1. Record Nr. UNINA9910349543803321

Titolo	Quanta and Mind [[electronic resource]] : Essays on the Connection between Quantum Mechanics and Consciousness / / edited by J. Acacio de Barros, Carlos Montemayor
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2019
ISBN	3-030-21908-9
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (XIV, 260 p. 15 illus.)
Collana	Synthese Library, Studies in Epistemology, Logic, Methodology, and Philosophy of Science, , 0166-6991 ; ; 414
Disciplina	128.2
Soggetti	Philosophy of mind Quantum physics Cognitive psychology Philosophy of Mind Quantum Physics Cognitive Psychology
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Foreword -- Preface -- Part I. Quanta informs Mind. 1. Free Will in a Quantum World? (Valia Allori) -- 2. Mind and Matter (Marcus Appleby) -- 3. Between physics and metaphysics: a discussion of the status of mind in quantum mechanics (Raoni Arroyo and Jonas Arenhardt) -- 4. Bridges between Classical and Quantum (L. P. G. De Assis) -- 5. Where does quanta meet mind? (J. Acacio de Barros) -- 6. Quantum Schmuntum? (Pawe Kurzynski and Dagomir Kaszlikowski) -- 7. A Quantum Model of Non-Illusory Free Will (Kathryn Blackmond Laskey) -- 8. Bohmian Philosophy of Mind? (Peter J. Lewis) -- 9. Mind and matter: Two entangled parallel time-lines, one reconstructing the past in remembering, the other extrapolating into the future in predicting (Giuseppe Vitiello) -- Part II. Mind informs Quanta. 10. Contextuality Revisited – Signaling May Differ From Communicating (Harald Atmanspacher and Thomas Filk) -- 11. Is There a Place for Consciousness in Quantum Mechanics? (Otávio Bueno) -- 12. Quantum mechanics and consciousness: some views from a novice (Emmanuel

Haven) -- 13. Panpsychism and Quantum Mechanics: Explanatory Challenges (Carlos Montemayor) -- 14. Quantum theory and the place of mind in the causal order of things (Paavo Pylkkanen) -- 15. Introspection and Superposition (Paul Skokowski) -- Part III. Quanta and Mind informs worldviews. 16. Absolute present, Zen and Schrödinger's One Mind (Peter D. Bruza and Brentyn Ramm) -- 17. Semantic gaps and protosemantics (Benj Hellie) -- 18. The Observer and Access to Information in the Quantum Universe (Menas C. Kafatos and Ashok Narasimhan) -- 19. Unifying Decision-Making: a Review on Evolutionary Theories on Rationality and Cognitive Biases (Catarina Moreira) -- 20. "Time is out of Joint:" Consciousness, Temporality, and Probability in Quantum Theory (Arkady Plotnitsky).

Sommario/riassunto

This edited volume examines aspects of the mind/consciousness that are relevant to the interpretations of quantum mechanics. In it, an international group of contributors focus on the possible connections between quantum mechanics and consciousness. They look at how consciousness can help us with quantum mechanics as well as how quantum mechanics can contribute to our understanding of consciousness. For example, what do different interpretations aimed at solving the measurement problem in quantum mechanics tell us about the nature of consciousness, such as von Neumann's interpretation? Each interpretation has, associated to it, a corresponding metaphysical framework that helps us think about possible "models" of consciousness. Alternatively, what does the nature of consciousness tell us about the role of the observer and time reversibility in the measurement process? The book features 20 papers on contemporary approaches to quanta and mind. It brings together the work of scholars from different disciplines with diverse views on the connections between quanta and mind, ranging from those who are supportive of a link between consciousness and quantum physics to those who are very skeptical of such link. Coverage includes such topics as free will in a quantum world, contextuality and causality, mind and matter interaction, quantum panpsychism, the quantum and quantum-like brain, and the role of time in brain-mind dynamics.