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References

Andersen, T. G. (1994). "Stochastic Autoregressive Volatility: A Framework for Volatility Modeling," *Mathematical Finance* 4, 75–102.

Google Scholar

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Implicit in Deutschemark Options," Review of Financial Studies 9, 69-108.

Google Scholar

Black, F., and M. Scholes. (1973). "The Pricing of Options and Corporate Liabilities," *Journal of Political Economy* 81, 637–654.

Google Scholar

Carr, P., H. Geman, D. Madan, and M. Yor. (2000). "The Fine Structure of Asset Returns: An Empirical Investigation," forthcoming in the *Journal of Business*.

Carr, P., H. Geman, D. Madan, and M. Yor. (2001). "Stochastic Volatility for Lévy Processes," Working Paper, University of Maryland.

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Duan, J, I. Popova, and P. Ritchken. (1999). "Option Pricing under Regime Switching," Working Paper, Case Western Reserve University.

Eberlein, E., U. Keller, and K. Prause. (1998). "New Insights into Smile, Mispricing and Value at Risk: The Hyperbolic Model," *Journal of Business* 71, 371–406.

Google Scholar

Elliott, Robert J., Lakhdar Aggoun, and John B. Moore. (1995). *Hidden Markov Models: Estimation and Control (Applications of Mathematics, Vol. 29)*. Berlin: Springer-Verlag.

Google Scholar

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Madan, D. B., P. P. Carr, and E. C. Chang. (1998). "The Variance Gamma Process and Option Pricing," *European Finance Review* 2, 79–105.

Google Scholar

Merton, R. C. (1973). "Theory of Rational Option Pricing," *Bell Journal of Economics and Management* 4, 141–183.

Google Scholar

Merton, R. C. (1976). "Option Pricing when Underlying Stock Returns are Discontinuous," *Journal of Financial Economics* 3, 125–144

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