# Workshops

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## **New Methods for Zimmer's Conjecture**

**JANUARY 22 - 26, 2018** 

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SPEAKER LIST

**SCHEDULE** 

## **Overview**

The purpose of this workshop is to bring focused attention on a recent breakthrough by Brown, Fisher and Hurtado on Zimmer's Conjecture. The conjecture concerns low dimensional actions of lattices in higher rank Lie groups and was made in 1983. Many approaches to the conjecture have been proposed in the intervening years, but progress has been minimal. The recent breakthrough both dramatically improves the state of knowledge and involves many novel ideas and contributions from various areas of mathematics. The main sources of techniques and ideas are:

- (1) rigidity theory,
- (2) smooth dynamics, particularly hyperbolic dynamics,
- (3) homogeneous dynamics, particularly the study of invariant measures,
- (4) operator algebras, particularly Lafforgue's strong property (T).

The workshop aims to explore topics related to these developments, to clear the ground for further progress on related questions, and to facilitate interaction between specialists in these four areas. Morning talks will focus on recent developments directly related to Zimmer's program, afternoon talks will concern related areas of research that may contribute to future developments.

### **ORGANIZING COMMITTEE**

Aaron Brown (University of Chicago)

Mikael De La Salle (École Normale Supérieure de Lyon)

Alex Eskin (University of Chicago, Mathematics)

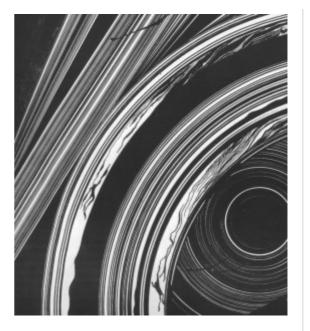
David Fisher (Indiana University)

Sebastian Hurtado Salazar (University of Chicago)

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Ralf Spatzier (University of Michigan)

Amie Wilkinson (University of Chicago)



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