1046-N1-1731   **Eric W Kuennen*** (`kuennene@uwosh.edu`), Mathematics Department, University of Wisconsin Oshkosh, 800 Algoma Blvd., Oshkosh, WI 54901. *A Markov Chain Model of Baseball.*

This session will present a Markov Chain Model for Baseball that has been used as a student project in an undergraduate stochastic modeling course. We will introduce the idea of the Markov Chain, and discuss its applicability to the game of baseball. A model for baseball will be developed, and recent Major League Baseball statistics will be used to define transition probabilities. The applicability to the model will be illustrated by conducting both theoretical and computer-simulation analyses to investigate strategic questions, such as: in which situations is bunting most advantageous, and what success rate should a base runner have to make attempting a steal worth while. (Received September 16, 2008)

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