The book was found

Models Of The Stochastic Activity Of Neurones (Lecture Notes In Biomathematics)

Lecture Notes in Biomathematics

Managing Editor: S. Levin

12

Arun V. Holden

Models of the Stochastic
Activity of Neurones

Springer-Verlag
Berlin · Heidelberg · New York
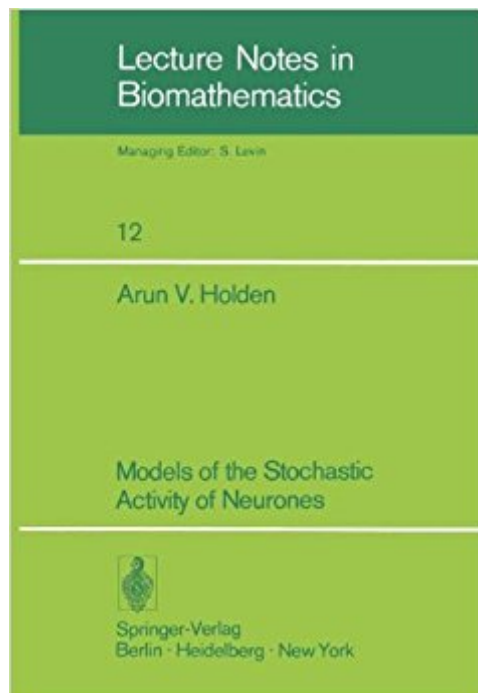
Synopsis

These notes have grown from a series of seminars given at Leeds between 1972 and 1975. They represent an attempt to gather together the different kinds of model which have been proposed to account for the stochastic activity of neurones, and to provide an introduction to this area of mathematical biology. A striking feature of the electrical activity of the nervous system is that it appears stochastic: this is apparent at all levels of recording, ranging from intracellular recordings to the electroencephalogram. The chapters start with fluctuations in membrane potential, proceed through single unit and synaptic activity and end with the behaviour of large aggregates of neurones: L have chgaen this seque~~eV~~';uggest that the interesting behaviourr~f :the nervous system - its individuality, variability and dynamic forms - may in part result from the stochastic behaviour of its components. I would like to thank Dr. Julio Rubio for reading and commenting on the drafts, Mrs. Doris Beighton for producing the final typescript and Mr. Peter Hargreaves for preparing the figures.

Book Information

Series: Lecture Notes in Biomathematics (Book 12)

Paperback: 370 pages

Publisher: Springer; 1 edition (December 9, 1976)

Language: English

ISBN-10: 3540079831

ISBN-13: 978-3540079835

Product Dimensions: 6.7 x 0.9 x 9.6 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: Be the first to review this item

Best Sellers Rank: #2,367,171 in Books (See Top 100 in Books)   #74 inÃ Â Books > Science & Math > Mathematics > Applied > Biomathematics   #19913 inÃ Â Books > Textbooks > Science & Mathematics > Mathematics

Download to continue reading...

Models of the Stochastic Activity of Neurones (Lecture Notes in Biomathematics) The Measurement of Biological Shape and Shape Change (Lecture Notes in Biomathematics, Volume 24) Compartmental Modeling and Tracer Kinetics (Lecture notes in biomathematics) Stochastic Simulation: Algorithms and Analysis (Stochastic Modelling and Applied Probability, No. 57) (No. 100) Continuous-time Stochastic Control and Optimization with Financial Applications (Stochastic

Modelling and Applied Probability) Linear Mixed Models in Practice: A SAS-Oriented Approach (Lecture Notes in Statistics) Lattice Models of Polymers (Cambridge Lecture Notes in Physics) Simple Mathematical Models of Gene Regulatory Dynamics (Lecture Notes on Mathematical Modelling in the Life Sciences) Complexity, Language, and Life: Mathematical Approaches (Biomathematics) Lecture Ready Student Book 2, Second Edition (Lecture Ready Second Edition 2) Brainiac's Secret Agent Activity Book: Fun Activities for Spies of All Ages (Activity Books) (Activity Journal Series) Stochastic Calculus for Finance II: Continuous-Time Models (Springer Finance) Comparison Methods for Stochastic Models and Risks Stochastic Models, Information Theory, and Lie Groups, Volume 1: Classical Results and Geometric Methods (Applied and Numerical Harmonic Analysis) Stochastic Models, Information Theory, and Lie Groups, Volume 2: Analytic Methods and Modern Applications (Applied and Numerical Harmonic Analysis) USMLE Step 1 Lecture Notes 2017: 7-Book Set (Kaplan Test Prep) USMLE Step 1 Lecture Notes 2017: Pharmacology (USMLE Prep) USMLE Step 3 Lecture Notes 2017-2018: 2-Book Set (USMLE Prep) Ultracold Gases and Quantum Information: Lecture Notes of the Les Houches Summer School in Singapore: Volume 91, July 2009 Dynamic Response of Infrastructure to Environmentally Induced Loads: Analysis, Measurements, Testing, and Design (Lecture Notes in Civil Engineering)