

1. Record Nr.	UNINA9910484642803321
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Titolo	Parameter estimation in stochastic differential equations // Jaya P. N. Bishwal
Pubbl/distr/stampa	Berlin : , : Springer, , [2007] ©2007
ISBN	3-540-74448-7
Edizione	[1st ed. 2008.]
Descrizione fisica	1 online resource (XIV, 268 p.)
Collana	Lecture Notes in Mathematics ; ; 1923
Disciplina	519.544
Soggetti	Parameter estimation Stochastic differential equations - Statistical methods
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Continuous Sampling -- Parametric Stochastic Differential Equations -- Rates of Weak Convergence of Estimators in Homogeneous Diffusions -- Large Deviations of Estimators in Homogeneous Diffusions -- Local Asymptotic Mixed Normality for Nonhomogeneous Diffusions -- Bayes and Sequential Estimation in Stochastic PDEs -- Maximum Likelihood Estimation in Fractional Diffusions -- Discrete Sampling -- Approximate Maximum Likelihood Estimation in Nonhomogeneous Diffusions -- Rates of Weak Convergence of Estimators in the Ornstein-Uhlenbeck Process -- Local Asymptotic Normality for Discretely Observed Homogeneous Diffusions -- Estimating Function for Discretely Observed Homogeneous Diffusions.
Sommario/riassunto	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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