GRAHAM LEUSCHKE, Syracuse University

Non-commutative desingularizations of determinantal varieties

This talk is about joint work with R.-O. Buchweitz and M. Van den Bergh. We construct non-commutative resolutions of determinantal varieties defined by arbitrary-size minors of a generic matrix. The resolution can be presented as the path algebra of a quiver with relations, where the underlying graph of the quiver is an ideal in the Young lattice of partitions.