

# MATH and PIZZA

## **How Your Vote Is Counted Matters More Than How You Vote: A Geometric Approach To Voting Theory**

Ben Braun

Department of Mathematics  
University of Kentucky

It's an election year! The big question on everyone's mind is, "does my vote matter?" We will look at voting theory from a geometric perspective in this talk. In particular, we will see how, in an election with three candidates and eleven voters, by changing the vote counting procedure (but not changing the voter preferences), any of the candidates can win! More generally, we will discuss some of the history of voting theory with the work of Borda and Condorcet in France in the late 1700's and we will explain using simple geometry how some crazy voting paradoxes can arise.

4 pm, Wednesday  
24 September 2008  
CB 204  
UK Math Club

<http://www.math.uky.edu/~mathclub>

All students with an interest in mathematics are welcome to attend.