Title: Littlewood-Richardson coefficients: an overview

Abstract: The Littlewood-Richardson coefficients are among the most important numbers in algebraic combinatorics. They are the structure constants for the ring of symmetric functions and encode decomposition rules for representations of the symmetric and General Linear groups. I will describe several combinatorial ways of computing these coefficients. Variations on the theme will lead to interesting generalizations such as the skew-flagged and w-refined versions. I will describe saturation and semigroup results that hold in these settings, along with some open conjectures.