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

1000-14-162A. Prabhakar Rao* (rao@arch.umsl.edu), Dept of Mathematics, University of Missouri
St.Louis, St. Louis, MO 63121. ACM Bundles on Hypersurfaces. Preliminary report.

ACM bundles on hypersurfaces in projective space are bundles which have no intermediate cohomologies. Such bundles of rank two are obtained from skew-symmetric matrices of homogeneous polynomials on the projective space. We survey some of the results about these bundles, and we relate some partial results that indicate that nontrivial bundles of this type should not exist on general hypersurfaces in projective four space. (Received August 24, 2004)