F. Cellarosi

Title: The Geometry of Trigonometric Sums from a Dynamical Viewpoint

Abstract:

In this talk we investigate the geometry of the set of points generated by quadratic trigonometric sums. We shall see how the approximate multi-scale structure is described dynamically in terms of a Gauss-like map preserving an infinite measure. This map is related to the continued fraction expansion with even partial quotients and has anomalous scaling properties of the corresponding Birkhoff sums.