

Title: Motivic Poisson summation over function fields

Abstract:

Abstract: Motivic integration as defined by Kontsevich, and developed by Denef-Loeser, is closely analogous to integration over the locally compact field $F_p((t))$; but it takes values in a Grothendieck ring of algebraic varieties, and applies to any field $k((t))$. Another functional, essentially counting lattice point, admits a similar generalization. I will explain these constructions and the Poisson summation formula connecting them, and discuss some applications. Joint work with David Kazhdan.