

**Eberlein, Ernst**

**Application of generalized hyperbolic Lévy motions to finance.** (English) [Zbl 0982.60045](#)

Barndorff-Nielsen, Ole E. (ed.) et al., Lévy processes. Theory and applications. Boston: Birkhäuser. 319-336 (2001).

In the classical model of financial market developed by Black, Scholes, and Merton, geometric Brownian motion plays the dominating role. However, it was observed by many authors that consequences of the theory deviate from empirical facts. The goal of the paper is to show that generalized hyperbolic Lévy motions are better fit to financial data. In this connection the following themes are discussed: asset price modeling, interest rate theory, multivariate and intraday modeling.

For the entire collection see [\[Zbl 0961.00012\]](#).

Reviewer: [Victor V.Goryainov \(Volzhsky\)](#)

**MSC:**

**60G51** Processes with independent increments; Lévy processes  
**91B28** Finance etc. (MSC2000)

Cited in **1** Review  
Cited in **63** Documents

**Keywords:**

[Brownian motion](#); [generalized hyperbolic Lévy motions](#); [martingale](#); [semimartingale](#); [mathematical finance](#)