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TBA

Mercredi 30 Janvier 2019, 14 :30
IHES, Amphithéâtre Léon Motchane(Séminaire Géométrie et groupes discrets)
Domaines : math

Titre : *Two simultaneous actions of big mapping class groups*

Orateur : **Juliette Bavard (CNRS & Université de Rennes 1)**

Résumé : *Mapping class groups of infinite type surfaces, also called "big" mapping class groups, arise naturally in several dynamical contexts, such as two-dimensional dynamics, one-dimensional complex dynamics, "Artinization" of Thompson groups, etc. In this talk, I will present recent objects and phenomena related to big mapping class groups. In particular, I will define two faithful actions of some big mapping class groups. The first is an action by isometries on a Gromov-hyperbolic graph. The second is an action by homeomorphisms on a circle in which the vertices of the graph naturally embed. I will describe some properties of the objects involved, and give some fruitful relations between the dynamics of the two actions. For example, we will see that loxodromic elements (for the first action) necessarily have rational rotation number (for the second action). If time allows, I will explain how to use these simultaneous actions to construct nontrivial quasimorphisms on subgroups of big mapping class groups. This is joint work with Alden Walker.*