Premia 22

Approximation Methods

Topics:

Approximation for American Options

Laplace Transform for Asian and Double Barrier Options

Approximation for Asian Options I

Approximation for Asian Options II

Laplace and Fourier Transform for Asian Option

Analytical Formula for Discrete Barrier Options

Fourier Transform for Levy Models

Laplace Transform for Parisian Options

Laplace Transform for Double Barrier Parisian Options

IAC Method for Tempered Stable Model

Approximate prices of basket and Asian options

Approximation formula in the Kou model

Numerical Quadrature methods for pricing Discrete Monitoring Asian options

Fast Wiener-Hopf factorization method for option pricing

Efficient pricing options under regime switching

A generalization of the Hull and White formula

Pricing American Options under Stochastic Volatility and Stochastic Interest Rates

Option Pricing Using Fourier Transforms

A Stochastic Volatility Alternative to SABR

Time Dependent Heston Model

Pricing options under stochastic volatility : a power series approach

Fourier Cosine Option pricing

Pricing European option under Heston-CIR model with Fourier Cosine Method

Backward Convolution Algorithm for Discretely Sampled Asian Options

Exponential Moments of the Discrete Maximum of a Lévy process

Fourier space time-stepping for option pricing with Levy models

Saddlepoint methods for option pricing

Efficient Wiener-Hopf approach for option pricing in stochastic volatility models

Pricing Fixed and Floating Asian Options in a Discretely Monitored Framework

Fourier-Cosine Method for Pricing Bermudan Options and American Options in Heston Model

Static Hedging of Standard Options

Efficient pricing lookback options under Lévy processes

Computing VaR and AVar in Infinitely Divisible Distributions

Analytical formulas for local volatility model with stochastic rates

Forward Variance Dynamics: Bergomi's model revisited

Option pricing for a lognormal stochastic volatility model

Stochastic expansion for the pricing of call options with discrete dividends

Double Heston Fourier transform

Efficient Pricing of Commodity Options with Early-Exercise under the Ornstein–Uhlenbeck proc

Approximations for Spread options in the commodity market

Approximations for commodities

Multi-asset Spread Option Pricing and Hedging.

New approximations in local volatility models.

Asymptotic and exact pricing options on variance.

A Closed-Form Exact Solution for Pricing Variance Swaps with Stochastic Volatility

Pricing and hedging gap risk.

On the Fourier cosine series expansion (COS) method for stochastic control problems.

A Multifactor Volatility Heston Model.

General approximation schemes for option prices in stochastic volatility models.

Smart expansion and fast calibration for jump diffusions

Efficient pricing of Asian options under Levy processes based on Fourier cosine expansions. Part

On The Heston Model with Stochastic Interest Rates

Fourier cosine method for Variables Annuities

Stratified approximations for the pricing of options on average.

Efficient variations of the Fourier transform in applications to option pricing.

Two-dimensional Fourier cosine series expansion method for pricing financial options.

A Forward Solution for Computing Derivatives Exposure.

Volatility swaps and volatility options on discretely sampled realized variance.

Option price with stochastic volatility for both fast and slow mean-reverting regimes.

Option pricing and implied volatilities in a 2-hypergeometric stochastic volatility model.

On the application of spectral filters in a Fourier option pricing technique.

Features of the Russian derivatives market volatility index development taking into account pos

Efficient Solution of Backward Jump-Diffusion PIDEs with Splitting and Matrix Exponentials.

Fourier transform algorithms for pricing and hedging discretely sampled exotic variance product

Pricing CIR yield options by conditional moment matching.

Ultra-Fast Pricing Barrier Options and CDSs

Robust Barrier Option Pricing by Frame Projection under Exponential Levy Dynamics-America

Valuation of variable annuities with Guaranteed Minimum Withdrawal Benefit under stochastic

An Efficient Transform Method For Asian Option Pricing.

Robust pricing of European Options with Wavelets and the Characteristic Function.

American option pricing under the double Heston model based on asymptotic expansion.