



Quantum Meaning: A Semantic Interpretation of Quantum Theory

Ashish Dalela

Download now

[Click here](#) if your download doesn't start automatically

Quantum Meaning: A Semantic Interpretation of Quantum Theory

Ashish Dalela

Quantum Meaning: A Semantic Interpretation of Quantum Theory Ashish Dalela

The problems of indeterminism, uncertainty and statistics in quantum theory are legend and have spawned a wide-variety of interpretations, none too satisfactory. The key issue of discontent is the conflict between the microscopic and the macroscopic worlds: How does a classically certain world emerge from a world of uncertainty and probability? To attempt to solve this riddle, we must first understand the nature of atoms.

What If Atoms Are Not Things But Ideas?

In the Semantic Interpretation of Quantum Theory atomic objects are treated as symbols of meaning. The book shows that if atoms are symbols, then describing them as meaningless objects would naturally lead to problems of uncertainty, indeterminism, non-locality and probability.

For example, if we analyze a book in terms of physical properties, we can measure the frequencies of symbols but not their meanings. Current quantum theory measures symbol probabilities rather than meanings associated with symbol order. Unless quantum objects are treated as symbols, the succession or order amongst these objects will remain unpredictable.

Is Quantum Theory a Final Theory of Reality?

Quantum Meaning argues that the current quantum theory is not a final theory of reality. Rather, the theory can be replaced by a better one, in which objects are treated as symbols, rendering it free of indeterminism and probability. The Semantic Interpretation makes it possible to formulate new laws of nature. These laws will predict the order amongst symbols, similar to the notes in a musical composition or the words in a book.

How This Book Is Structured

Chapter 1: Quantum Information—discusses the quantum physics - classical physics conflict and connects it to the historical divide between primary and secondary properties. The consequences of introducing semantic information into physics are described.

Chapter 2: The Quantum Problem—surveys the “quantum weirdness” including issue such as discreteness, uncertainty, probability, wave-particle duality, non-locality and irreversibility.

Chapter 3: Developing the Intuitions—an informational view of nature is motivated by analyzing the problems that arise when symbols are treated as classical objects. The connection between problems of meaning and Gödel’s Incompleteness and Turing’s Halting Problem are discussed and certain foundational notions such as semantic space and quantum spacelets are introduced.

Chapter 4: The Semantic Interpretation—interprets standard constructs in the quantum formalism such as statistics, uncertainty, Schrödinger’s equation, non-locality and complementarity. The chapter shows how these constructs cease to be problematic when quanta are treated as symbols.

Chapter 5: Advanced Quantum Topics—extends the ideas in the previous chapter to interpret quasi-

particles, antiparticles, spin, the weak force, decoherence and the constant speed of light. The chapter discusses a semantic path to Quantum Gravity.

Chapter 6: Comparing Interpretations—compares the Semantic Interpretation with some well-known interpretations of quantum theory such as the Copenhagen Interpretation, the Ensemble Interpretation, the Many Worlds Interpretation, the Von Neumann/Wigner Interpretation, the Relational Interpretation, and the Objective Collapse Interpretation.

The book concludes by arguing that the quantum wavefunction—which is currently treated physically—can also be treated semantically. Much like a word can be understood as a sound vibration, but also has meaning, the quanta can also be treated as phonemes that symbolize meanings.

 [Download Quantum Meaning: A Semantic Interpretation of Quan ...pdf](#)

 [Read Online Quantum Meaning: A Semantic Interpretation of Qu ...pdf](#)

Download and Read Free Online Quantum Meaning: A Semantic Interpretation of Quantum Theory

Ashish Dalela

From reader reviews:

William Gannaway:

The book Quantum Meaning: A Semantic Interpretation of Quantum Theory can give more knowledge and information about everything you want. Why must we leave the good thing like a book Quantum Meaning: A Semantic Interpretation of Quantum Theory? A few of you have a different opinion about reserve. But one aim in which book can give many data for us. It is absolutely correct. Right now, try to closer together with your book. Knowledge or data that you take for that, you could give for each other; you may share all of these. Book Quantum Meaning: A Semantic Interpretation of Quantum Theory has simple shape but you know: it has great and big function for you. You can search the enormous world by start and read a reserve. So it is very wonderful.

Mike Gray:

This Quantum Meaning: A Semantic Interpretation of Quantum Theory is great reserve for you because the content which can be full of information for you who have always deal with world and also have to make decision every minute. That book reveal it details accurately using great organize word or we can claim no rambling sentences in it. So if you are read this hurriedly you can have whole facts in it. Doesn't mean it only will give you straight forward sentences but hard core information with lovely delivering sentences. Having Quantum Meaning: A Semantic Interpretation of Quantum Theory in your hand like getting the world in your arm, info in it is not ridiculous 1. We can say that no book that offer you world in ten or fifteen tiny right but this book already do that. So , this can be good reading book. Hi Mr. and Mrs. active do you still doubt that?

Rosalie Lloyd:

The book untitled Quantum Meaning: A Semantic Interpretation of Quantum Theory contain a lot of information on that. The writer explains her idea with easy approach. The language is very clear and understandable all the people, so do certainly not worry, you can easy to read this. The book was published by famous author. The author provides you in the new period of time of literary works. You can read this book because you can please read on your smart phone, or product, so you can read the book throughout anywhere and anytime. If you want to buy the e-book, you can start their official web-site as well as order it. Have a nice examine.

Bernice Bland:

As we know that book is essential thing to add our understanding for everything. By a reserve we can know everything we would like. A book is a group of written, printed, illustrated or maybe blank sheet. Every year ended up being exactly added. This reserve Quantum Meaning: A Semantic Interpretation of Quantum Theory was filled about science. Spend your time to add your knowledge about your science competence. Some people has various feel when they reading any book. If you know how big good thing about a book,

you can sense enjoy to read a e-book. In the modern era like right now, many ways to get book you wanted.

Download and Read Online Quantum Meaning: A Semantic Interpretation of Quantum Theory Ashish Dalela #2IUKB48TGPA

Read Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela for online ebook

Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela books to read online.

Online Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela ebook PDF download

Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela Doc

Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela Mobipocket

Quantum Meaning: A Semantic Interpretation of Quantum Theory by Ashish Dalela EPub