

1023-60-1404

Martin S Forde* (forde@pstat.ucsb.edu), Statistics & Applied Probability, University of California, Santa Barbara, CA 93106-3110. *Small-time and tail asymptotics for diffusion and time-changed diffusion processes*. Preliminary report.

We discuss tail asymptotics for a Dupire-type local volatility model, and a diffusion process subordinated to an independent stochastic clock. We also discuss small-time asymptotics for these classes of models, with applications to volatility derivatives and the general p-stochastic volatility model which nests the Heston and SABR parametrizations. (Received September 25, 2006)