1. Record Nr. UNISA990002018450203316

Autore	WALTON, Izaak
Titolo	The compleat angler / by Izaak Walton
Pubbl/distr/stampa	Stockholm ; London : Continental Co., 1945
Descrizione fisica	XLIV, 315 p. ; 18 cm
Collana	Zephyr books
Collocazione	VII.3.A. 703(II i A 123)
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia

2. Record Nr. UNINA9910437623403321

Autore	Coward L. Andrew
Titolo	Towards a theoretical neuroscience : from cell chemistry to cognition / / L. Andrew Coward
Pubbl/distr/stampa	New York, : Springer, 2013
ISBN	94-007-7107-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (458 p.)
Collana	Springer series in cognitive and neural systems ; ; 8
Disciplina	004.6 573.80113
Soggetti	Neurosciences Neuropsychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes bibliographical references and index.
Nota di contenuto	The nature of scientific understanding -- Higher Cognition -- Brain Anatomy -- Neuron Physiology -- Intracellular message chains -- Major Anatomical Structures -- Constraints on the physical architecture of the brain -- Appearance of architectural constraints in the brain -- Memory and the organisation of experience -- Attention and working

memory -- Understanding complex cognitive phenomena.- Towards a Theoretical Neuroscience.

Sommario/riassunto

An effective theoretical neuroscience must deliver an accurate, comprehensible and intuitively satisfying understanding of higher cognition in terms of anatomy, neuron physiology and neurochemistry. Massive simulations of assemblies of relatively realistic neurons do not necessarily contribute to understanding, because such simulations can be just one more complex system that is not understood in any satisfying way. Collection of extensive data on the connectivity of the brain may also contribute little to understanding in the absence of an effective theoretical framework. Beginning in the 1980s, some extremely complex electronic systems have been created. Each such system required thousands of man years of design effort and utilises many billions of transistors. These systems are understood by human beings. Although there are minimal direct resemblances between such electronic systems and the brain, the techniques for achieving electronic system understanding can be adapted to create the framework for an effective neuroscience. This book describes how these techniques are applied to understanding the brain. From 1969 to 1999 the author worked on many aspects of the design and manufacturing of complex electronic systems. Since 1982, he has been active in the creation of a theoretical neuroscience framework. The book covers the following areas: -The nature of scientific understanding and ways to achieve it -Key topics in psychology, neuroanatomy, neurophysiology and neurochemistry -Theoretical constraints on brain architecture and appearance of those constraints in the human brain -How the architectural constraints make it possible to map between descriptions of brain activity on different levels of detail -Understanding of attention, semantic and episodic memory, procedural and working memory in terms of anatomy, neuron physiology and neurochemistry -Understanding of complex cognitive phenomena including speech, prospective memory, consciousness and self awareness.