



UNIVERSITY OF SYDNEY

SCHOOL OF MATHEMATICS AND STATISTICS

Statistics Seminar

Friday, 24 August 2007, 2.00pm

Carslaw 373

## **Games, Sports, Statistics and Probability**

**Alan Huang**

### **Abstract**

The time taken just to roll dice consumes much of the total time taken to play a game of "Snakes and Ladders". We will show how simple probability can be used to (fairly) determine the outcome of a game in a single instance, thus not only saving a lot of time but also ruining the anticipation and excitement of any game involving dice. After that, we will show how Markov Chains can be found in card shuffling and introduce some useful tools to analyse randomness in a deck of cards. Finally, time permitting, we will move on to sports and see how statistical models can be formulated to predict whether the team you love will come last or second last next year\*.

This talk will be aimed at honours and advanced undergraduate students. It will not contain any new research.

\*assuming you are a Penrith or Newcastle fan

Enquiries about the Statistics Seminar should be directed to  
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