Oberseminar Topologie: 09.12.2024

Jeremy K. Miller, Purdue University)

Title: Uniform twisted homological stability and moments of quadratic L-functions

Abstract: Homological stability is a pattern in the homology of families of spaces and groups. Examples of groups with homological stability include braid groups, symmetric groups, general linear groups, and mapping class groups. I will describe applications of this phenomenon to questions in analytic number theory. Specifically, I will report on joint work with Patzt, Petersen, and Randal-Williams on a stability pattern called uniform twisted homological stability and describe applications of these results to a conjecture of Conrey-Farmer-Keating-Rubinstein-Snaith on moments of quadratic L-functions over function fields.