

Secretary Problems

Ted Hill

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Georgia Institute of Technology**

Abstract

The subject of this talk will be so-called Secretary Problems, (also known as Marriage, Dowry, or Best-choice Problems), and more generally, Optimal-Stopping Problems. The basic framework is that a sequence of random variables (stock prices, offers on a house, test scores for job applicants [e.g. for a secretarial position]) is being observed, and the objective is to decide when to stop in order to maximize the reward. The classical no-information secretary problem and its solution will be reviewed, along with game-theoretic extensions, analogs for full information and partial-information stopping, a few counterintuitive surprises, and several basic unsolved problems. The talk will be aimed for the non-specialist.

Biographical Sketch:

Ted Hill is Professor Emeritus of Mathematics at the Georgia Institute of Technology, and is currently Research Scholar in Residence at the California Polytechnic State University. He studied at West Point (BS in Engineering), Stanford (MS in Operations Research), Gottingen (Fulbright Scholar in Mathematics) and Berkeley (MA, PhD in Mathematics), and has held visiting appointments in Leiden (NATO Fellow), Israel, Mexico, Amsterdam, Italy, Gottingen (Gauss Professor), and Costa Rica. His primary research interests are in mathematical probability, especially optimal-stopping theory, fair-division problems, and Benford's Law.

**3108 Etcheverry
Monday, 16 October 2006
3:30PM-4:30PM**

COME EARLY! REFRESHMENTS WILL BE SERVED AT 3:00PM.

Next Seminar:

October 23 : TBA

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