Michigan Math Club

Thursday at 4pm in the Nesbitt Room
Free Pizza and Pop

Arithmetic of curves

Andrew Snowden

Abstract for 23 January

Arithmetic geometry is the study of rational solutions to systems of polynomial equations, and lies at the intersection of number theory and geometry. The simplest case is that of curves, when there is one equation in two variables, and will be the focus of the talk. Many deep theorems have been proven (e.g., those of Faltings, Mazur, Mordell, and Wiles), but there are many basic questions that are still open. I will attempt to give an overview of the subject.