

**Meeting:** 1001, Evanston, Illinois, SS 18A, Special Session on Applications of Motives

1001-14-123      **Patrick Brosnan\*** (pbrosnan@math.ucla.edu). *Motivic decomposition of projective homogeneous varieties and the method of Bialynicki-Birula.* Preliminary report.

Let  $X$  be a projective homogeneous variety for an isotropic reductive group  $G$  over a field  $k$ . Using the method of Bialynicki-Birula, we prove a rather explicit decomposition theorem for the motive  $M(X)$  of  $X$  with integral coefficients. This generalizes a result of M. Rost on the motives of quadratic forms and more recent work of V. Chernousov, S. Gille and A. Merkurjev on the motives of isotropic projective homogeneous varieties. In particular, it answers a question of N. Karpenko concerning such motives. (Received August 19, 2004)