neuroscience

Honorable Mention, 2010 American Publishers Award for Professional and Scholarly Excellence (PROSE) in the Biomedicine and Neuroscience category

Networks of the Brain

Olaf Sporns

Over the last decade, the study of complex networks has expanded across diverse scientific fields. Increasingly, science is concerned with the structure, behavior, and evolution of complex systems ranging from cells to ecosystems. In *Networks of the Brain*, Olaf Sporns describes how the integrative nature of brain function can be illuminated from a complex network perspective.

Highlighting the many emerging points of contact between neuroscience and network science, the book serves to introduce network theory to neuroscientists and neuroscience to those working on theoretical network models. Sporns emphasizes how networks connect levels of organization in the brain and how they link structure to function, offering an informal and nonmathematical treatment of the subject. *Networks of the Brain* provides a synthesis of the sciences of complex networks and the brain that will be an essential foundation for future research.

Olaf Sporns is Distinguished Professor in the Department of Psychological and Brain Sciences, Adjunct Professor in the School of Informatics and Computing, Codirector of the Indiana University Network Science Institute, a member of the programs in Neuroscience and Cognitive Science, and Head of the Computational Cognitive Neuroscience Laboratory at Indiana University Bloomington. He is the author of Discovering the Human Connectome.

"Sporns provides a comprehensive, tour-de-force overview of the cutting edge of the application of network science to neuroscience. This is a book that everyone with an interest in brain function should read."

- -Mark Daley and Jody C. Culham, Canadian Psychology
- "Networks of the Brain is a unique resource. It defines the nature and scope of one of the newest and most exciting research programs in cognitive neuroscience."
- -Matteo Colombo, Minds & Machines

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