

Michigan Math Club

Thursday at 4pm in the Commons

Free Pizza and Pop

Impartial Games

Andrew Snowden

Abstract for 9 October

An impartial game is a two-player game in which both players have the same legal moves in any position. Most games that people play in real life, such as chess, go, or Battleship, are not impartial.

Nonetheless, there is an enormous number of very interesting impartial games (Nim, Kayles, Dawson's chess, ...). The crowning achievement of this flavor of game theory is Sprague-Grundy theory, which allows one to completely solve many of these games. However, it does not apply to the so-called misère games, and these are still a complete mystery. I will explain all of this, and we will get to play some games!

