



TATA INSTITUTE OF FUNDAMENTAL RESEARCH

ICTS String Seminar

Title: Möbius randomness in the Hartle-Hawking state

Speaker: Victor Godet (Sorbonne University, France)

Date : Wednesday, 06 August 2025

Time : 3:30 PM (IST)

Abstract: I will discuss the canonical quantization of quantum cosmology on toroidal universes. The

wavefunctions are automorphic forms, and the Wheeler-DeWitt equation reduces to a dynamical equation on moduli space, so quantum cosmology can be viewed as "automorphic dynamics". This perspective offers new insights into the Hartle-Hawking state and reveals

intriguing connections to number theory.

Venue: Emmy Noether Seminar Room