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 $F(x, y)=a x^{n}+r x^{m} y^{n-m}-s x^{k} y^{n-k}+t y^{n}$ 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 $\left|\frac{r m}{a n}\right|<.99$ and $\left|\frac{s(n-k)}{t n}\right|<.99$.

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)

