

Keith Wilson '04
professional poker player



An Introduction to Mathematical Poker



ABSTRACT

The use of mathematics to inform poker strategy goes well beyond calculating probabilities and pot odds. In the past decade, mathematical methods have revolutionized the game. In this talk, I will briefly discuss some basic mathematical principles of poker, such as pot odds. I will then describe how more in-depth mathematical analysis can be useful to poker players. I will focus mainly on using game theory to solve toy games based on both the canonical $[0,1]$ game and a game using a deck with just three cards, AKQ. These games can provide useful insights into proper poker strategy. Prior knowledge of poker rules is not required, as we will be looking only at abstract examples.

TUESDAY, FEBRUARY 14, 2012 • TEA AT 4:15, TALK AT 4:30 • SCIENCE CENTER 199