

The Non-Local Universe: The New Physics and Matters of the Mind

By Robert Nadeau, Menas Kafatos



The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos

Classical physics states that physical reality is local, or that a measurement at one point in space cannot cannot influence what occurs at another beyond a fairly short distance. Until recently this seemed like an immutable truth in nature. However, in 1997 experiments were conducted in which light particles (photons) originated under certain conditions and traveled in opposite directions to detectors located about seven miles apart. The amazing results indicated that the photons "interacted" or "communicated" with one another instantly or "in no time," leading to the revelation that physical reality is non-local--a discovery that Robert Nadeau and Menas Kafatos view as "the most momentous in the history of science."

In pursuing this groundbreaking argument, the authors provide a fascinating history of developments that led to the discovery of non-locality and the sometimes heated debate between the great scientists responsible for these discoveries. What this new knowledge reveals, the authors conclude, is that the connection between mind and nature is far more intimate than we previously dared to imagine. What they offer is a revolutionary look at the implications of non-locality, implications that reach deep into that most intimate aspect of humanity--consciousness.



Read Online The Non-Local Universe: The New Physics and Matt ...pdf

The Non-Local Universe: The New Physics and Matters of the Mind

By Robert Nadeau, Menas Kafatos

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos

Classical physics states that physical reality is local, or that a measurement at one point in space cannot cannot influence what occurs at another beyond a fairly short distance. Until recently this seemed like an immutable truth in nature. However, in 1997 experiments were conducted in which light particles (photons) originated under certain conditions and traveled in opposite directions to detectors located about seven miles apart. The amazing results indicated that the photons "interacted" or "communicated" with one another instantly or "in no time," leading to the revelation that physical reality is non-local--a discovery that Robert Nadeau and Menas Kafatos view as "the most momentous in the history of science."

In pursuing this groundbreaking argument, the authors provide a fascinating history of developments that led to the discovery of non-locality and the sometimes heated debate between the great scientists responsible for these discoveries. What this new knowledge reveals, the authors conclude, is that the connection between mind and nature is far more intimate than we previously dared to imagine. What they offer is a revolutionary look at the implications of non-locality, implications that reach deep into that most intimate aspect of humanity--consciousness.

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos Bibliography

Sales Rank: #994868 in Books
Published on: 2001-05-31
Released on: 2001-05-31
Original language: English

• Number of items: 1

• Dimensions: 5.10" h x .60" w x 7.80" l, .75 pounds

• Binding: Paperback

• 256 pages

Download The Non-Local Universe: The New Physics and Matter ...pdf

Read Online The Non-Local Universe: The New Physics and Matt ...pdf

Download and Read Free Online The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos

Editorial Review

From Publishers Weekly

The latest of many attempts to link subatomic physics to broader human concerns, this brisk, uneven volume splits neatly in two: the first half explains key ideas in quantum physics, and the second makes grand claims about their worth for other fields. Classical physics rules out "action at a distance." (You can't move a billiard ball unless something--a pool cue, an air jet, lightning--contacts it.) But quantum physics permits "non-local" action, and recent experiments prove it: do certain things to one photon, and you'll affect another faster than light can travel between the two. Hence, "all of physical reality is a single quantum system that responds together to further interactions," say the authors. Nadeau (a historian of science) and Kafatos (a physicist), both professors at George Mason University, move from these cogent, compact exegeses of quantum non-locality to its purported meanings for biology, philosophy and even economics. Non-locality, Nadeau and Kafatos contend--with its attendant "complementarity" between parts and wholes--helps explain the origins of life, speaks to the evolution of consciousness, solves the dilemmas of recent social and literary thought and bridges for good the divides between mind and matter, arts and sciences. The authors bring up, but don't always keep in mind, the difference between explanation and analogy. Some arguments "prove" truths most potential readers already know (e.g., we ought to work to save the rain forests); others (about evolution and about French theory) seem facile. Nonetheless, Nadeau and Kafatos supply plenty of food for thought: the apparently recondite concept of non-locality, they suggest, has consequences everywhere. (Jan.) Copyright 1999 Reed Business Information, Inc.

Review

"Nadeau and Kafatos supply plenty of food for thought: the apparently recondite concept of non-locality, they suggest, has consequences everywhere."--Publishers Weekly

About the Author

Robert Nadeau, a historian of science, has written seven books on the implications of advances in science and technology. **Menas Kafatos**, a physicist, has published numerous books and articles on computational science, astrophysics, earth systems science, general relativity and the foundations of quantum theory. They are both professors at George Mason University, in Fairfax, Virginia.

Users Review

From reader reviews:

Cicely Silber:

Why don't make it to become your habit? Right now, try to prepare your time to do the important work, like looking for your favorite book and reading a book. Beside you can solve your problem; you can add your knowledge by the reserve entitled The Non-Local Universe: The New Physics and Matters of the Mind. Try to the actual book The Non-Local Universe: The New Physics and Matters of the Mind as your good friend. It means that it can to become your friend when you really feel alone and beside those of course make you

smarter than ever. Yeah, it is very fortuned in your case. The book makes you more confidence because you can know almost everything by the book. So, we need to make new experience and knowledge with this book.

Edward Olivieri:

The book The Non-Local Universe: The New Physics and Matters of the Mind can give more knowledge and information about everything you want. Exactly why must we leave the best thing like a book The Non-Local Universe: The New Physics and Matters of the Mind? A number of you have a different opinion about reserve. But one aim this book can give many info for us. It is absolutely proper. Right now, try to closer using your book. Knowledge or info that you take for that, you can give for each other; you could share all of these. Book The Non-Local Universe: The New Physics and Matters of the Mind has simple shape however you know: it has great and massive function for you. You can appear the enormous world by start and read a reserve. So it is very wonderful.

Bertha Davis:

This The Non-Local Universe: The New Physics and Matters of the Mind book is absolutely not ordinary book, you have it then the world is in your hands. The benefit you obtain by reading this book is information inside this e-book incredible fresh, you will get facts which is getting deeper you read a lot of information you will get. This specific The Non-Local Universe: The New Physics and Matters of the Mind without we comprehend teach the one who reading it become critical in contemplating and analyzing. Don't possibly be worry The Non-Local Universe: The New Physics and Matters of the Mind can bring whenever you are and not make your tote space or bookshelves' come to be full because you can have it inside your lovely laptop even mobile phone. This The Non-Local Universe: The New Physics and Matters of the Mind having very good arrangement in word and also layout, so you will not sense uninterested in reading.

Darren Reid:

Guide is one of source of know-how. We can add our knowledge from it. Not only for students but additionally native or citizen need book to know the revise information of year in order to year. As we know those guides have many advantages. Beside all of us add our knowledge, also can bring us to around the world. With the book The Non-Local Universe: The New Physics and Matters of the Mind we can have more advantage. Don't one to be creative people? For being creative person must want to read a book. Just choose the best book that suited with your aim. Don't end up being doubt to change your life at this time book The Non-Local Universe: The New Physics and Matters of the Mind. You can more appealing than now.

Download and Read Online The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos

#0RTU6WHXEFN

Read The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos for online ebook

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos 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 The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos books to read online.

Online The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos ebook PDF download

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos Doc

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos Mobipocket

The Non-Local Universe: The New Physics and Matters of the Mind By Robert Nadeau, Menas Kafatos EPub