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Price dynamics of the financial markets using the stochastic differential equation for a potential double well

L.S. Lima, L.L.B. Miranda

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Highlights

. The stcohastic differential equation with a double well has been used as a mathematical model for the price dynamics of the financial market.

. The mean price < S > have been calculated using simulation.

. The Hurst index has been calculated for the model

. The behavior of long tail distribution for the volatilities has been determined.