1167-16-214        **Brett Collins\*** (`bac043@bucknell.edu`). *Generalized Littlewood-Richardson coefficients for branching rules of classical groups.*

Horn's Conjecture and the Saturation Conjecture of Littlewood-Richardson coefficients are two problems in 20th century mathematics that have a rich history and which can be solved with quiver invariant theory. In this talk, I'll discuss how similar structure coefficients arising from the branching rules of the diagonal embedding $\mathrm{GL}(n) \times \mathrm{GL}(n)$ and the direct sum embedding $\mathrm{GL}(n + n')$ can be viewed as the dimensions of certain weight spaces of quiver semi-invariants and how their saturation helps us to understand their combinatorial properties. Time permitting, I'll discuss recent progress in how symmetric quivers can be used to similarly investigate certain branching rules of the symplectic and orthogonal groups. (Received March 07, 2021)