

**Meeting:** 1000, Albuquerque, New Mexico, SS 3A, Special Session on Algebraic Geometry

1000-14-144      **Mohan Kumar Neithalath\*** (kumar@wustl.edu), Campus Box 1146, Washington University in St. Louis, One Brookings Drive, St. Louis, MO 63130. *Remarks on vector bundles on Projective spaces.*

We prove that a vector bundle  $E$  on a projective space of dimension at least two is decomposable if and only if  $H^1(\mathcal{E}ndE(-k)) = 0$  for all  $k > 0$ . This generalises a criterion of G. Kempf. We also give a similar criterion for a vector bundle to be homogeneous. (Received August 23, 2004)