

# SEMPARIS – Séminaires en région parisienne

<http://string.lpthe.jussieu.fr/semparis/>

## Seminaire exceptionnel

**Mercredi 19 Juin 2024, 14 :00**

LPTHE, LPTHE library, tower 13-14, room 401

Domaines : hep-th

Titre : *Quantum cosmology as automorphic dynamics*

Orateur : **Victor Godet ( SISSA )**

Résumé : *I will explain how some recent progress on the Wheeler-DeWitt equation makes possible the systematic development of quantum cosmology in the canonical formulation. The cosmological wavefunctions are automorphic forms, and the Wheeler-DeWitt equation reduces to a dynamical equation on moduli space, so that quantum cosmology is equivalent to "automorphic dynamics". I will describe in detail this equivalence in the simple context of pure three-dimensional gravity and comment on how these ideas should generalize to higher dimensions and to our universe.*

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