

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

1000-14-198 **Alastair Craw, Diane Maclagan*** (maclagan@math.rutgers.edu) and **Rekha R. Thomas.**

Polyhedral geometry of representations of the McKay quiver.

We give an explicit description of moduli of representations of the McKay quiver for finite abelian groups. These moduli spaces are GIT quotients with a distinguished component which is a toric variety. We give a concrete description of this component, using polyhedral and Groebner language. (Received August 24, 2004)