1070-11-84 Helen G. Grundman\* (grundman@brynmawr.edu), 101 N. Merion Ave., Bryn Mawr, PA 19010, and Daniel P. Wisniewski (Daniel.Wisniewski@desales.edu), 2755 Station Avenue, Center Valley, PA 18034. On Tetranomial Thue Equations. Preliminary report.

Let  $F(x,y) = ax^n + rx^m y^{n-m} - sx^k y^{n-k} + ty^n$  be an irreducible polynomial with integer coefficients and exactly four non-zero terms, n > m > k > 0. We consider the problem of bounding the number of integer solutions to the equation |F(x,y)| = 1, with the added assumptions that  $\left|\frac{rm}{an}\right| < .99$  and  $\left|\frac{s(n-k)}{tn}\right| < .99$ .

In this talk, I will discuss our methods, adapted from those of Emery Thomas for the cubic case, and present our explicit numerical bounds on the number of solutions. (Received January 30, 2011)