1125-11-2013 James Ricci* (jricci@daemen.edu), 4380 Main Street, Department of Mathematics and Computer Sci., Amherst, NY 14226. Finiteness results for regular binary quadratic polynomials. Preliminary report.
An integral quadratic polynomial is called regular if it represents every integer that is represented by the polynomial itself over the reals and over the $p$-adic integers for every prime $p$. In a joint paper with W.K. Chan in 2015, we show that there are only finitely many equivalence classes of positive primitive ternary regular complete quadratic polynomials with conductor $c$. This generalizes analogous finiteness results for positive definite regular ternary quadratic forms by Watson in 1954 and for ternary triangular forms by Chan and Oh in 2013. In this talk we will look at similar results for binary regular quadratic polynomials. (Received September 19, 2016)

