1046-91-1603   **Gregory Minton*** (`gminton@hmc.edu`). *Studying Voting Paradoxes Through Representation Theory.*

Voting theory is plagued with paradoxes: with a fixed set of voter preferences, the winner of an election may change if the voting system in use changes. Certain types of voting systems, the so-called positional maps, have symmetries that make them easily understood through the representation theory of the symmetric group. In this talk, I will discuss the paradoxes that arise with positional voting maps when candidates drop out of an election. This was joint work with the Applied Representation Theory group at Harvey Mudd College. (Received September 16, 2008)