1092-13-128 **Ragnar-Olaf Buchweitz**, **Graham Leuschke*** (gjleusch@math.syr.edu) and **Michel Van den Bergh**. *Pieri maps and the bound Young quiver.*

The irreducible polynomial representations $L^\alpha V$ of $\mathrm{GL}(V)$ are well-known to be indexed by partitions α with at most $\dim(V)$ parts. The Pieri rules for decomposing the tensor products $V \otimes L^\alpha V$ and $V^* \otimes L^\alpha V$ into irreducibles defines, up to some choices of scalars, a system of split inclusions between those representations related by adding or removing a single box from the partitions. The scalars cannot be chosen with complete freedom; in particular there are some unavoidable non-commutativity relations among the Pieri maps. We build a quiver out of the data of partitions, maps, and relations, and show that the path algebra of this bound quiver is a non-commutative desingularization of a generic determinantal ring. (Received August 06, 2013)