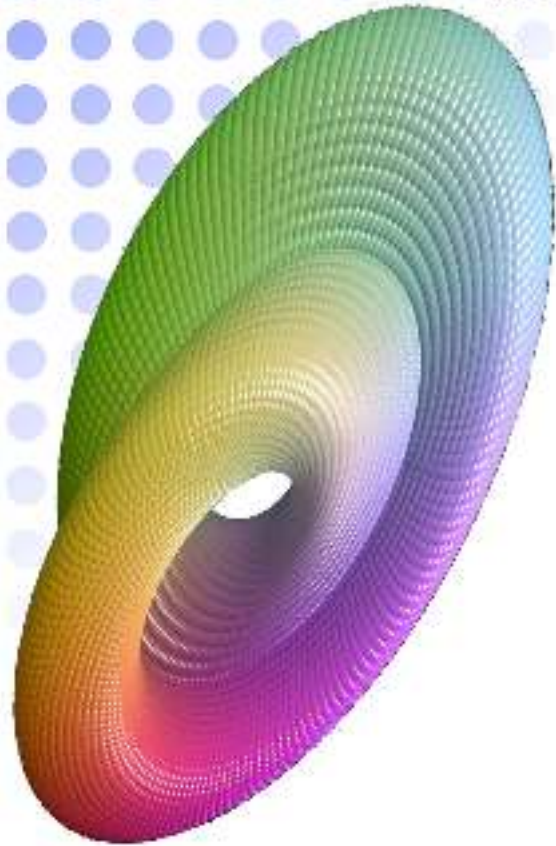# Michigan Math Club

Thursday at 4pm in East Hall 2851
(Nesbitt Room) Free Pizza and Pop

Arrow's Impossibility Theorem

Alex Mueller

Abstract for 19 Jan. 2012

In 1951 Kenneth Arrow proved it is impossible to construct a voting system that simultaneously agrees with all our different notions of "fairness." I will discuss his impossibility theorem, outline its proof, and give some historical examples of the theorem in action. I will also discuss a way out: for an infinite number of votes an ultrafilter can overcome Arrow's theorem.