

**Meeting:** 1003, Atlanta, Georgia, MAA CP D1, MAA Session on Mathematics and Sports, I

1003-D1-788      **Joseph Evan\*** (jmevan@kings.edu), Department of Mathematics, King's College, Wilkes-Barre, PA 18711, and **Daniel Ghezzi** (djghezzi@kings.edu), Department of Mathematics, King's College, Wilkes-Barre, PA 18711. *Why so many World Series Go Seven Games.*

In the past, several people have identified an interesting fact about World Series play in major league baseball. If you assume that in each World Series, the probability of each team winning each game is  $1/2$ , and each game is an independent event, then 31.25 % of all World Series should last seven games. It is then somewhat remarkable that since 1945, 27, or 47%, of the 58 World Series played have lasted seven games.

Of course, given the complex factors that go into determining the winner of a World Series game, it seems very reasonable to conclude that this simple probabilistic model is just not valid. But this gives rise to a very interesting question. Is there any simple, reasonable, probabilistic model that could correctly predict the likelihood that a World Series will last a given number of games? This is the fundamental question that we will attack in this talk. (Received September 29, 2004)