

Fractional Constant Elasticity of Variance Model

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Abstract: In this talk, an European option pricing formula for fractional market models will be proposed. Although there have been previous results about pricing formula for a fractional Black Scholes model using Wick calculus and Malliavin calculus, they do not account for stochastic volatility. In this paper, a fractional version of the Constant Elasticity of Variance (CEV) model is developed. An European option pricing formula similar to that of the classical CEV model is obtained and a volatility skew pattern is revealed.