Algebra and Geometry Seminar

Speaker: Charles Paquette (Royal Military College & Queen's University)

Title: Simple representations over free products of semi-simple algebras via quivers

Abstract: This is a report on joint work with Andrew Buchanan, Ivan Dimitrov, Olivia Grace, David Wehlau and Tianyuan Xu. We consider a free product A of semi-simple $\mathbb{K}$-algebras over an algebraically closed field and show how representation theory of a suitable finite acyclic quiver Q can be used to understand the representation theory of A. In particular, we show that the simple A-modules correspond to stable representations of Q for some stability parameter. We apply this to the representation theory of free products of finite groups.