

Finite-Volume Difference Schemes for the Black-Sholes Equation in Stochastic Volatility Models

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We study numerically the two-dimensional Black-Sholes equation in stochastic volatility models (see E. Ekstrom and J. Tysk, JMAA, DOI:10.1016/j.jmaa.2010.04.014). For these models we construct finite-volume difference scheme using the appropriate boundary conditions. Numerical experiments are discussed.