Many Cheerful Facts

Organizers: Yael Degany & Jason Ferguson

Friday, 2:10pm-3:00pm, 939 Evans

Apr. 30 Holger Kammeyer, UC Berkeley

Fair and Unfair Prices for Financial Derivatives

A derivative is an agreement between two parties whose value is determined by the future price of another financial instrument. Is it possible to establish a mathematically rigorous framework in which a meaningful notion of its fair price can be defined? This is a guiding question of mathematical finance, a subject of intrinsic beauty, but with tarnished credibility in the enduring crisis. In an example-based approach, we will try to give a partial answer to this question. We will conclude with a glimpse of what is called the fundamental theorem of arbitrage free pricing.

The talk requires no more than some familiarity with the most basic concepts of probability theory.