

Intrinsic Diophantine approximation on quadrics via homogeneous dynamics

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The goal of the talk is to quantify the density of rational points on quadric hypersurfaces using a connection between the distribution of rational points on those manifolds and dynamics on homogeneous spaces. This improves on recent results of Ghosh, Gorodnik and Nevo. Most of the talk will be about spheres; no background in dynamics or number theory is needed. Joint work with Lior Fishman, Keith Merrill and David Simmons.