Seminar/Talk

Effective equidistribution of primitive rational points on expanding horospheres

Daniel El-Baz
Max Planck Institute for Mathematics in Bonn

Host: Tim Browning

In a 2016 paper, Manfred Einsiedler, Shahar Mozes, Nimish Shah and Uri Shapira used techniques from homogeneous dynamics to establish the equidistribution of primitive rational points on expanding horospheres in the space of unimodular lattices in at least 3 dimensions.Due to the nature of their proof, relying in particular on Marina Ratner's measure-classification theorem, their result does not come with a quantitative error term. I will discuss a joint work with Bingrong Huang and Min Lee, in which we pursue an analytic number-theoretic approach to give a rate of convergence for a specific horospherical subgroup in any dimension. This extends work of Min Lee and Jens Marklof who dealt with the 3-dimensional case in 2017.

Thursday, March 21, 2019 11:00am - 12:00pm
Mondi Seminar Room 1, Central Building

This invitation is valid as a ticket for the ISTA Shuttle from and to Heiligenstadt Station. Please find a schedule of the ISTA Shuttle on our webpage: https://ista.ac.at/en/campus/how-to-get-here/ The ISTA Shuttle bus is marked ISTA Shuttle (#142) and has the Institute Logo printed on the side.