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*Selecting Diverse Committees.*

Selecting a committee can become complex when the voters have preferences for the entire composition of the committee which cannot be reduced to candidate-by-candidate preferences. For example, the gender or ethnic diversity of the committee may be extremely important to the electorate, and different voters may place priority on different criteria. If the voters express their preferences on a candidate-by-candidate basis, it is not only possible to select a homogeneous committee that is unacceptable to every voter, but this has happened in practice. One option is to require the voters to provide a complete ranking of all possible committees and apply a standard voting procedure to this profile, but this is often infeasible since the number of possible committees can be extremely large. We first consider selecting a committee of size three where there are two candidates for each of the three positions on the committee and the electorate agree on a common diversity criterion. We describe a simple voting method that will never select a universally unacceptable committee in this case. We provide a geometric framework to explore the implications of extending to more candidates and to multiple diversity criteria among the voters. (Received September 22, 2009)