



Department of
Theoretical Physics

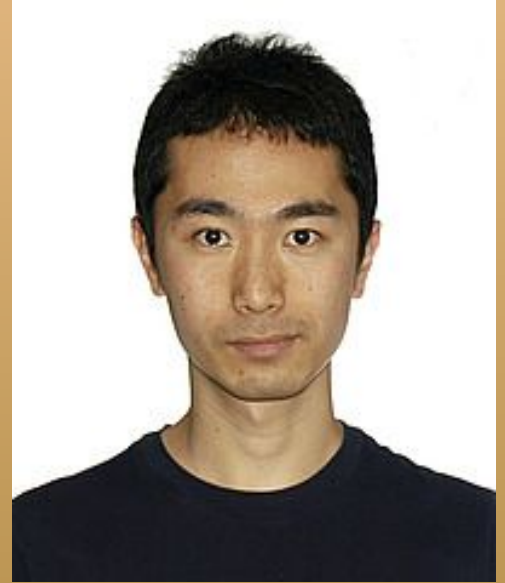
The Quantum Space-Time Seminar

Einstein Gravity from Matrix Integral

Shota Komatsu (CERN)

Date and time: 3:30 PM, 24 Feb 2025
(Mon)
Venue: D 330

The zoom link will be sent separately.



We formulate and test holography between a supersymmetric mass deformation of the Ishibashi-Kawai-Kitazawa-Tsuchiya (IKKT) matrix model and type IIB supergravity backgrounds with exceptional F4 supersymmetry. This is arguably the simplest example of holography in which the dual description contains Einstein gravity. We conjecture a one-to-one correspondence between saddle points of matrix integral and supergravity backgrounds, and test it through the supersymmetric localization of the matrix integral.