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## 1.3. BROWNIAN MOTION

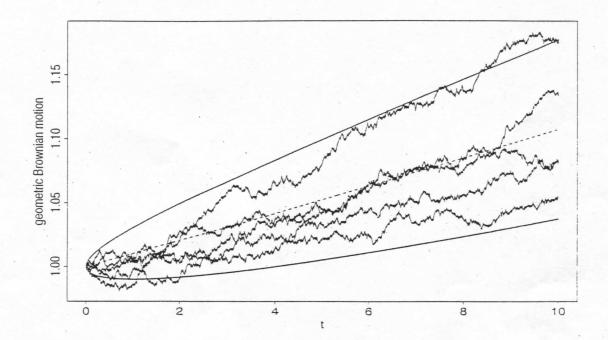


Figure 1.3.9 Sample paths of geometric Brownian motion  $X_t = \exp\{0.01t + 0.01B_t\}$  on [0, 10], the expectation function  $\mu_X(t)$  (dashed line) and the graphs of the functions  $\mu_X(t) \pm 2\sigma_X(t)$  (solid lines). The latter curves have to be interpreted with care since the distributions of the  $X_t$ s are not normal.