

Stochastic Equations: Theory and Applications in Acoustics, Hydrodynamics, Magnetohydrodynamics, and Radiophysics, Volume 1 [ Basic Concepts, Exact Results, and Asymptotic Approximations /

Klyatskin, Valery I. aut. http://id.loc.gov/vocabulary/relators/aut Springer International Publishing,

2015



Monografía

This monograph set presents a consistent and self-contained framework of stochastic dynamic systems with maximal possible completeness. Volume 1 presents the basic concepts, exact results, and asymptotic approximations of the theory of stochastic equations on the basis of the developed functional approach. This approach offers a possibility of both obtaining exact solutions to stochastic problems for a number of models of fluctuating parameters and constructing various asymptotic buildings. Ideas of statistical topography are used to discuss general issues of generating coherent structures from chaos with probability one, i.e., almost in every individual realization of random parameters. The general theory is illustrated with certain problems and applications of stochastic mathematical physics in various fields such as mechanics, hydrodynamics, magnetohydrodynamics, acoustics, optics, and radiophysics.

**Título:** Stochastic Equations: Theory and Applications in Acoustics, Hydrodynamics, Magnetohydrodynamics, and Radiophysics, Volume 1 Recurso electrónico] :] Basic Concepts, Exact Results, and Asymptotic Approximations by Valery I. Klyatskin

Editorial: Cham Springer International Publishing Imprint: Springer 2015

Editorial: Cham Springer International Publishing 2015

Descripción física: XX, 418 p. 45 il

Mención de serie: Understanding Complex Systems

Nota general: Bibliographic Level Mode of Issuance: Monograph

**Contenido:** Dynamical description of stochastic systems -- Random quantities, processes, and fields -- Stochastic equations -- Asymptotic methods for analyzing stochastic equations

Lengua: English

ISBN: 9783319075877 9783319075884 9783319075860 9783319357751

**Materia:** Engineering Differentiable dynamical systems Hydraulic engineering Complexity Data-driven Science, Modeling and Theory Building Dynamical Systems and Ergodic Theory Engineering Fluid Dynamics

Enlace a formato físico adicional: 3-319-07586-1

Punto acceso adicional serie-Título: Understanding Complex Systems

## **Baratz Innovación Documental**

- Gran Vía, 59 28013 Madrid
- (+34) 91 456 03 60
- informa@baratz.es