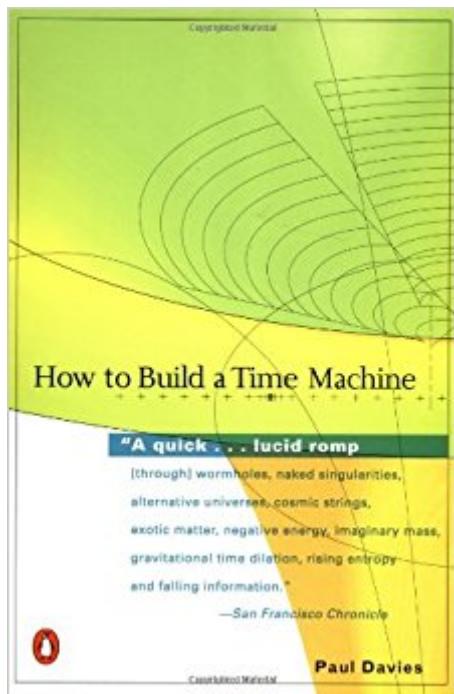


The book was found

# How To Build A Time Machine



## **Synopsis**

With his unique knack for making cutting-edge theoretical science effortlessly accessible, world-renowned physicist Paul Davies now tackles an issue that has boggled minds for centuries: Is time travel possible? The answer, insists Davies, is definitely yesâ "once you iron out a few kinks in the space-time continuum. With tongue placed firmly in cheek, Davies explains the theoretical physics that make visiting the future and revisiting the past possible, then proceeds to lay out a four-stage process for assembling a time machine and making it work. Wildly inventive and theoretically sound, How to Build a Time Machine is creative science at its bestâ "illuminating, entertaining, and thought provoking.

## **Book Information**

Paperback: 144 pages

Publisher: Penguin Books; Reprint edition (March 25, 2003)

Language: English

ISBN-10: 0142001864

ISBN-13: 978-0142001868

Product Dimensions: 5.1 x 0.4 x 7.7 inches

Shipping Weight: 2.1 ounces (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 stars 20 customer reviews

Best Sellers Rank: #82,280 in Books (See Top 100 in Books) #21 inÂ Books > Science & Math > Experiments, Instruments & Measurement > Time #112 inÂ Books > Textbooks > Science & Mathematics > Astronomy & Astrophysics #139 inÂ Books > Science & Math > Astronomy & Space Science > Astrophysics & Space Science

## **Customer Reviews**

"An entertaining tour around a fascinating topic, conducted by a world-class physicist" - SUNDAY TELEGRAPH --This text refers to an out of print or unavailable edition of this title.

Paul Davies is an internationally acclaimed theoretical physicist and the author of *God and the New Physics*, *The Mind of God*, and many other popular books. In 1995 he won the prestigious Templeton Prize for his work on the philosophical meaning of science and was recently awarded the Kelvin Medal by the UK Institute of Physics. Davies lives in Australia and frequently travels, teaches, and lectures in the United States.

I purchased this book for my 12 year. He's taken an interest in Quantum physics. He has kept such an interest in this book I am beyond amazed. He keeps it with him with his notebook and dictionary handy. There are some words he comes across that he's not familiar with which is completely understandable. This isn't a book for a 12 year old. It truly explains the concept of time travel not as a fantasy but as what you would have to do in order to achieve such a goal.

very good overview of the issues involved explained in layman's terms

A well written albeit short study in time machines. Interesting and not boring. A quick fun read. would recommend for a Saturday afternoon.

I recommend this reading because author uses clear and easy language to explain on the subject aimed topic. I Realized, however, that the author did not address the following situation: What would happen if a time traveler found his alter ego of the past?

Planckatron :)

Any book of P Davies is worth reading. As a specialist on timemachines, this is a good starter on this subject!

An inventive little book, artfully designed and compactly arranged into short sections, HOW TO BUILD A TIME MACHINEexplains the basic theories of time travel and then explores what means are required to achieve it. Paul Davies makes the strongest and, it would seem, irrefutable case for time travel into the future. But such "travel," based on Einstein's special theory of relativity, which distinguishes a "time-dilation factor" between two bodies moving at different speeds, is more like an exchange of times: a spaceship leaves Earth and approaches the speed of light; then it returns and the crew find that Earth has aged seven times faster than they have. They have avoided the standard speed of time on Earth, but still have aged by their spaceship time. Arriving, say, a hundred years "in the future," they resume their normal rate of aging on Earth, having turned themselves into visitors (or relicts) from the past. But they have not escaped time. The big question is whether they can go back--back to the year of their departure. Davies thinks they can. The best of conceivable methods, he determines, is the wormhole, a theoretical entity that links one space/time in the universe with another. Somehow he imagines that it could be managed by human beings on Earth who want to

travel from the present into the past. He doesn't trouble much over such questions as where one end of a natural wormhole would be, where the other, how people would get to one, and where the hell would they be when they came out the other, but rather embarks with great gusto on drawing up plans for building a serviceable wormhole right at home. Sliding cheerfully through "spacetime foam," "antigravity," "the chronology horizon" and other such slippery concepts, he finally focuses on the project of opening up the throat of his wormhole in the interstices of space and keeping it open so that anyone who enters it is not instantly "spaghettified" by a crushing singularity. How this project differs from counting the number of angels on the head of a pin is obvious: it is much more difficult and much more scientific. Davies pursues it in good humor, and to his credit does not avoid the mechanical difficulties. To open a wormhole, he calculates, you would need either an accelerator as large as the solar system or so much "negative energy" that it would take more time than the age of the universe to produce it. No matter, he concludes, science will get better and the job will someday get done. So much optimism, such high spirits! You can't dislike this book! Sober reasoning, of course, reminds you that time is not a thing that you can visit, like walking forward toward a mountain or back toward town. Time is the relationship between things that change. And so if you want to go back to things in a previous state, all those things would have to reverse their accrued changes simultaneously: water would rush back upstream, corpses would rise out of the ground, buildings would be unbuilt. But Davies and other theorists of time travel do not have such a past in mind. Rather, they assume that there is a historical continuum, a sort of museum of history that preserves every change in the universe in a long static hallway, and the successful time traveller will be able to go back and visit any room he chooses. How you get from our changing world to the fixed continuum, historical museum or alternate universe is a problem they never consider, because such a past does not exist. And so they prefer to play with intellectual games like "the twins paradox," "the mother paradox," and so on; even Stephen Hawking indulges in them. Final verdict: If you want to take pleasure in wormholes, go ahead: this is the perfect book. It's when the scientists start to request millions of dollars to build them that we should draw the line.

I have read other books by Paul Davies, and found this one as enlightening, entertaining and challenging as previous ones. This is serious science, not science fiction. Davies outlines in a very readable style, with good diagrams and humorous illustrations, the current thinking in Quantum Physics concerning the concept of time. He discusses the mechanical and mathematical possibilities of moving between points in time, reflecting on principles and implications in the Theory of Relativity. He discusses wormholes and how to create and control them, using anti-gravity,

negative energy and time dilation. He goes through the known steps necessary to create a time dilation by connecting one point of time in relation to a certain spatial location to different time conditions in another spatial location. This involves, of course, reflections on light speed and the physical and practical limitations involved in the state of the universes as we know it. This is fascinating reading, with both feet planted firmly on terra firma, but with the mind probing the depths and breadths of existence and possibilities within the laws of physics! Stimulating!

[Download to continue reading...](#)

BREAD MACHINE COOKBOOK: 120 Most Delicious Bread Machine Recipes (bread, bread bible, bread makers, breakfast, bread machine cookbook, bread baking, bread making, healthy, healthy recipes) The Bread Lover's Bread Machine Cookbook: A Master Baker's 300 Favorite Recipes for Perfect-Every-Time Bread-From Every Kind of Machine Bread Lover's Bread Machine Cookbook: A Master Baker's 300 Favorite Recipes for Perfect-Every-Time Bread-From Every Kind of Machine Bodybuilding: 48 Bodybuilding Secrets Proven To Help You Build Muscle, Build Strength And Build Mass In 30 Days Or Less (bodybuilding, fitness, strength training, bodybuilding training) How to Build a Time Machine The Bodybuilding Cookbook: 100 Delicious Recipes To Build Muscle, Burn Fat And Save Time (The Build Muscle, Get Shredded, Muscle & Fat Loss Cookbook Series) Bendy and the Ink Machine- An Animator's Tale: Book 1: Welcome to Joey Drew Studios! (Bendy and the Ink Machine - An Animator's Tale) The Sewing Machine Embroiderer's Bible: Get the Most from Your Machine with Embroidery Designs and Inbuilt Decorative Stitches Oster Expressbake Bread Machine Cookbook: 101 Classic Recipes With Expert Instructions For Your Bread Maker (Bread Machine & Bread Maker Recipes) Machine Made and Contemporary Marbles (Grist, Everett//Machine-Made and Contemporary Marbles) The Sewing Machine Accessory Bible: Get the Most Out of Your Machine---From Using Basic Feet to Mastering Specialty Feet Mastering Machine Applique: The Complete Guide Including: Invisible Machine Applique Satin Stitch Blanket Stitch & Much More Heirloom Machine Quilting: A Comprehensive Guide to Hand-Quilting Effects Using Your Sewing Machine Sewing Machine Magic: Make the Most of Your Machine--Demystify Presser Feet and Other Accessories \* Tips and Tricks for Smooth Sewing \* 10 Easy, Creative Projects The Complete Guide to Machine Quilting: How to Use Your Home Sewing Machine to Achieve Hand-Quilting Effects The Sewing Machine Classroom: Learn the Ins & Outs of Your Machine Bread Machine Recipes: 32 Bread Machine Recipes That Are Delicious and Easy to Make (Bread Cookbook Book 1) Viscoelastic Machine Elements: Elastomers and Lubricants in Machine Systems Bread Machine: Top 50 Best Bread Machine Recipes â “ The Quick, Easy, & Delicious Everyday Cookbook! Oster Expressbake Bread Machine Cookbook: 101 Classic Recipes With Expert

# Instructions For Your Bread Maker (Bread Machine & Bread Maker Recipes) (Volume 1)

[Contact Us](#)

[DMCA](#)

[Privacy](#)

[FAQ & Help](#)