Géométrie et dynamique dans les espaces de modules

(Carlos Matheus et Anton Zorich)

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

Séminaires au mois de Mai:

- **18/05/2022 - Adrien Sauvaget** (Universit de Cergy Pontoise)

    Titre: *Integrals on DR-cycles and strata of differentials*

    Résumé: I will present how to integrate a single psi-class on generalized DR-cycle and how this produce formulas for integrals of a psi-class on strata of differentials. I will also present spin refinements of these formulas and some applications of these results. Based on j.w. with M. Costantini and J. Schmitt.

    Salle 01

- **25/05/2022 - Jayadev Athreya** (University of Washington)

    Titre: *Counting pairs of saddle connections*

    Résumé: We show that for almost every translation surface the number of pairs of saddle connections with bounded virtual area has asymptotic growth like cR^2 where the constant c depends only on the area and the connected component of the stratum. The proof techniques combine classical results for counting saddle connections with the crucial result that the Siegel-Veech transform is in L^2. In order to capture information about pairs of saddle connections, we consider pairs with bounded virtual area since the set of such pairs can be approximated by a fibered set which is equivariant under geodesic flow. In the case of lattice surfaces, small virtual area is equivalent to counting parallel pairs of saddle connections, which also have a quadratic growth of cR^2 where c depends in this case on the given lattice surface. This is joint work with Samantha Fairchild and Howard Masur.

    Salle 201