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*Approximating American Option Prices via Sub-Optimal Exercise Strategies*

In this talk we investigate the approximate pricing of American put options by optimizing over sub-optimal exercise strategies. Strategies are taken to be hitting times of the stock price (geometric Brownian motion) to smooth curves, and all curves considered are drawn from parametric families which admit closed-form first-passage time distributions. This allows one to express option values as (very well-behaved) one-dimensional integrals which are easily evaluated numerically. Despite the apparent simplicity of the method it appears to be remarkably accurate, providing an extremely rapid lower bound on the option value. The talk is based on the M.Sc. thesis of W. Xing.