Stochastic Volatility Models

Week 2:

Week 3:
H. Johnson and D. Shanno, Option Pricing when the Variance is Changing, Journal of Financial and Quantitative Analysis, 1987, 22, 143-151,

Week 4: J. C. Hull and A. White, An Analysis of the Bias in Option Pricing Caused by a Stochastic Volatility, Advances in Futures and Options Research, 1988, 3, 29-61,
S. L. Heston, A Closed Form Solution for Options with Stochastic Volatility with Applications to Bond and Currency Options, Review of Financial Studies, 1993, 6, 327-343,

The SABR model: see the wikipedia entry.

Further topics
Pricing in stochastic volatility models:
R. Frey, Derivative Asset Analysis in Models with Level-Dependent and Stochastic Volatility, CWI Quarterly, 1997, 10, 1-34,
Pricing pathologies: