Colloquium

Indranil SenGupta

North Dakota State University

Friday, March 01, 2013 at 3 pm in Bell Hall 143

Hedging in option pricing with stochastic volatility

When trading assets requires paying transaction costs the option pricing problem is known to lead to solving nonlinear partial differential equations even when the underlying asset is modeled using a simple geometric Brownian motion. The nonlinear term in the resulting partial differential equation (PDE) reflects the presence of transaction costs. We generalize this model to a stochastic volatility model. A hedging strategy will be given for this case.