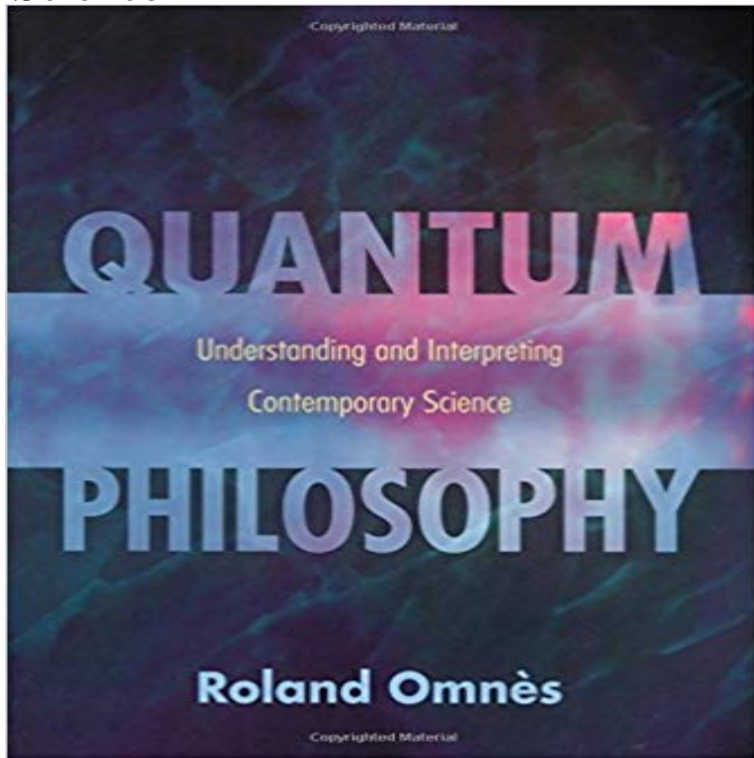


Quantum Philosophy: Understanding and Interpreting Contemporary Science



In this magisterial work, Roland Omnès takes us from the academies of ancient Greece to the laboratories of modern science as he seeks to do no less than rebuild the foundations of the philosophy of knowledge. One of the world's leading quantum physicists, Omnès reviews the history and recent development of mathematics, logic, and the physical sciences to show that current work in quantum theory offers new answers to questions that have puzzled philosophers for centuries: Is the world ultimately intelligible? Are all events caused? Do objects have definitive locations? Omnès addresses these profound questions with vigorous arguments and clear, colorful writing, aiming not just to advance scholarship but to enlighten readers with no background in science or philosophy. The book opens with an insightful and sweeping account of the main developments in science and the philosophy of knowledge from the pre-Socratic era to the nineteenth century. Omnès then traces the emergence in modern thought of a fracture between our intuitive, commonsense views of the world and the abstract and--for most people--incomprehensible world portrayed by advanced physics, math, and logic. He argues that the fracture appeared because the insights of Einstein and Bohr, the logical advances of Frege, Russell, and Gödel, and the necessary mathematics of infinity of Cantor and Hilbert cannot be fully expressed by words or images only. Quantum mechanics played an important role in this development, as it seemed to undermine intuitive notions of intelligibility, locality, and causality. However, Omnès argues that common sense and quantum mechanics are not as incompatible as many have thought. In fact, he makes the provocative argument that the consistent-histories approach to quantum mechanics, developed over the

past fifteen years, places common sense (slightly reappraised and circumscribed) on a firm scientific and philosophical footing for the first time. In doing so, it provides what philosophers have sought through the ages: a sure foundation for human knowledge. Quantum Philosophy is a profound work of contemporary science and philosophy and an eloquent history of the long struggle to understand the nature of the world and of knowledge itself.

Quantum Philosophy: Understanding and Interpreting Contemporary Science such as the Copenhagen Interpretation, Shrodingers Cat, the EPR Paradox and Quantum Philosophy: Understanding and Interpreting Contemporary Science such as the Copenhagen Interpretation, Shrodingers Cat, the EPR Paradox and Quantum Philosophy is a profound work of contemporary science and philosophy and an eloquent history of the long struggle to understand the nature of the world and of knowledge itself. Roland Omnes is Professor Emeritus of Physics at the University of Paris-Sud. If we must rethink today the links between philosophy and science, it is because we are in the aftermath of a fracture. The most fundamental sciences, those In this magisterial work, Roland Omnes takes us from the academies of ancient Greece to the laboratories of modern science as he seeks to do no less than Quantum Philosophy is a profound work of contemporary science and philosophy and an eloquent history of the long struggle to understand the nature of the Find helpful customer reviews and review ratings for Quantum Philosophy: Understanding and Interpreting Contemporary Science at . Read honest Quantum Philosophy is a profound work of contemporary science and philosophy and an eloquent history of the long struggle to understand the nature of the Quantum Philosophy: Understanding and Interpreting Contemporary Science Roland Omnes, Arturo Sangalli ISBN: 9780691095516 Kostenloser Versand Quantum Philosophy: Understanding and Interpreting Contemporary Science Roland Omnes ISBN: 9780691027876 Kostenloser Versand fur alle Bucher mit Quantum Philosophy : Understanding and Interpreting Contemporary Science. Responsibility: Roland Omnes. Language: English. In English. Edition: Core Encuentra Quantum Philosophy: Understanding and Interpreting Contemporary Science de Roland Omnes, Roland Omnes, Arturo Sangalli (ISBN: Quantum Philosophy is a profound work of contemporary science and philosophy and an eloquent history of the long struggle to understand the nature of the world and of knowledge itself. Quantum Philosophy: Understanding and Interpreting Contemporary Science. Article in European Journal of Physics 20(4) July 1999 with 11 Buy Quantum Philosophy: Understanding and Interpreting Contemporary Science New Ed by Roland Omnes, Arturo Sangalli (ISBN: 9780691095516) from Scopri Quantum Philosophy: Understanding and Interpreting Contemporary Science di Roland Omnes, Arturo Sangalli: spedizione gratuita per i clienti Prime e Quantum Philosophy is a 2002 book by the physicist Roland Omnes, in which he aims to show Section I - a review of mathematics, epistemology and science from the Quantum Philosophy: Understanding and Interpreting Contemporary