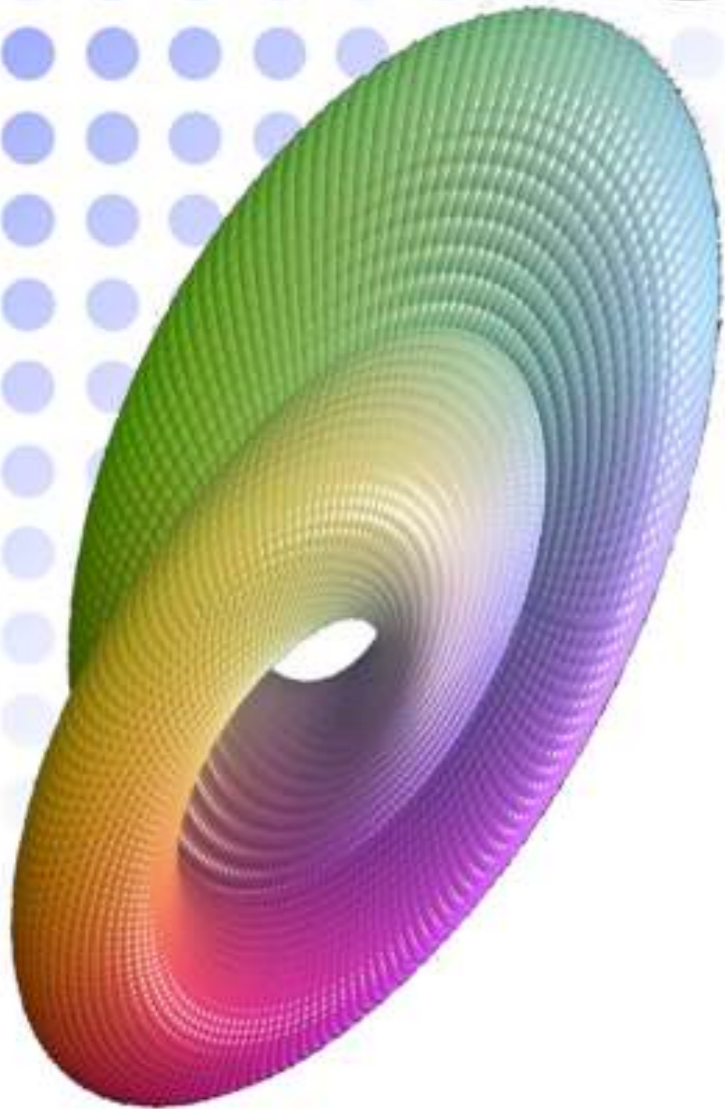


Michigan Math Club

Thursday at 4pm in the Nesbitt Room

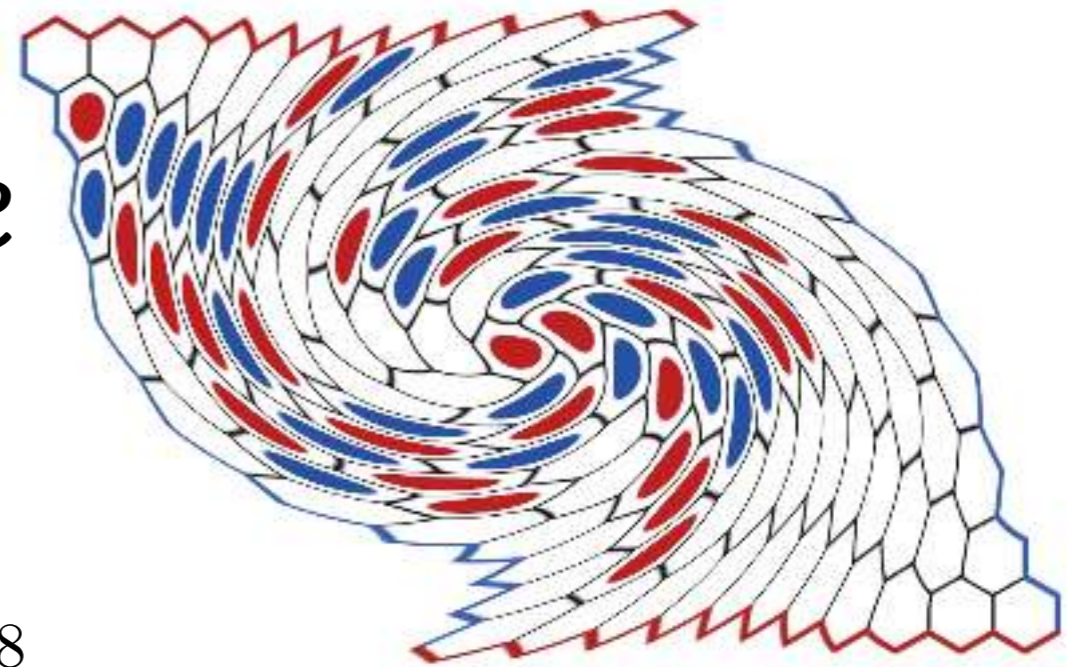
Free Pizza and Pop



Proof by board game

**Katie Mann
Brown University**

Abstract for 01 November 2018



The Brouwer fixed point theorem is about homeomorphisms of the disc, saying (basically) that if you stir a bowl of soup, some molecule in the soup always ends up in exactly the same place it started. It's a deep result in topology and has many surprising consequences elsewhere in math.

I'll explain and prove this theorem, but not in the way Brouwer intended! Instead, you'll learn how to play the 2-player board game Hex and how the game gives you a rigorous proof of Brouwer's theorem.