Michigan Math Club

Thursday at 4pm in the Commons
Free Pizza and Pop

Intransitivity in Game Theory

Jeremy West

Abstract for 17 March 2011

When ranking objects, we often expect the ranking to be transitive. That is, if A is better than B and B is better than C, then we might expect that A is better than C. Unfortunately, this is not always the case. There are many examples of intransitivity in game theory and I will present two of them in this talk: the simple dice game Knock 'em Down and the well-known example of the Nontransitive Dice. Finally, I will discuss the similarly motivated theorem of Arrow on the impossibility of a rational voting system.