Parameter Estimation in Stochastic Differential Equations [

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Monografía

Parameter estimation in stochastic differential equations and stochastic partial differential equations is the science, art and technology of modelling complex phenomena and making beautiful decisions. The subject has attracted researchers from several areas of mathematics and other related fields like economics and finance. This volume presents the estimation of the unknown parameters in the corresponding continuous models based on continuous and discrete observations and examines extensively maximum likelihood, minimum contrast and Bayesian methods. Useful because of the current availability of high frequency data is the study of refined asymptotic properties of several estimators when the observation time length is large and the observation time interval is small. Also space time white noise driven models, useful for spatial data, and more sophisticated non-Markovian and non-semimartingale models like fractional diffusions that model the long memory phenomena are examined in this volume

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