
Géométrie et dynamique dans les espaces de modules

(Carlos Matheus, Bram Petri et Anton Zorich)

Un **mercredi** par mois de **14h à 15h** à l'**Institut Henri Poincaré**.

Séminaire au mois de Décembre:

- **03/12/2025 - Joe Thomas** (Durham University)

Titre: *Spectral gap for random hyperbolic surfaces*

Résumé: The first non-zero eigenvalue, or spectral gap, of the Laplacian on a closed hyperbolic surface encodes important geometric and dynamical information about a surface. In this talk, I will discuss the typical size of the spectral gap for a random surface with large genus sampled with respect to the Weil-Petersson probability measure. In particular, I will explain joint work with Will Hide and Davide Macera where we obtain a spectral gap with a polynomial error rate. Our result uses a fusion of the polynomial method used in recent breakthroughs on the strong convergence of group representations with the trace formula for hyperbolic surfaces.

Salle Olga Ladyjenskaïa (ex-salle 01)

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