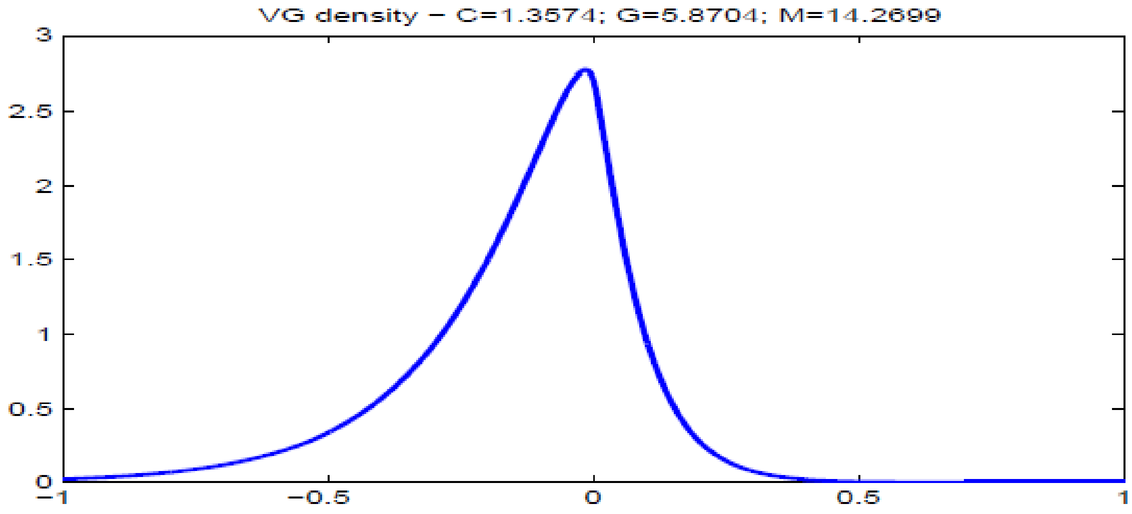
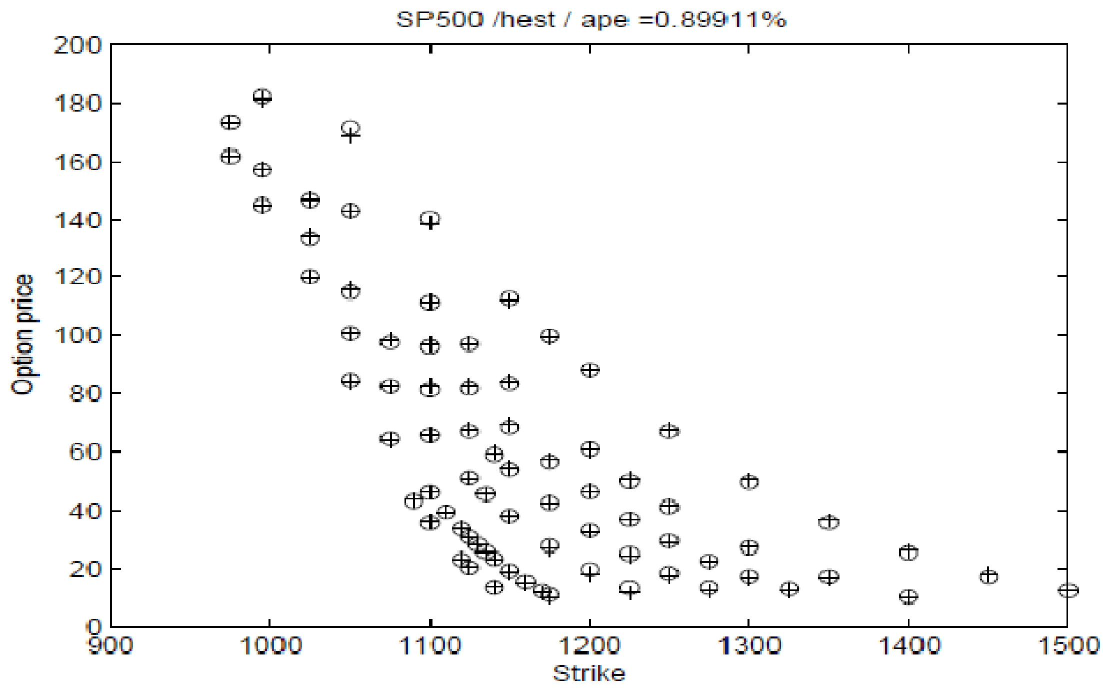
Equity Exotic Options: calibration and pricing

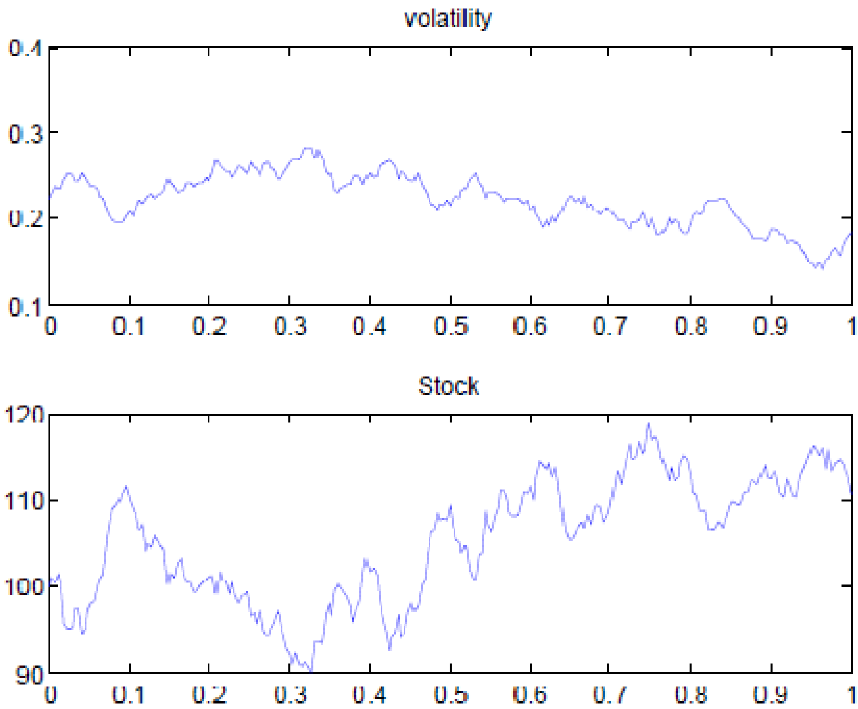
The course explores jump and stochastic volatility models; learn how to implement the Variance Gamma model which allows for negative skewness and excess kurtosis in log returns.



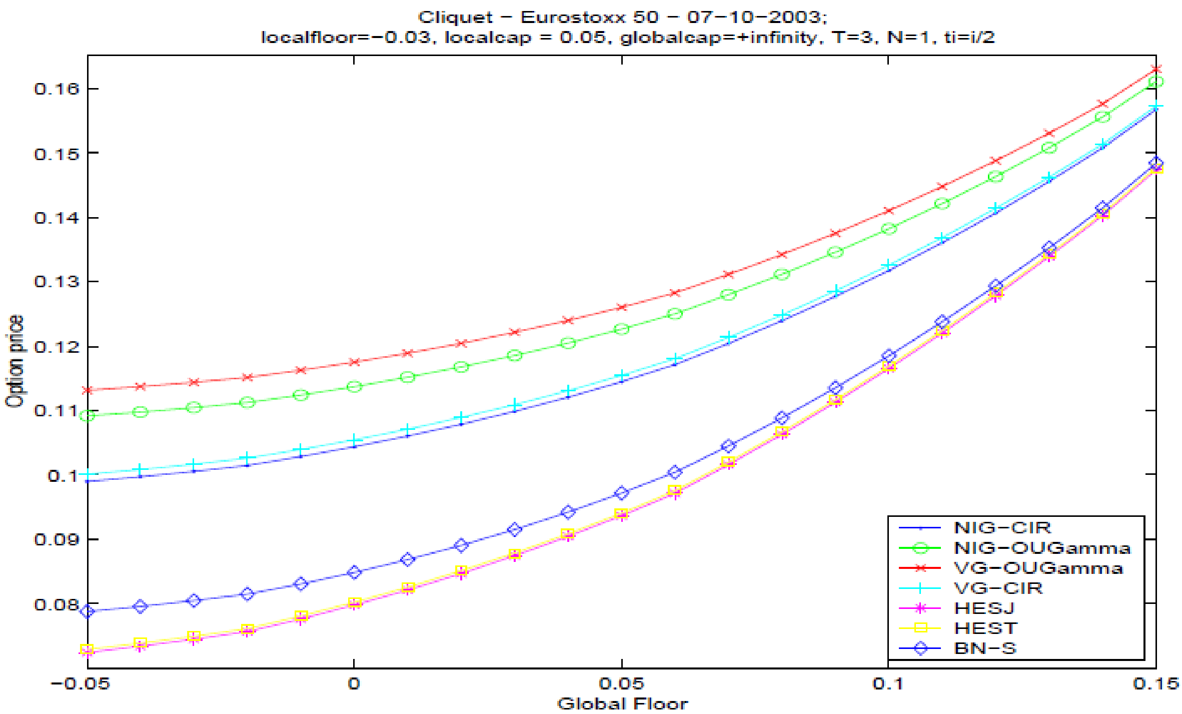
FFT pricer for vanillas for a generic model will be set up and implemented for VG and/or Heston. This FFT pricer will lie at the heart of the calibration algorithm. Delegates will implement step-by step the FFT pricer and the calibration algorithm and will test it on a basic set of market prices.



Monte Carlo simulation under the covered models are examined and you will be guided through the steps of implementation of the Monte-Carlo algorithms.



Delegates will price their favorite European options using these algorithms.



All the implementations are done in Matlab. Prior knowledge to this package is welcome, but not necessary. Basic computer programing skills are strongly recommended.