STAT 547C Project Proposal

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In many sports such as soccer, and ice hockey, you can think of the number of goals scored in a game as a Poisson random variable. For this project, we plan to analyze all of the scoring in the 2014/15 season of the Barclay’s Premier League in England in order to see the intensity of goal scoring, and then we will try to model this as a Cox process using either a Bayesian model or maximum likelihood.

A possible extension of this project would be to observe the effect of conditioning on whether a team is up/down by x number of goals at halftime, and how this affects the scoring intensity for the second half of the match.

