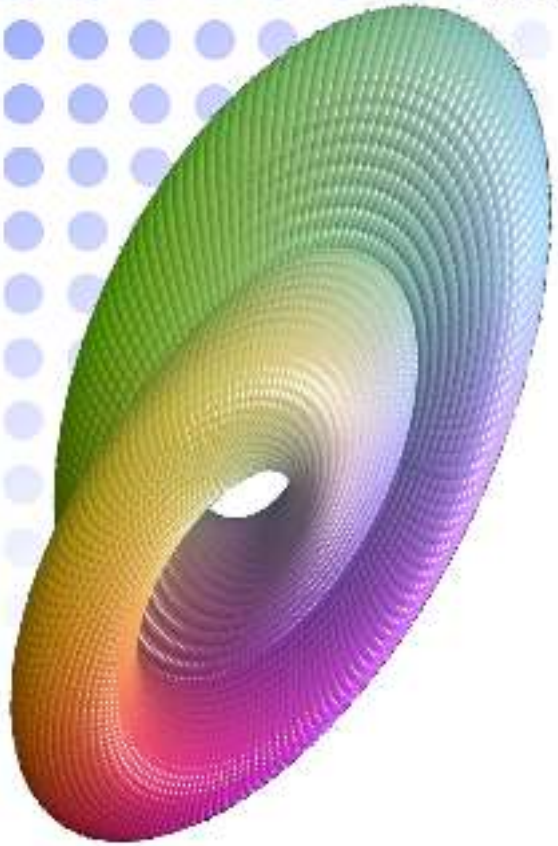
Michigan Math Club

Thursday at 4pm in the Nesbitt Room

Free Pizza and Pop



Hilbert's Tenth Problem

Andrew Snowden

Abstract for 14 January 2016

In 1900, David Hilbert posed the following problem (number 10 on his famous list of 23 problems): devise an algorithm that decides if a polynomial equation f(x_1, ..., x_n) = 0 admits a solution in the integers. Surprisingly, building on the efforts of several people, it was proven by Yuri Matiyasevich in 1970 that no such algorithm exists! I will present the main ideas of the proof.