

1143-22-502      **Jeffrey Adams\*** (jda@math.umd.edu). *Calculating the Hodge filtration*. Preliminary report.

Suppose  $\pi$  is an irreducible representation of a real reductive group. The Hodge filtration is a canonical,  $K$ -invariant filtration of  $\pi$ , defined geometrically. On the other hand  $\pi$  admits a canonical Hermitian form, known as the c-invariant form, which plays a crucial role in computing the unitary dual.

According to a conjecture of Wilfried Schmid and Kari Vilonen, there is a close relationship between the Hodge filtration and the c-invariant form. In this talk I will describe an algorithm to compute the Hodge filtration, which is a generalization of an algorithm to compute the c-form. (Received August 21, 2018)