

The Math Colloquium Department of Mathematics San José State University



## Ron Davis SJSU College of Business

Implications of Exponential Utility: From Fallacies to Fortunes AUGUST 31, 2011, MH320

**Abstract:** Risk-averse decision making requires choosing *utility functions.* When the *delta property*, or *value additivity*, is imposed, only exponential utility functions have the desired property. Unfortunately, certain fallacies about exponential utility functions have crept into the literature, frustrating widespread use of the model. We will describe these myths and how to correct them. We will also briefly discuss risk tolerance, risk tolerance parametrics, the maximal value frontier, the value of information, and portfolio optimization.

*Background:* Familiarity with logarithmic and exponential functions and the idea of optimization. Calculus is helpful, but not necessary.

**About the speaker:** Ron Davis received his B.S. in applied mathematics from Harvard, and his M.S. and Ph.D. degrees in mathematics from Stanford. He has been an Associate Professor of Decision Sciences in the Department of Marketing and Decision Sciences for 24 years, and serves as the coordinator of the Decision Sciences Certificate Program offered by the College of Business at SJSU.

SNACKS IN MH331B AT 2:30 PM TALK STARTS AT 3 PM

For more information, see our full schedule at:

http://www.math.sjsu.edu/~hsu/colloq/