1096-VO-2367 **James L Ricci*** (jamricci@gmail.com), Department of Mathematics and Comp. Sci., Wesleyan University Science Tower 655, 265 Church Street, Middletown, CT 06459. *Finiteness Results for Regular Ternary Quadratic Polynomials.* Preliminary report.

Any quadratic polynomial can be written in the form $f(x) = Q(x) + l(x) + c$ where Q is a quadratic form, l is a linear form, and c is a constant; it is called regular if it represents all the integers which are represented locally by the polynomial itself over $\mathbb{Z}_p$ for all primes p. Given a positive definite Q, we can associate certain types of quadratic polynomials to a coset of a $\mathbb{Z}$-lattice in order to view quadratic polynomials through the geometric perspective of quadratic spaces and lattices. In this talk we will define an invariant called the conductor, a notion of a semi-equivalence class of a regular quadratic polynomial and present our result: Given a fixed conductor, there are only finitely many semi-equivalence classes of primitive regular integral quadratic polynomials in three variables. (Received September 17, 2013)