Chuck Wessell* (cwessell@gettysburg.edu). Ranking Individual Sports: Lessons from Tennis and Golf.

The linear algebra based methods developed for sports ranking are primarily used for ranking college football and basketball teams. Besides both being team sports, NCAA football and basketball are characterized by schedules where each team plays approximately the same number of games and where each team plays only a small fraction of all the teams in their NCAA Division.

This talk will address the applicability of linear algebra based ranking methods to two individual sports. Will these methods produce sensible rankings for professional tennis, where the best players play far more matches than an average ones, or for professional golf, where each round can be viewed as a head-to-head match-up between each pair of players in the tournament? If not, can some simple modifications be made to improve ranking methods for sports other than college football and basketball? (Received September 04, 2012)