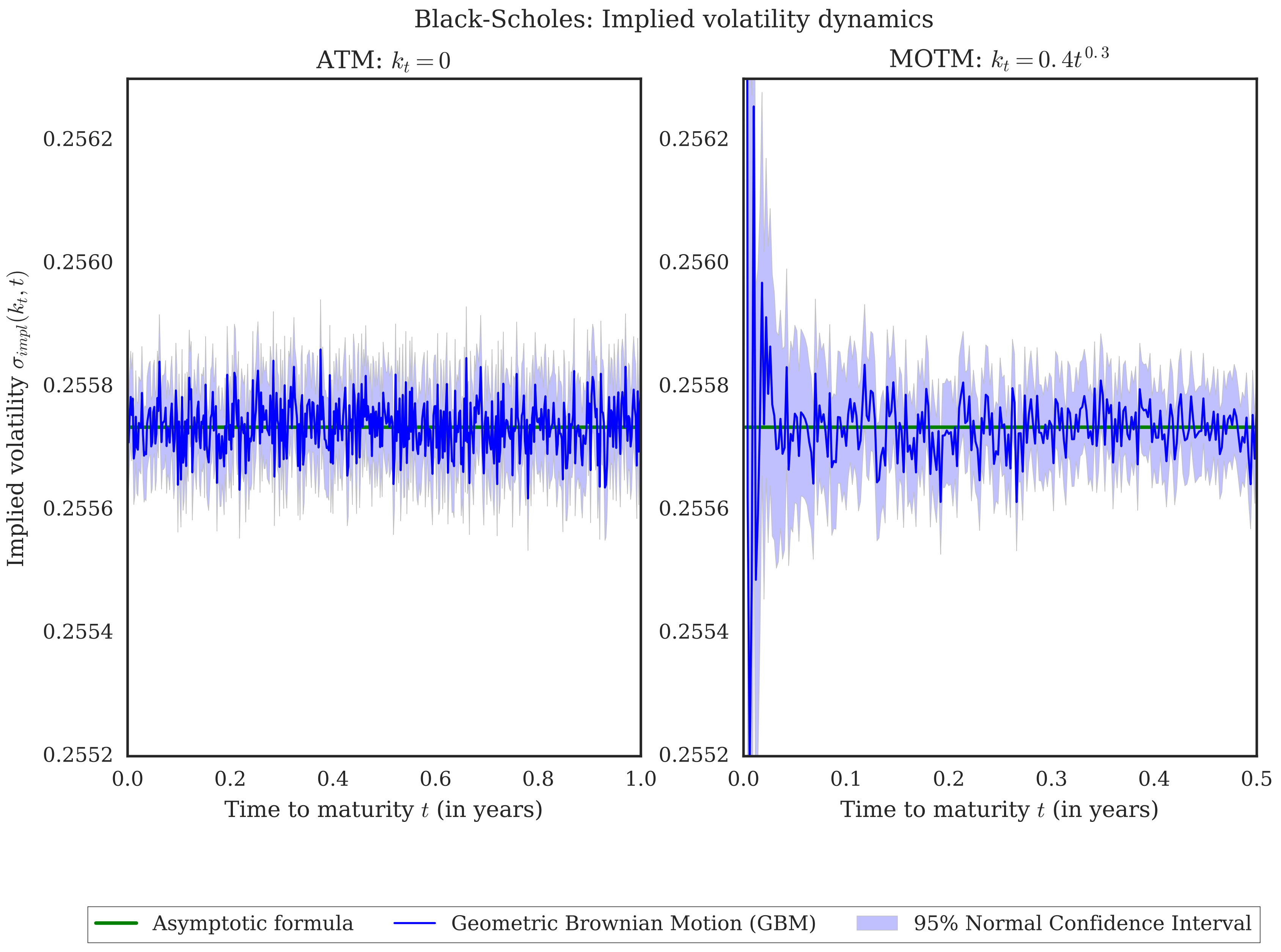

Black-Scholes: Implied volatility dynamics
ATM: $k_t = 0$
MOTM: $k_t = 0.4t^{0.3}$
Implied volatility $\sigma_{impl}(k_t, t)$
0.2562
0.2560
0.2558
0.2556
0.2554
0.2552
0.0
0.2
0.4
0.6
0.8
1.0
0.1
0.3
0.5
Time to maturity t (in years)
Asymptotic formula
Geometric Brownian Motion (GBM)
95% Normal Confidence Interval