1106-VJ-1643 **Stephen M. Adams*** (sa3236@cabrini.edu), Cabrini College, 610 King of Prussia Road, Radnor, PA 19087. *Cross Section Lattices of $\mathcal{J}$-irreducible Reductive Monoids as a Product of Chains.* Preliminary report.

Let M be an irreducible algebraic monoid with reductive unit group G. There exists an idempotent cross section Λ of $G \times G$ orbits that forms a lattice under the partial order $e \leq f \iff GeG \subseteq \overline{GfG}$, where the closure is in the Zariski topology. This cross section lattice is important in describing the structure of reductive monoids. M is said to be $\mathcal{J}$-irreducible when Λ has a unique minimal nonzero element.

In this talk we will describe when the cross section lattice of a $\mathcal{J}$-irreducible monoid will be distributive. We will then describe when this distributive lattice can be written as a product of chains. (Received September 14, 2014)