



Du  
**10**  
JUIN.  
2024  
au  
**14**  
JUIN.  
2024

09h00  
-  
18h00

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

### **Actions of Large Groups, Geometric Structures, and the Zimmer Program**

Institut Henri Poincaré  
Amphithéâtre Hermite / Darboux  
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 de la page : <https://www.ihp.fr/fr/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.

## **Speakers:**

- Miklós Abért (Rényi Institute)
- Uri Bader (Weizmann Institute), to be confirmed
- Aaron Brown (Northwestern University)
- Daniela Damjanovic (KTH)
- Tim De Laat (University of Münster)
- Charles Frances (University of Strasbourg)
- Alex Furman (University of Illinois at Chicago)
- Cyril Houdayer (ENS Paris)
- Mitul Islam (MPI Leipzig)
- Homin Lee (Northwestern University)
- Karin Melnick (University of Luxembourg)
- Vincent Pecastaing (Université Côte d'Azur)
- Federico Rodriguez-Hertz (PennState University)
- Victoria Sadovskaya (PennState University)
- Sven Sandfeldt (KTH)
- Alp Uzman (University of Utah)
- Wouter Van Limbeek (University of Illinois Chicago)
- Kurt Vinhage (University of Utah), to be confirmed
- Amanda Wilkens (University of Texas)
- Abdelghani Zeghib (ENS Lyon)

## **Organising committee:**

- Aaron Brown (Northwestern University)
- David Fisher (Rice University)
- Karin Melnick (University of Luxembourg)
- Vincent Pecastaing (Université Côte d'Azur)

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## **INSTITUT HENRI POINCARÉ - UAR839**

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### **HORAIRES**

L'institut :

- lundi au vendredi de 8h30 à 18h,
- fermé les jours fériés.

Le musée - Maison Poincaré :

- lundi, mardi, jeudi et vendredi de 9h30 à 17h30,
- samedi de 10h à 18h,
- fermé le mercredi et le dimanche.