

## **On the geometry of the flip graph**

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The flip graph of an orientable punctured surface is the graph whose vertices are the ideal triangulations of the surface (up to isotopy) and whose edges correspond to flips. Its combinatorics is crucial in works of Thurston and Penner's decorated Teichmüller theory. In this talk we will explore some geometric properties of this graph, in particular we will see that it provides a coarse model of the mapping class group in which the mapping class groups of some subsurfaces are convex. We will also establish upper and lower bounds on the growth of the diameter of the flip graph modulo the mapping class group, extending a result of Sleator-Tarjan-Thurston. This is a joint work with Hugo Parlier.