1118-37-227 Kathryn Dabbs* (kdabbs@math.utexas.edu), Michael Kelly and Han Li. Effective

equidistrubution of translates of maximal horospherical measures in the space of lattices.

Recently Mohammadi and Salehi-Golsefidy gave necessary and sufficient conditions under which certain translates of homogeneous measures converge, and they determined the limiting measures in the cases of convergence. The class of measures they considered includes the maximal horospherical measures. In this paper we prove the corresponding effective equidistribution results in the space of unimodular lattices, $SL_n(\mathbb{R})/SL_n(\mathbb{Z})$. We also prove the corresponding results for probability measures with absolutely continuous densities in rank two and three. Then we address the problem of determining the error terms in two counting problems also considered by Mohammadi and Salehi-Golsefidy. (Received February 01, 2016)