1145-B5-2687 **Stephen Devlin** and **Molly Creagar*** (`mcreagar@dons.usfca.edu`), Department of Mathematics and Statistics, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117, and **Thomas Treloar** and **Sam Cassels**. *An iterative Markov ranking method.*

Ranking and rating methods for teams using paired comparisons generally fall into two categories. Global, or accumulative, methods compile season results into a matrix and solve a linear system to find ratings and rankings, while iterative, or adjustive, methods update ratings and rankings after each competition and evolve over the course of the season. Examples of the former include the many variations of the Markov method (e.g., PageRank) while the latter include Elo's method, commonly used in the rating of chess players. In this paper, we introduce an iterative version of the Markov method, and show that it converges, in a natural sense, to the global Markov method. Moreover, we show that there is a close connection between the iterative Markov method, Elo's method, and the Bradley-Terry model for paired comparisons. We illustrate concepts with empirical examples from real and simulated data sets. (Received September 25, 2018)