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Autore	Greenwood Priscilla E
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Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Introduction -- Single Neuron Models -- Population and Subpopulation Models -- Spatially-structured Neural Systems -- The Bigger Picture.
Sommario/riassunto	This book describes a large number of open problems in the theory of stochastic neural systems, with the aim of enticing probabilists to work on them. This includes problems arising from stochastic models of individual neurons as well as those arising from stochastic models of the activities of small and large networks of interconnected neurons. The necessary neuroscience background to these problems is outlined within the text, so readers can grasp the context in which they arise. This book will be useful for graduate students and instructors providing material and references for applying probability to stochastic neuron modeling. Methods and results are presented, but the emphasis is on questions where additional stochastic analysis may contribute neuroscience insight. An extensive bibliography is included. Dr. Priscilla E. Greenwood is a Professor Emerita in the Department of Mathematics at the University of British Columbia. Dr. Lawrence M. Ward is a

Professor in the Department of Psychology and the Brain Research Centre at the University of British Columbia.