



# Is God a Mathematician?

By Mario Livio

Download now

Read Online ➔

## Is God a Mathematician? By Mario Livio

Bestselling author and astrophysicist Mario Livio examines the lives and theories of history's greatest mathematicians to ask how—if mathematics is an abstract construction of the human mind—it can so perfectly explain the physical world.

Nobel Laureate Eugene Wigner once wondered about “the unreasonable effectiveness of mathematics” in the formulation of the laws of nature. *Is God a Mathematician?* investigates why mathematics is as powerful as it is. From ancient times to the present, scientists and philosophers have marveled at how such a seemingly abstract discipline could so perfectly explain the natural world. More than that—mathematics has often made predictions, for example, about subatomic particles or cosmic phenomena that were unknown at the time, but later were proven to be true. Is mathematics ultimately invented or discovered? If, as Einstein insisted, mathematics is “a product of human thought that is independent of experience,” how can it so accurately describe and even predict the world around us?

Physicist and author Mario Livio brilliantly explores mathematical ideas from Pythagoras to the present day as he shows us how intriguing questions and ingenious answers have led to ever deeper insights into our world. This fascinating book will interest anyone curious about the human mind, the scientific world, and the relationship between them.

↓ [Download Is God a Mathematician? ...pdf](#)

📖 [Read Online Is God a Mathematician? ...pdf](#)

# Is God a Mathematician?

*By Mario Livio*

## Is God a Mathematician? By Mario Livio

Bestselling author and astrophysicist Mario Livio examines the lives and theories of history's greatest mathematicians to ask how—if mathematics is an abstract construction of the human mind—it can so perfectly explain the physical world.

Nobel Laureate Eugene Wigner once wondered about “the unreasonable effectiveness of mathematics” in the formulation of the laws of nature. *Is God a Mathematician?* investigates why mathematics is as powerful as it is. From ancient times to the present, scientists and philosophers have marveled at how such a seemingly abstract discipline could so perfectly explain the natural world. More than that—mathematics has often made predictions, for example, about subatomic particles or cosmic phenomena that were unknown at the time, but later were proven to be true. Is mathematics ultimately invented or discovered? If, as Einstein insisted, mathematics is “a product of human thought that is independent of experience,” how can it so accurately describe and even predict the world around us?

Physicist and author Mario Livio brilliantly explores mathematical ideas from Pythagoras to the present day as he shows us how intriguing questions and ingenious answers have led to ever deeper insights into our world. This fascinating book will interest anyone curious about the human mind, the scientific world, and the relationship between them.

## Is God a Mathematician? By Mario Livio Bibliography

- Rank: #89243 in eBooks
- Published on: 2011-02-22
- Released on: 2011-02-22
- Format: Kindle eBook

 [Download Is God a Mathematician? ...pdf](#)

 [Read Online Is God a Mathematician? ...pdf](#)

## Editorial Review

From Publishers Weekly

The title of astrophysicist Livio's latest wide-ranging science survey is a teaser since God rarely makes an appearance; along with the French astronomer Laplace, Livio has no need of that hypothesis. Rather, Livio (*The Golden Ratio*) is concerned with the contentious question: is mathematics a human invention? Or is it the intricate design of the universe that we are slowly discovering? Scientists in past centuries have argued for the latter, Platonist position. In the last 50 years, however, many scientists, calling into question the whole idea of scientific discovery, maintain that we have invented mathematics. Livio gives as one example the famous golden ratio, which has fascinated Western mathematicians for millennia and was originally emphasized for its mystical symbolism. But Chinese mathematicians, not sharing that outlook, didn't discover it—or maybe they just didn't need to invent it. Livio hedges his bets, unsatisfyingly arguing that mathematics is partly discovered and partly invented. But Livio is a smooth writer. His fans will enjoy this book, and new ones may discover him. B&w illus. (*Jan. 6*)

Copyright © Reed Business Information, a division of Reed Elsevier Inc. All rights reserved.

From [Booklist](#)

**\*Starred Review\*** Four centuries after church inquisitors accused Galileo of dangerous skepticism, a modern astrophysicist hails the Italian scientist as the embodiment of bold faith: namely, faith that God himself inscribed the heavens in mathematics. Because mathematics now empowers research communities investigating everything from deep-space pulsars to genetic proteins, a secularized version of Galileo's credo now defines the new orthodoxy of science. But Livio recognizes a profound mystery inherent in the formulas his colleagues employ so sedulously: Why does the universe harmonize so well with numbers accessible to human minds? Probing this mystery, Livio traces the evolution of mathematical reasoning from the ritual symbolism of the ancient Pythagoreans to the multilayered analyses of twenty-first-century string theorists. In the impressive parade of intellectual explorers, we encounter Archimedes pondering geometrical figures at the very moment of his death, Descartes overthrowing all of medieval philosophy with one audacious thought, and Gödel quashing the ambitions of system-building logicians. This wide-ranging inquiry, however, ultimately highlights far more than personalities. A sharp conflict emerges between platonically minded philosophers who view mathematical breakthroughs as transcendent discoveries and psychologically inclined thinkers who interpret these breakthroughs as merely human inventions. Testing the tensions between these views, Livio delivers an exhilarating foray into the founding premises of mathematical science. --Bryce Christensen

Unknown

"Is God a mathematician? In his new book Mario Livio delves into this question, putting it into a scientific, historical and philosophical context. He steers skillfully through deep and tricky waters, but writes with clarity and ease...Read the book and decide for yourself what the answer is." -- Sir Michael Atiyah, recipient of the Fields Medal, 1966, and the Abel Prize, 2004

"This highly readable book explores one of the most fascinating questions that lies at the heart of fundamental physics -- why is mathematics so effective in describing nature and is mathematics an invention of the human mind or part of the fabric of physical reality? Livio provides a wonderful review of the various issues, presents a wide variety of opinions, and in addition some fascinating insights of his own. I strongly recommend this volume to anyone interested in these questions." -- David Gross, 2004 Nobel Prize Winner in Physics, Frederick W. Gluck Professor of Theoretical Physics and Director, Kavli Institute For Theoretical Physics, University of California, Santa Barbara

"All science proceeds from the assumption that the cosmos is ordered in an intelligible way. Beneath the bewildering richness of natural phenomena there lies an elegant mathematical unity. How astonishing that the human mind is attuned to this hidden subtext of nature! With elegance and clarity, Mario Livio charts how, through science and mathematics, we have come to glimpse the fundamental rules on which the universe runs." -- Paul Davies, author of *The Goldilocks Enigma* and Director of the Beyond Center for Fundamental Concepts in Science, Arizona State University

"An exhilarating foray into the founding premises of mathematical science." -- *Booklist*

"Theologians have God, philosophers existence, and scientists mathematics. Mario Livio makes the case for how these three ideas might be related...Livio's rich history gives the discussions human force and verve." -- Sam Kean, *New Scientist*

## **Users Review**

### **From reader reviews:**

#### **Joanne Starks:**

Spent a free the perfect time to be fun activity to accomplish! A lot of people spent their down time with their family, or their own friends. Usually they doing activity like watching television, going to beach, or picnic from the park. They actually doing ditto every week. Do you feel it? Would you like to something different to fill your current free time/ holiday? Can be reading a book could be option to fill your no cost time/ holiday. The first thing that you ask may be what kinds of publication that you should read. If you want to test look for book, may be the e-book untitled Is God a Mathematician? can be great book to read. May be it might be best activity to you.

#### **Peter Holmes:**

The book Is God a Mathematician? has a lot details on it. So when you check out this book you can get a lot of advantage. The book was written by the very famous author. The writer makes some research ahead of write this book. This particular book very easy to read you may get the point easily after scanning this book.

#### **Julio Rico:**

The reason? Because this Is God a Mathematician? is an unordinary book that the inside of the reserve waiting for you to snap the item but latter it will shock you with the secret this inside. Reading this book close to it was fantastic author who write the book in such remarkable way makes the content within easier to understand, entertaining means but still convey the meaning thoroughly. So , it is good for you for not hesitating having this any more or you going to regret it. This excellent book will give you a lot of gains than the other book have such as help improving your ability and your critical thinking method. So , still want to hold off having that book? If I ended up you I will go to the guide store hurriedly.

**Albert Fragoso:**

Do you have something that you enjoy such as book? The reserve lovers usually prefer to decide on book like comic, quick story and the biggest the first is novel. Now, why not seeking Is God a Mathematician? that give your entertainment preference will be satisfied through reading this book. Reading behavior all over the world can be said as the opportunity for people to know world considerably better then how they react toward the world. It can't be stated constantly that reading routine only for the geeky man or woman but for all of you who wants to always be success person. So , for all of you who want to start reading through as your good habit, you can pick Is God a Mathematician? become your personal starter.

**Download and Read Online Is God a Mathematician? By Mario Livio #YCOEWRLXM4I**

# **Read Is God a Mathematician? By Mario Livio for online ebook**

Is God a Mathematician? By Mario Livio 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 Is God a Mathematician? By Mario Livio books to read online.

## **Online Is God a Mathematician? By Mario Livio ebook PDF download**

**Is God a Mathematician? By Mario Livio Doc**

**Is God a Mathematician? By Mario Livio Mobipocket**

**Is God a Mathematician? By Mario Livio EPub**

**YCOEWRLXM4I: Is God a Mathematician? By Mario Livio**