RUHR-UNIVERSITÄT BOCHUM

FAKULTÄT FÜR MATHEMATIK



Alberto Abbondandolo, Luca Asselle, Barney Bramham Gerhard Knieper, Stefan Suhr, Kai Zehmisch

Oberseminar Dynamische Systeme

Horospheres, Lipschitz maps, and laminations

Dienstag, 13. Februar 2024 16:15 Uhr – Raum IA 1/53

James Farre (Leipzig)

Abstract:

Every horocycle in a closed hyperbolic surface is dense, and this has been known since the 1940's. We study the behavior of horocycle orbit closures in Z-covers of closed surfaces, and obtain a fairly complete classification of their topology and geometry. The main tool is a solution of a surprisingly delicate geometric optimization problem: finding an optimal Lipschitz map to the circle and the associated lamination of maximal stretch. This is joint work with Yair Minsky and Or Landesberg.