

From **10** JUN. 2024 to **14** JUN. 2024

09h00

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18h00

2024-T2 GROUP ACTIONS AND RIGIDITY: AROUND THE ZIMMER PROGRAM

Actions of large groups, geometric structures, and the Zimmer program

Institut Henri Poincaré 11 rue Pierre et Marie Curie 75005 Paris

INSCRIPTION

Group actions and rigidity: around the Zimmer program

Workshop: Actions of large groups, geometric structures, and the Zimmer program

June 10 to 14, 2024 - IHP, Paris

URL of the page: https://www.ihp.fr/en/events/actions-large-groups-geometric-structures-and-zimmer-program

Analyzing actions of semisimple Lie groups and their lattices has been a main stay of rigidity in dynamics and geometry, and has been studied since Zimmer's call to action in the 1980s. It ties together ergodic theory and smooth dynamics, geometry and Lie theory, via geometric structures, coarse geometry, order structures, measure and cocycle rigidity amongst others. In turn it has motivated major problems in those areas.

The workshop will emphasize advances and connections between smooth dynamics and the Zimmer program over the last decade, such as the work on hyperbolic actions of higher rank abelian groups. It brought about major advances, especially breakthroughs in the Zimmer conjecture about actions in low dimensions, the classification of lattice actions on tori and nilmanifolds in the presence of Anosov elements, and recently on arbitrary manifolds, on conformal Lorentz structures as well as local rigidity results for actions of lattices on boundaries. Crucially it will feature new tools developed.

Many exciting problems remain, especially assuming invariant dynamical or geometric structures for the action, or equivalently studying such structures with lots of symmetry.



INSTITUT HENRI POINCARÉ

Sorbonne Université / CNRS 11 rue Pierre et Marie Curie 75231 Paris Cedex 05

TIMETABLE

- The institute:
- Monday to Friday from 8:30am to 6pm,
- closed on public holidays.

The museum - Maison Poincaré : • Monday, Tuesday, Thursday and Friday from 9:30am to 5:30pm,

- Saturday from 10am to 6pm,
- closed on Wednesday and Sunday.