1077-G1-2049 **T. S. Michael*** (tsm@usna.edu). *Paradoxes in Colley Matrix Sports Rankings.*

The Colley method ranks sports teams by solving a certain linear system $Cx = b$, where the matrix C encodes the games played between pairs of teams, and the vector b summarizes the outcomes of the games. The i-th component of the vector x is the rating of the i-th team. The Colley method is well motivated and one of the computer rankings used in the Bowl Championship Series (BCS) to select collegiate football teams for post-season bowl games. We construct examples where the Colley method behaves paradoxically. This is joint work with Thomas Quint. (Received September 21, 2011)