Analysis of the Approximate Maximum Likelihood Estimators of Diffusion Parameters by Simulations

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Abstract

Observations of diffusion paths are usually discrete. Except in few cases, the exact maximum likelihood estimation (MLE) of diffusion parameters is not possible. Hence, some other methods of estimation have to be applied. We analyze some of the approximate maximum likelihood estimators by using computer simulations. Diffusion models we used are growth models such as Gompertz, logistic and von Bertalanffy diffusion models.

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