

Thursday, April 7, 2016

4:30–5:20 p.m.

SAS 2102

The Mathematics of Voting

Molly Fenn

We've all seen how complicated **elections** can be. Changing the rules for how we vote and how we determine a winner can change the outcome of an election. In this talk, we will look at several **different methods for voting**, all of which seem completely reasonable, and we will demonstrate the completely **unreasonable outcomes** these methods lead to. We will look at some desirable properties any voting system should have, and then prove a simplified version of **Arrow's Impossibility Theorem** which states that no voting system can satisfy all of these desirable properties. (Uh oh.) This talk will be accessible to all undergraduates.

NCSU Society for Undergraduate Mathematics

SUM Series

Mathematics and pizza!