Marko Toroš. Poster design: SuperNova Studios. NL





