
Géométrie et dynamique dans les espaces de modules

(Giovanni Forni, Carlos Matheus et Anton Zorich)

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

Séminaire au mois de Mai:

- **10/05/2023 - Simion Filip** (University of Chicago)

Titre: *Lyapunov exponents, Anosov representations, and Hodge theory*

Résumé: Lyapunov exponents are in general not easy to compute or even estimate. Nonetheless, using tools from Hodge theory it is possible to give lower bounds, and even formulas, in some cases. I will discuss the proof of one such formula for Lyapunov exponents conjectured by Eskin, Kontsevich, Moller, and Zorich. The proof also gives the Anosov property of associated monodromy representations, or equivalently that of domination for certain cocycles. This in turn has many further geometric consequences including Torelli theorems for certain families of Calabi-Yau manifolds and uniformization results for domains of discontinuity of the associated discrete groups. The necessary context and background will be explained.

Salle 05

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