Title: Probabilistic Effectivity in The Subspace Theorem

Victor Shirandami

Abstract:

In recent work of Koleda, an explicit formula for the limiting distribution of the real algebraic numbers of bounded naive height is obtained, with sharp error term. We shall first discuss how this result may be applied, in conjunction with a result of Barroero and Widmer on the enumeration of lattice points and o-minimal structures, to count real algebraic vectors occurring in families of semi-algebraic sets. This is used to determine the distribution of projective algebraic points via a suitable parametrization of projective space, which shall bring us towards recent work, in collaboration with Faustin Adiceam, on how one may analyse the Schmidt Subspace Theorem from the probabilistic perspective.