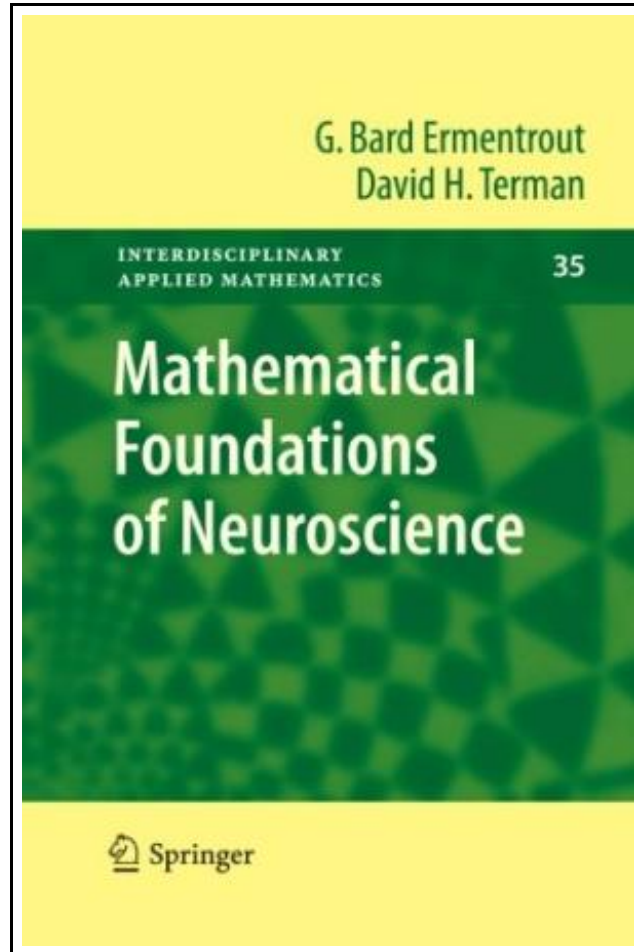


Mathematical Foundations of Neuroscience



Filesize: 9.67 MB

Reviews

It becomes an awesome publication that I actually have actually read. It really is written in simple terms and not difficult to understand. Once you begin to read the book, it is extremely difficult to leave it before concluding.

(Talia Cormier)

MATHEMATICAL FOUNDATIONS OF NEUROSCIENCE

[DOWNLOAD](#)

Springer-Verlag New York Inc. Paperback. Book Condition: New. Paperback. 422 pages. Dimensions: 9.1in. x 6.1in. x 0.8in. One can say that the field of computational neuroscience started with the 1952 paper of Hodgkin and Huxley in which they describe, through nonlinear partial differential equations, the genesis of the action potential in the giant axon of the squid. These equations and the methods that arose from this combination of modeling and experiments have since formed the basis for nearly every subsequent model for active cells. The Hodgkin-Huxley model and a host of simplified equations that are derived from it have inspired the development of new and beautiful mathematics. Dynamical systems and computational methods are now being used to study activity patterns in a variety of neuronal systems. It is becoming increasingly recognized, by both experimentalists and theoreticians, that issues raised in neuroscience and the mathematical analysis of neuronal models provide unique interdisciplinary collaborative research and educational opportunities. This book is motivated by a perceived need for an overview of how dynamical systems and computational analysis have been used in understanding the types of models that come out of neuroscience. Our hope is that this will help to stimulate an increasing number of collaborations between mathematicians and other theoreticians, looking for interesting and relevant problems in applied mathematics and dynamical systems, and neuroscientists, looking for new ways to think about the biological mechanisms underlying experimental data. The book arose out of several courses that the authors have taught. One of these is a graduate course in computational neuroscience that has students from the disciplines of psychology, mathematics, computer science, physics, and neuroscience. This item ships from multiple locations. Your book may arrive from Roseburg, OR, La Vergne, TN. Paperback.

[Read Mathematical Foundations of Neuroscience Online](#)[Download PDF Mathematical Foundations of Neuroscience](#)

See Also



The Day I Forgot to Pray

Tate Publishing. Paperback. Book Condition: New. Paperback. 28 pages. Dimensions: 8.7in. x 5.8in. x 0.3in. Alexis is an ordinary five-year-old who likes to run and play in the sandbox. On her first day of Kindergarten, she...

[Read Book »](#)



DK Readers Robin Hood Level 4 Proficient Readers

DK CHILDREN. Paperback. Book Condition: New. Nick Harris (illustrator). Paperback. 48 pages. Dimensions: 8.4in. x 5.7in. x 0.2in. Discover the rollicking exploits of Robin and his merry men as they take from the rich and give...

[Read Book »](#)



DK Readers Invaders From Outer Space Level 3 Reading Alone

DK CHILDREN. Paperback. Book Condition: New. Paperback. 48 pages. Dimensions: 8.9in. x 5.9in. x 0.1in. Are aliens from other planets visiting Earth? Read these amazing stories of alien encounters -- and make up your own mind!...

[Read Book »](#)



DK Readers Animal Hospital Level 2 Beginning to Read Alone

DK CHILDREN. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 8.9in. x 5.8in. x 0.1in. This Level 2 book is appropriate for children who are beginning to read alone. When Jack and Luke take an injured...

[Read Book »](#)



DK Readers The Story of Muhammad Ali Level 4 Proficient Readers

DK CHILDREN. Paperback. Book Condition: New. Paperback. 48 pages. Dimensions: 8.7in. x 6.5in. x 0.2in. Written by leading children's authors and compiled by leading experts in the field, DK Readers are one of the most delightful...

[Read Book »](#)

**Scala in Depth**

Manning Publications. Paperback. Book Condition: New. Paperback. 304 pages. Dimensions: 9.2in. x 7.3in. x 0.8in. Summary Scala in Depth is a unique new book designed to help you integrate Scala effectively into your development process. By

[Save Book »](#)

**DK Readers Beastly Tales Level 3 Reading Alone**

DK CHILDREN. Paperback. Book Condition: New. Paperback. 48 pages. Dimensions: 8.8in. x 5.8in. x 0.2in. This Level 3 book is perfect for children who can read alone. Do these monsters really exist Read these amazing true

[Save Book »](#)

**The Stories Julian Tells A Stepping Stone Book™**

Random House Books for Young Readers. Paperback. Book Condition: New. Ann Strugnell (illustrator). Paperback. 80 pages. Dimensions: 7.6in. x 5.0in. x 0.4in. Julian is a quick fibber and a wishful thinker. And he is great at

[Save Book »](#)

**Wondrous Strange**

Harper Teen. Paperback. Book Condition: New. Paperback. 352 pages. Dimensions: 7.9in. x 5.3in. x 0.9in. Since the dawn of time, the Faerie have taken. . . . Seventeen-year-old actress Kelley Winslow always thought faeries were just

[Save Book »](#)

**Absolutely Lucy #4 Lucy on the Ball A Stepping Stone Book™**

Random House Books for Young Readers. Paperback. Book Condition: New. David Merrell (illustrator). Paperback. 112 pages. Dimensions: 7.4in. x 5.1in. x 0.4in. Ilene Coopers fourth story of a boy and his beagle takes Bobby and Lucy

[Save Book »](#)