

**Anna Haensch** (Wesleyan University). “The Representation Problem for Inhomogeneous Quadratic Polynomials.”

*Abstract:* The representation problem for quadratic polynomials, asks for an effective determination of all integers represented by a given quadratic polynomial. This problem has a rich history and has been widely studied. One related problem asks, can we determine when a quadratic polynomial represents all natural numbers? What about all but finitely many? Polynomials satisfying such conditions are called universal, or almost universal, respectively. Imposing some mild arithmetic conditions, I will give a complete characterization of inhomogeneous quadratic polynomials, which are almost universal. This generalizes the recent work by Chan and Oh on almost universal ternary sums of triangular numbers.