

Uri Shapira

Title: Dynamics and continued fractions.

Abstract: We will present some recent results regarding the continued fraction expansion of certain sequences of numbers. In particular, we will focus on the following result (joint with Menny Aka): Let x be a quadratic irrational and p a prime. Then the statistics of the period of the continued fraction expansion of pnx converges to the "right" statistics; i.e. to the one given by the Gauss measure.

Mahan Mj

Title: On Discreteness of Commensurators

Abstract: We begin by showing that commensurators of Zariski dense subgroups of isometry groups of symmetric spaces of non-compact type are discrete provided that the limit set on the Furstenberg boundary is not invariant under the action of a (virtual) simple factor. In particular, for rank one or simple Lie groups, Zariski dense subgroups with non-empty domain of discontinuity have discrete commensurators. This generalizes a Theorem of Greenberg for Kleinian groups. We then prove that for all finitely generated, Zariski dense, infinite covolume discrete subgroups of $\text{Isom}(\mathbb{H}^3)$, commensurators are discrete. Together these prove discreteness of commensurators for all known examples of finitely generated, Zariski dense, infinite covolume discrete subgroups of $\text{Isom}(X)$ for X an irreducible symmetric space of noncompact type.