

MARC VIEW FOR ISBN 9780081004715 (ISBNPlus.com)

LEADER 04323cam a2200493li 4500
 001 6482958
 005 20150820110050.0
 006 m o d
 007 cr cnu|||unuuu
 008 150406s2015 enk ob 001 0 eng d
 020 \$a 9780081004715\$qelectronic bk.
 020 \$a 0081004710\$qelectronic bk.
 020 \$z9781785480058
 020 \$z1785480057
 035 \$a (NhCcYBP)eybpebr11040161
 035 \$a 6482958
 040 \$a NhCcYBP\$cNhCcYBP
 050 4\$a QA274.2
 072 7\$a MAT\$x003000\$2bisacsh
 072 7\$a MAT\$x029000\$2bisacsh
 082 04\$a 519.2\$223
 100 1 \$a Cursi, Eduardo Souza de,\$eauthor.
 245 10\$a Uncertainty Quantification and Stochastic Modeling with Matlab\$h[electronic resource].
 264 1\$a London :\$bISTE Press Ltd ;\$a Kidlington, Oxford :\$bElsevier Ltd.,\$c2015.
 300 \$a 1 online resource
 336 \$a text\$btxt\$2rdacontent
 337 \$a computer\$bc\$2rdamedia
 338 \$a online resource\$bcr\$2rdacarrier
 533 \$a Electronic reproduction.\$bPalo Alto, Calif.\$nAvailable via World Wide Web.
 588 0 \$a Vendor-supplied metadata.
 504 \$a Includes bibliographical references and index.
 505 0 \$a Front Cover ; Uncertainty Quantification and Stochastic Modeling with Matlab® ; Copyright ; Contents ; Introduction ; Chapter 1: Elements of Probability Theory and Stochastic Processes ; 1.1. Notation ; 1.2. Numerical Characteristics of Finite Populations ; 1.3. Matlab Implementation; 1.4. Couples of Numerical Characteristics ; 1.5. Matlab Implementation ; 1.6. Hilbertian Properties of the Numerical Characteristics ; 1.7. Measure and Probability ; 1.8. Construction of Measures ; 1.9. Measures, Probability and Integrals in Infinite Dimensional Spaces ; 1.10. Random Variables
 505 8 \$a 1.11. Hilbertian Properties of Random Variables 1.12. Sequences of Random Variables ; 1.13. Some Usual Distributions ; 1.14. Samples of Random Variables ; 1.15. Gaussian Samples ; 1.16. Stochastic Processes ; 1.17. Hilbertian Structure ; 1.18. Wiener Process ; 1.19. Ito Integrals ; 1.20. Ito Calculus ; Chapter 2: Maximum Entropy and Information ; 2.1. Construction of a Stochastic Model ; 2.2. The Principle of Maximum Entropy ; 2.3. Generating Samples of Random Variables, Random Vectors and Stochastic Processes
 505 8 \$a 2.4. Karhunen-Loe?ve Expansions and Numerical Generation of Variates from Stochastic Processes Chapter 3: Representation of Random Variables ; 3.1. Approximations Based on Hilbertian Properties ; 3.2. Approximations Based on Statistical Properties (Moment Matching Method); 3.3. Interpolation-Based Approximations (Collocation); Chapter 4: Linear Algebraic Equations Under Uncertainty ; 4.1. Representation of the Solution of Uncertain Linear Systems ; 4.2. Representation of Eigenvalues and Eigenvectors of Uncertain Matrices ; 4.3. Stochastic Methods for Deterministic Linear Systems
 505 8 \$a Chapter 5: Nonlinear Algebraic Equations Involving Random Parameters 5.1. Nonlinear Systems of Algebraic Equations ; 5.2. Numerical Solution of Noisy Deterministic Systems of Nonlinear Equations ; Chapter 6: Differential Equations Under Uncertainty ; 6.1. The Case of Linear Differential Equations ; 6.2. The Case of Nonlinear Differential Equations ; 6.3. The Case of Partial Differential Equations ; 6.4. Reduction of

Hamiltonian Systems ; 6.5. Local Solution of Deterministic Differential Equations by Stochastic Simulation ;
6.6. Statistics of Dynamical Systems

505 8 \$a Chapter 7: Optimization Under Uncertainty 7.1. Representation of the Solutions in Unconstrained
Optimization ; 7.2. Stochastic Methods in Deterministic Continuous Optimization ; 7.3. Population-Based
Methods; 7.4. Determination of Starting Points ; Chapter 8: Reliability-Based Optimization ; 8.1. The Model
Situation ; 8.2. Reliability Index ; 8.3. FORM; 8.4. The Bi-Level or Double-Loop Method; 8.5. One-Level or
Single-Loop Approach ; 8.6. Safety Factors ; Bibliography ; Index

506 \$a Restricted for use by site license.

650 0\$a Stochastic models.

650 0\$a Uncertainty (Information theory)

700 1 \$a Sampaio, Rubens,\$eauthor.

710 2 \$a ebrary, Inc.

776 08\$iPrint version:\$z9780081004715

856 40\$u<http://hdl.library.upenn.edu/1017.12/1405234>\$zConnect to full text