



Algebra and Number Theory Seminar

Title: Constant rank subspaces of matrices 2

Speaker: Rod Gow

Date: Mon 22nd September 2008 at 4:00PM

Location: Mathematical Sciences Seminar Room

Abstract: We will use octonions to construct a 7-dimensional constant rank 6 subspace of real 7×7 skew-symmetric matrices which is invariant under the compact Lie group $G_2(R)$. The action of the group is transitive on the one-dimensional subspaces of this space, implying that the space is irreducible.