

1106-AD-2185 **Tomas J. McIntee***, tomas.mcintee@gmail.com, and **Don Saari**. *Finding Geometric Answers to Voting Problems*.

The relationship between pairwise voting criteria and positional voting rules, including but not limited to the Borda count, have been of substantial interest since the eighteenth century. Pairwise voting criteria of historic interest include the Condorcet winner and Condorcet loser criteria, along with the Condorcet paradox. This presentation will discuss some recently developed geometric techniques for discerning the complete relationships between pairwise voting criteria and the outcomes of positional voting rules for $n = 3$ candidates. In addition to providing entirely new answers to centuries-old concerns, these techniques are easily understood and applied. (Received September 16, 2014)