Abstract
Running an election seems like it should be simple - whoever gets the most votes wins. But accounting for the voters' full range of preferences can be surprisingly difficult, or, by some measures, impossible. We will discuss some of the issues surrounding voting procedures and discuss some ways to analyze these procedures. We will examine some questions surrounding procedures for electing several members of a committee. (The talk will assume only some basic linear algebra - the notion of a linear transformation and subspaces of a vector space.)