

FOURIER RESTRICTION TO POLYNOMIAL CURVES

JIM WRIGHT

(University of Edinburgh)

Recently there has been considerable attention given to euclidean harmonic analysis problems (e.g., fourier restriction and smoothing estimates for generalised Radon transforms) where the underlying surface measure is replaced by the so-called affine invariant surface measure, making the problem affine invariant as well as the operators invariant under reparametrisation of the surface. The affine invariant measure dampens curvature degeneracies of the surface and one aim is then to obtain universal bounds over a large class of surfaces. We will investigate this with respect to the problem of Fourier restriction to general polynomial curves.