APPLIED MATHEMATICS COLLOQUIUM

The Evolutionary Dynamics of Human Cooperation

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Abstract:
Evolution, where the fitter become more common while the less fit die out, is the fundamental unifying force in the biological sciences. Cooperation, where individuals incur costs to benefit others, is common throughout the natural world and human societies. How can the selfish process of natural selection favor such altruistic cooperation? In this talk, I will use mathematical formalizations of the dynamics of evolution together with game theory to study the emergence of altruistic cooperation. By combining models with behavioral experiments, I will demonstrate the importance of considering stochastic effects for explaining human behavior, and shed light on our willingness to help each other.

Monday March 28, 2011
4:30 PM
Building 2, Room 105
Refreshments are available in Building 2, Room 290
(Math Common Room) between 3:30 – 4:30 PM

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