Sequential Monte Carlo methods for stochastic volatility models: a review

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Abstract

We review the *Sequential Monte Carlo* (SMC) methods, also known as particle filters, for estimation and pricing in stochastic volatility models with general noises.

Keywords : *Sequential Monte Carlo methods, particle filter, stochastic volatility model, option pricing, estimation.*

1. Introduction and results

Sequential learning and inference methods are important in many applications where data arrival is inherently sequential. Furthermore, one