

## **Average cusp excursions and random walks on the mapping class group**

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There are several ways to pick a random geodesic in Teichmueller space.

On one hand, one can choose a random direction in the unit (co)tangent bundle and follow the geodesic in that direction: we shall call this the 'Lebesgue measure' or 'visual measure'.

On the other hand, one can do a random walk on the mapping class group, and consider the geodesic connecting the limit point on the boundary to the base point: this is called 'harmonic measure' for the walk.

We shall analyze the dynamics of typical geodesics according to the different measures, and in particular their excursions in the cusp of the quotient moduli space. As a corollary, we shall prove that the two classes of measures are not the same.

The same argument also applies to Fuchsian groups with a cusp, answering a question of Deroin-Kleptsyn-Navas about the Lyapunov exponent of certain circle actions.

This is joint work with V. Gadre and J. Maher.