Seminar/Talk

Large hyperbolic circles

Davide Ravotti

University of Vienna

Host: Kaloshin Group

The projections of large circles in R^2 onto the standard torus T^2 become equidistributed as the radius of the circles goes to infinity. In this talk, we consider the analogous problem in the hyperbolic setting; more precisely, for any compact hyperbolic surface, we provide a precise asymptotic expansion of the equidistribution rate of arbitrary circle arcs of large radius. The method we use is inspired by the works of Ratner on quantitative mixing properties of the geodesic flow and of Burger.Furthermore, we discuss related distributional limit theorems and we give an explicit bound on the error term in the corresponding hyperbolic lattice counting problem (albeit weaker than the known estimates, which have been proved by Selberg and others using number theoretical methods).This is a joint work with E. Corso.

Monday, April 25, 2022 03:30pm - 04:30pm

Mondi Seminar Room 2, 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.

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