



Recent developments around joint equidistribution in number theory and dynamics

Organizers:

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Venue: Lipschitz lecture hall · Mathematics Center · Endenicher Allee 60 · 53115 Bonn

Joint equidistribution problems naturally arise in number theory, for example when studying properties of arithmetic objects beyond uniform distribution. One prominent example is the mixing conjecture formulated by Michel and Venkatesh in their 2006 ICM address on sparse equidistribution problems. This conjecture has seen much progress recently and there are two (different) conditional proofs available now.

In this Hausdorff School we will explore the interplay between tools from number theory and dynamical systems in the context of the mixing conjecture and beyond. The topics of the mini courses will cover both approaches and are tailored to give the participants a high level introduction to contemporary methods that are involved in the study of joint equidistribution problems.

Lecture series by:

- Menny Aka (ETH Zurich)
- Valentin Blomer (University of Bonn)
- Farrell Brumley (Université Sorbonne Paris Nord)
- Manfred Einsiedler (ETH Zurich)
- Min Lee (University of Bristol)

Additional talks by:

- Claire Burrin (UZH)
- Jasmin Matz (University of Copenhagen)



Call for participation: Participation is free. If you are interested in participating, please fill out the application form: <https://hsm-application.uni-bonn.de/index.php?id=5967>. Successful applicants are selected based on research background, and receive financial support for local expenses. To be considered for this financial support, please submit a CV and research overview. To encourage the participation of researchers facing increased financial burden, such as many researchers from developing countries, a small number of fully funded places are available (including support for travel etc). You can indicate in the application form, for which type of financial support you would like to be considered. Additional participants are welcome to join at their own cost.

The deadline for applications to participate in the school is October 28, 2025 (CET).