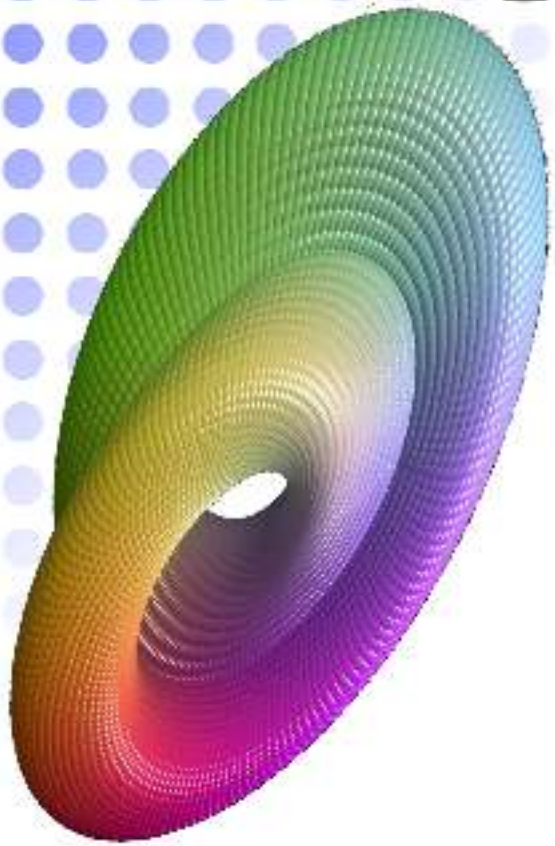
Michigan Math Club

Thursday at 4pm in the Commons

Free Pizza and Pop



Square Values of Polynomials

Michael Zieve

Abstract for 29 September 2011

There are infinitely many rational numbers x for which $x^3 - 2x$ is the square of a rational number. The same cannot be said for $x^3 + 2x$. I will discuss which polynomials share this property of $x^3 - 2x$, and how this connects with important theorems and conjectures in number theory and algebraic geometry.