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

1000-14-104 **David R. Finston\*** (dfinston@nmsu.edu), Department of Mathematical Sciences, New Mexico State University, Las Cruces, NM 88003, and James K. Deveney (jdeveney@mail2.vcu.edu), Department of Mathematics and Statistics, Virginia Commonwealth University, Richmond, VA 23284. Proper Actions of the Additive Group. Preliminary report.

It is known that proper algebraic actions of the additive group on complex affine space need not be locally trivial. Criteria for local triviality have been developed in joint work of the authors with P. Mehta and P. van Rosasum. For instance, finite generation and regularity of the ring of invariants is a sufficient condition. Extensions of this result and the important special case of triangular actions on complex four space will be discussed. (Received August 19, 2004)