**Solution Behavior of Heston Model Using Impression Matrix Norm**

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November 11, 2014

**Abstract**

We study the behavior of solutions for stochastic differential equations such as Heston stochastic volatility model. We examine the advantages and limitations of the model. Moreover, we introduce 3-dimensional matrix norms. Furthermore, we define market impression matrix norm as an application to the 3-dimensional matrix norms. Later, we perform simulations for various parameters. We can benefit from them to quantify market impression approximately by means of the the stochastic differential equations. This is joint work with Burhaneddin Izgi (see Duran and Bizgi, Advances in Applied Mathematics, Springer Proc. in Mathematics & Statistics 87, 215-221, Springer Switzerland, 2014).