Speaker: Dubi Kelmer

Title: Counting and distribution of rational points on the sphere

Abstract: In this talk I will describe some new and old results regarding the distribution of rational points on the unit n-dimensional sphere. I will discuss effective counting problems on counting rational points with bounded denominators that fall in a fixed, or shrinking target set. These problems can be studied using tools from homogenous dynamics, modular forms, and moments of incomplete Eisenstein series.