

1125-I5-969

Megan Olivia Powell* (mpowell@stfrancis.edu), University of St. Francis, 500 Wilcox St., Joliet, IL 60435. *Markov Chain Models of NFL Overtime Rules*.

In recent years, the National Football League's (NFL) rules for overtime have changed from a sudden death format to a modified sudden death format. Now, the team receiving the ball first during overtime can only win on their first possession with a touchdown. In this talk, I will discuss a Markov Chain model of the two overtime formats and use NFL overtime data to analyze the fairness of the two models. The modified sudden death is still criticized, especially for playoff games, so I will propose a new model where each team is allowed at least one possession of the ball. (Received September 13, 2016)