Financial Mathematics

MATH 5870/6870¹ Fall 2021

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¹Based on Robert L. McDonald's *Derivatives Markets*. 3rd Ed. Pearson. 2013.

- § 19.1 Computing the option price as a discounted expected value
- § 19.2 Computing random numbers
- § 19.3 Simulating lognormal stock prices
- § 19.4 Monte Carlo valuation
- § 19.5 Efficient Monte Carlo valuation
- § 19.6 Valuation of American options
- § 19.7 The Poisson distribution
- § 19.8 Simulating jumps with the Poisson distribution
- § 19.9 Simulating correlated stock prices
- § 19.10 Problems

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