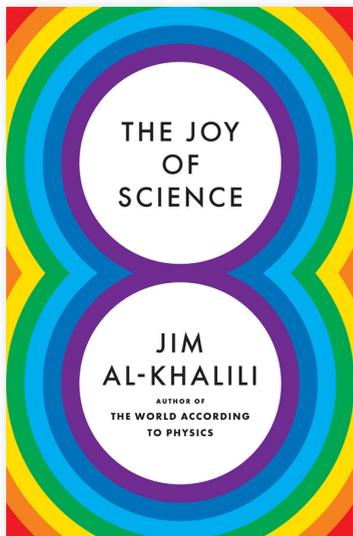


Princeton  
Physics &  
Astrophysics

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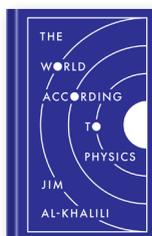
2022





“Jim Al-Khalili has distilled the very essence of science. This book is packed full of joy, inspiration, and real wisdom.”

—Alice Roberts, Professor of Public Engagement in Science, University of Birmingham



See page 6

Quantum physicist, *New York Times* bestselling author, and BBC host Jim Al-Khalili reveals how 8 lessons from the heart of science can help you get the most out of life

## The Joy of Science

Today’s world is unpredictable and full of contradictions, and navigating its complexities while trying to make the best decisions is far from easy. *The Joy of Science* presents 8 short lessons on how to unlock the clarity, empowerment, and joy of thinking and living a little more scientifically.

In this brief guide to leading a more rational life, acclaimed physicist Jim Al-Khalili invites readers to engage with the world as scientists have been trained to do. The scientific method has served humankind well in its quest to see things as they really are, and underpinning the scientific method are core principles that can help us all navigate modern life more confidently. Discussing the nature of truth and uncertainty, the role of doubt, the pros and cons of simplification, the value of guarding against bias, the importance of evidence-based thinking, and more, Al-Khalili shows how the powerful ideas at the heart of the scientific method are deeply relevant to the complicated times we live in and the difficult choices we make.

Read this book and discover the joy of science. It will empower you to think more objectively, see through the fog of your own preexisting beliefs, and lead a more fulfilling life.

**Jim Al-Khalili** is Distinguished Professor of Theoretical Physics at the University of Surrey and one of Britain’s best-known science communicators. He has written numerous books, including *The World According to Physics* (page 6); *Quantum: A Guide for the Perplexed*; and *Life on the Edge: The Coming of Age of Quantum Biology*. He is a fellow of the Royal Society and lives in Southsea, England.

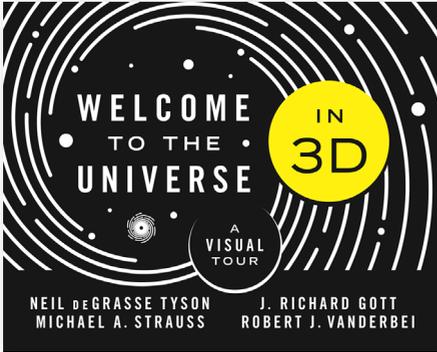
April 2022. 224 pages.

Hardback 9780691211572

ebook 9780691235660

\$16.95 | £12.99

Audiobook 9780691240329



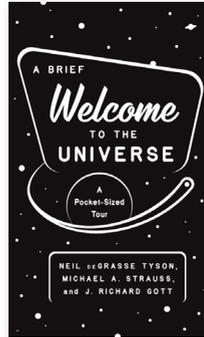
## Welcome to the Universe in 3D

*Welcome to the Universe in 3D* takes you on a grand tour of the observable universe, guiding you through the most spectacular sights in the cosmos—in breathtaking 3D. Presenting a rich array of stereoscopic color images, which can be viewed in 3D using a special stereo viewer that folds easily out of the cover of the book, this book reveals your cosmic environment as you have never seen it before.

Astronomy is the story of how humankind’s perception of the two-dimensional dome of the sky evolved into a far deeper comprehension of an expanding three-dimensional cosmos. This book invites you to take part in this story by exploring the universe in depth, as revealed by cutting-edge astronomical research and observations. The dramatic 3D images in this one-of-a-kind book will astonish you, extending your vision out to the farthest reaches of the universe.

**Neil deGrasse Tyson** is director of the Hayden Planetarium at the American Museum of Natural History. **Michael A. Strauss** is professor of astrophysical sciences at Princeton University. **J. Richard Gott** is professor emeritus of astrophysical sciences at Princeton. **Robert J. Vanderbei** is a professor at Princeton.

April 2022. 208 pages. 70 color illus.  
Hardback 9780691194073 \$24.95 | £20.00  
Audiobook 9780691212449

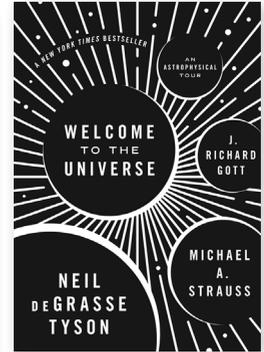


## A Brief Welcome to the Universe

*A Brief Welcome to the Universe* offers a breathtaking tour of the cosmos, from planets, stars, and galaxies to black holes and time loops. In this pocket-friendly book, bestselling authors and acclaimed astrophysicists Neil deGrasse Tyson, Michael A. Strauss, and J. Richard Gott take readers on an unforgettable journey of exploration to reveal how our universe actually works.

**Neil deGrasse Tyson, Michael A. Strauss & J. Richard Gott**

2021. 248 pages. 10 b/w illus.  
Paperback 9780691219943 \$14.95 | £9.99  
ebook 9780691223612

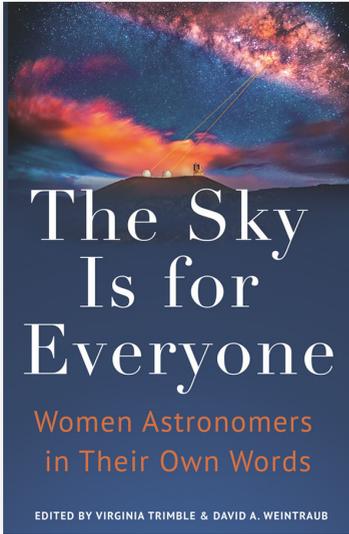


## Welcome to the Universe

*Welcome to the Universe* is a personal guided tour of the cosmos by three of today’s leading astrophysicists. Inspired by the enormously popular introductory astronomy course that Neil deGrasse Tyson, Michael A. Strauss, and J. Richard Gott taught together at Princeton, this book covers it all—from planets, stars, and galaxies to black holes, wormholes, and time travel.

**Neil deGrasse Tyson, Michael A. Strauss & J. Richard Gott**

2016. 480 pages. 95 color illus.  
Hardback 9780691157245 \$39.95 | £30.00  
ebook 9781400883226



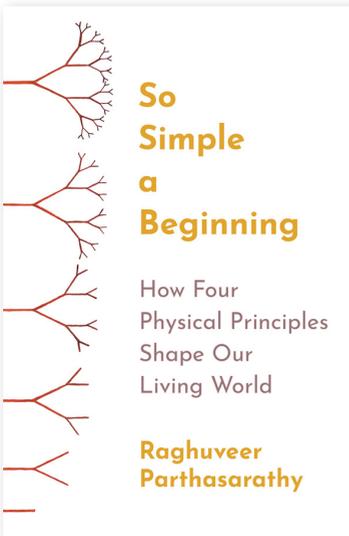
An inspiring anthology of writings by trailblazing women astronomers from around the globe

## The Sky Is for Everyone

*The Sky Is for Everyone* is an internationally diverse collection of autobiographical essays by women who broke down barriers and changed the face of modern astronomy. After decades of difficult struggles, women are closer to equality in astronomy than ever before. Virginia Trimble and David Weintraub bring together the stories of the tough and determined women who flung the doors of opportunity wide open. Taking readers from 1960 to today, this triumphant anthology serves as an inspiration to current and future generations of women scientists while giving voice to the history of a transformative era in astronomy.

**Virginia Trimble** is professor of physics and astronomy at the University of California, Irvine. **David A. Weintraub** is professor of astronomy, history, and the communication of science and technology at Vanderbilt University.

June 2022. 440 pages. 72 b/w illus.  
Hardback 9780691207100 \$29.95 | £25.00 ebook 9780691237367



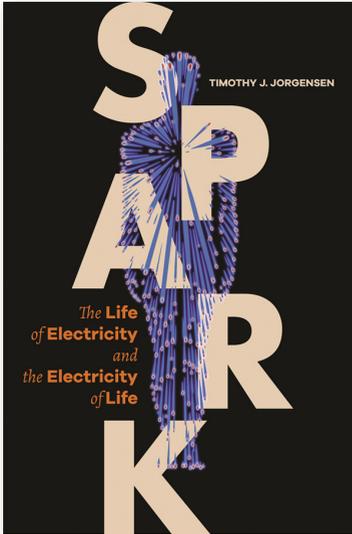
A biophysicist reveals the hidden unity behind nature's breathtaking complexity

## So Simple a Beginning

The living world is a realm of dazzling variety, yet a shared set of physical principles shapes the forms and behaviors of every creature in it. This book shows how the emerging new science of biophysics is transforming our understanding of life on Earth and enabling potentially lifesaving but controversial technologies such as gene editing, artificial organ growth, and ecosystem engineering. Featuring original watercolors and drawings by the author, this sweeping tour of biophysics offers new perspectives on how the wonders of life can arise from so simple a beginning.

**Raghuv eer Parthasarathy** is the Alec and Kay Keith Professor of Physics at the University of Oregon, where he is a member of the Institute of Molecular Biology and the Materials Science Institute.

February 2022. 336 pages. 119 color illus. 1 table.  
Hardback 9780691200408 \$35.00 | £28.00  
ebook 9780691231617 Audiobook 9780691234861



A fresh look at electricity and its powerful role in life on Earth

## Spark

Electricity is more than an external source of power, heat, or illumination. Life at its essence is nothing if not electrical. The story of how we came to understand electricity's essential role in all life is rooted in our observations of its influences on the body—influences governed by the body's central nervous system. Timothy Jorgensen shows how our views of electricity and the nervous system evolved in tandem, and how progress in one area enabled advancements in the other. Filled with gripping adventures in scientific exploration, *Spark* offers an indispensable look at electricity, how it works, and how it animates our lives from within and without.

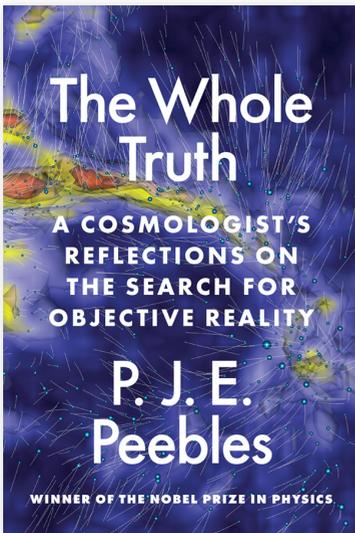
**Timothy J. Jorgensen** is professor of radiation medicine and director of the Health Physics Graduate Program at Georgetown University.

2021. 456 pages. 26 b/w illus.

Hardback 9780691197838

\$29.95 | £25.00

ebook 9780691232652



From the Nobel Prize–winning physicist, a personal meditation on the quest for objective reality in natural science

## The Whole Truth

A century ago, thoughtful people questioned how reality could agree with physical theories that keep changing, from a mechanical model of the ether to electric and magnetic fields, and from homogeneous matter to electrons and atoms. Today, concepts like dark matter and dark energy further complicate and enrich the search for objective reality. *The Whole Truth* is a personal reflection on this ongoing quest by one of the world's most esteemed cosmologists. A landmark work, *The Whole Truth* is essential reading for anyone interested in the practice of science.

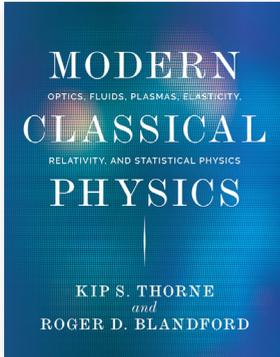
**P. J. E. Peebles** is a Nobel Prize–winning physicist and the Albert Einstein Professor of Science Emeritus in the Department of Physics at Princeton University.

June 2022. 240 pages. 1 b/w illus. 2 tables.

Hardback 9780691231358

\$27.95 | £22.00

ebook 9780691231365

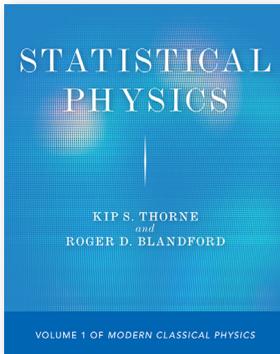


## Modern Classical Physics

This first-year graduate-level text and reference book covers the fundamental concepts and twenty-first-century applications of six major areas of classical physics: statistical physics, optics (waves of all sorts), elastodynamics, fluid mechanics, plasma physics, and special and general relativity and cosmology.

**Kip S. Thorne** is the Feynman Professor Emeritus of Theoretical Physics at Caltech. **Roger D. Blandford** is the Luke Blossom Professor in the School of Humanities and Sciences at Stanford University.

2017. 1552 pages. 349 color + 6 b/w illus. 15 tables.  
 Hardback 9780691159027 \$125.00 | £98.00 ebook 9781400874484

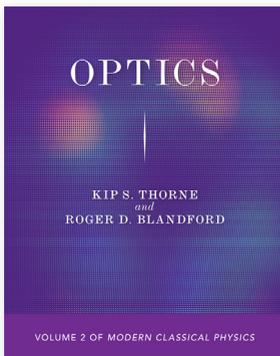


## Statistical Physics

*Statistical Physics* is an essential introduction that is different from others on the subject because of its unique approach, which is coordinate-independent and geometric; embraces and elucidates the close quantum-classical connection and the relativistic and Newtonian domains; and demonstrates the power of statistical techniques by presenting applications not only to the usual kinds of things, but also to a much wider range of phenomena, including black holes and the universe.

**Kip S. Thorne & Roger D. Blandford**

2021. 408 pages. 59 color + 4 b/w illus. 1 table.  
 Paperback 9780691206127 \$50.00 | £40.00 ebook 9780691215556

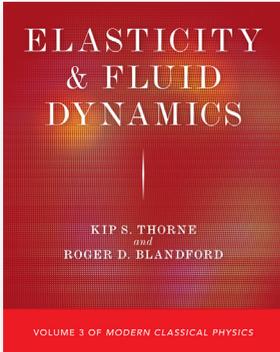


## Optics

“Optics” originally referred to the study of light, but today the field encompasses all types of waves. The past few decades have seen revolutions in optics—advances in nonlinear optics technology, a growing understanding of optical phenomena throughout the natural world, and an appreciation of the wide-ranging applicability of optics’ central principles. *Optics* shows how and why this subject—which was once a standard part of physics curricula—should again be routinely taught to physics students, as well as to students in engineering, computer science, and the natural sciences.

**Kip S. Thorne & Roger D. Blandford**

2021. 272 pages. 69 color + 2 b/w illus. 1 table.  
 Paperback 9780691207360 \$45.00 | £35.00 ebook 9780691215563

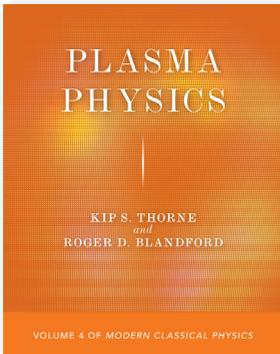


## Elasticity and Fluid Dynamics

Fluids and elastic solids are everywhere—from Earth’s crust to airplanes. They are central to modern physics, astrophysics, the Earth sciences, biophysics, medicine, chemistry, engineering, and technology, and this centrality has intensified in recent years. While both elasticity and fluid dynamics involve continuum physics and use similar mathematical tools and modes of reasoning, each subject can be readily understood without the other, and the book allows them to be taught independently.

**Kip S. Thorne & Roger D. Blandford**

2021. 480 pages. 112 color + 6 b/w illus. 5 tables.  
 Paperback 9780691207346 \$50.00 | £40.00 ebook 9780691215570

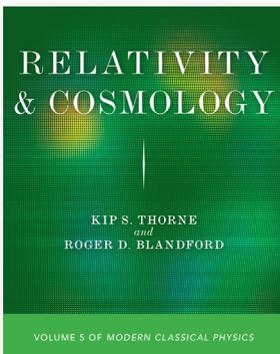


## Plasma Physics

*Plasma Physics* provides an essential introduction to the subject. Plasmas play a major role in many contemporary applications, phenomena, and fields, including attempts to achieve controlled thermonuclear fusion using magnetic or inertial confinement; in explanations of radio wave propagation in the ionosphere and the behavior of the solar corona and wind; and in astrophysics, where plasmas are responsible for emission throughout the electromagnetic spectrum.

**Kip S. Thorne & Roger D. Blandford**

2021. 304 pages. 53 color + 1 b/w illus. 2 table.  
 Paperback 9780691215501 \$50.00 | £40.00 ebook 9780691215532

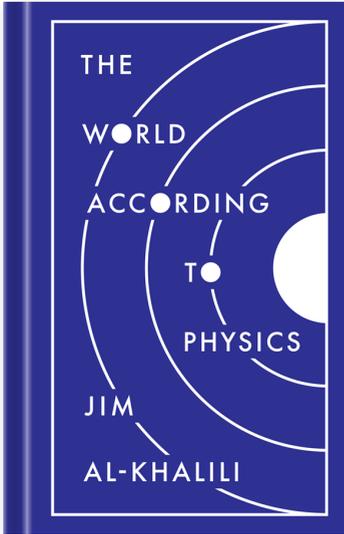


## Relativity and Cosmology

*Relativity and Cosmology* is an essential introduction to the subject, including remarkable recent advances. Written by award-winning physicists who have made fundamental contributions to the field and taught it for decades, the book differs from most others on the subject in important ways. While the book is designed to be used for a one-quarter or full-semester course, it goes deep enough to provide a foundation for understanding and participating in some areas of cutting-edge research.

**Kip S. Thorne & Roger D. Blandford**

2021. 416 pages. 56 color + 2 b/w illus. 1 table.  
 Paperback 9780691207391 \$60.00 | £48.00 ebook 9780691215549



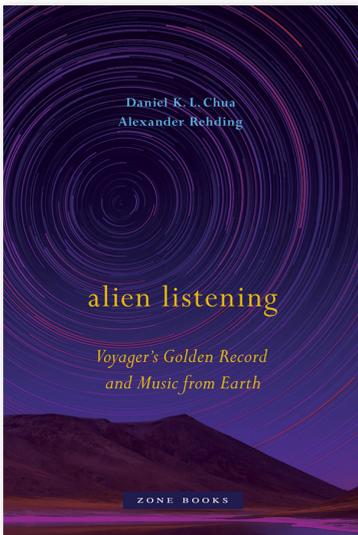
Quantum physicist, *New York Times* bestselling author, and BBC host Jim Al-Khalili offers a fascinating and illuminating look at what physics reveals about the world

## The World According to Physics

Jim Al-Khalili invites us all to understand what this important science tells us about the universe and the nature of reality itself. Al-Khalili begins by introducing the fundamental concepts of space, time, energy, and matter, and then describes the three pillars of modern physics—quantum theory, relativity, and thermodynamics—showing how all three must come together if we are ever to have a full understanding of reality. This book illuminates why physics matters to everyone and calls one and all to share in the adventure of seeking truth in the world around us.

**Jim Al-Khalili** is professor of physics at the University of Surrey.

2020. 336 pages. 6 b/w illus.  
Hardback 9780691182308 \$16.95 | £12.99  
ebook 9780691201672 Audiobook 9780691205052



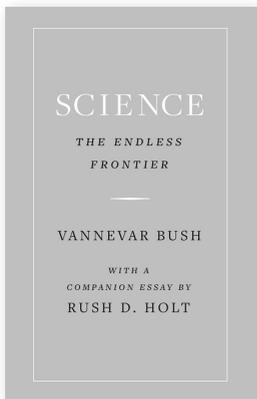
An examination of NASA's Golden Record that offers new perspectives and theories on how music can be analyzed, listened to, and thought about—by aliens and humans alike.

## Alien Listening

In 1977 NASA shot a mixtape into outer space. To date, the Golden Record is the only human-made object to have left the solar system. *Alien Listening* asks the big questions that the Golden Record raises: Can music live up to its reputation as the universal language in communications with the unknown? How do we fit all of human culture into a time capsule that will barrel through space for tens of thousands of years? Do aliens have ears?

**Daniel K. L. Chua** is Mr. and Mrs. Hung Hing-Ying Professor in the Arts and Chair Professor of Music at the University of Hong Kong. **Alexander Rehdling** is Fanny Peabody Professor of Music at Harvard University.

Zone Books  
2021. 272 pages. 51 b/w illus.  
Hardback 9781942130536 \$32.00 | £25.00 ebook 9781942130543



## Science, the Endless Frontier

*Science, the Endless Frontier* is recognized as the landmark argument for the essential role of science in society and government's responsibility to support scientific endeavors. This timely new edition presents this iconic text alongside a new companion essay from scientist and former congressman Rush Holt.

**Vannevar Bush** (1890–1974) was director of the US Office of Scientific Research and Development during World War II. **Rush D. Holt** is CEO emeritus of the American Association for the Advancement of Science.

2021. 192 pages. 1 b/w illus. 1 table.  
Hardback 9780691186627 \$12.95 | £9.99 ebook 9780691201658

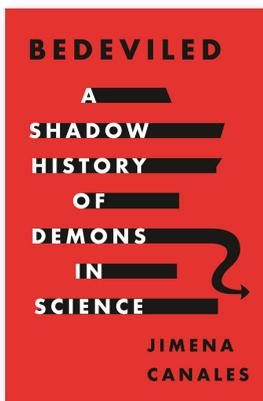


## Things Fall Together

Things in life tend to fall apart. Cars break down. Buildings fall into disrepair. Compelling and beautifully designed, *Things Fall Together* provides an insider's perspective on the materials revolution that lies ahead, revealing the spectacular possibilities for designing active materials that can self-assemble, collaborate, and one day even evolve and design on their own.

**Skylar Tibbits** is founder and codirector of the Self-Assembly Lab and Associate Professor of Design Research in the Department of Architecture at the Massachusetts Institute of Technology.

2021. 224 pages. 29 color + 13 b/w illus.  
Hardback 9780691170336 \$24.95 | £20.00  
ebook 9780691189710 Audiobook 9780691226569

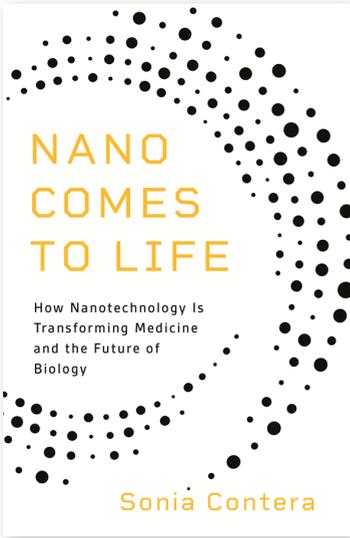


## Bedeviled

Science may be known for banishing the demons of superstition from the modern world. Yet just as the demon-haunted world was being exorcized by the enlightening power of reason, a new kind of demon mischievously materialized in the scientific imagination itself. Scientists began to employ hypothetical beings to perform certain roles in thought experiments and these impish assistants helped scientists achieve major breakthroughs that pushed forward the frontiers of science and technology.

**Jimena Canales** is a writer and faculty member of the Graduate College at the University of Illinois, Urbana-Champaign.

2020. 416 pages. 16 b/w illus.  
Hardback 9780691175324 \$29.95 | £25.00 ebook 9780691186078



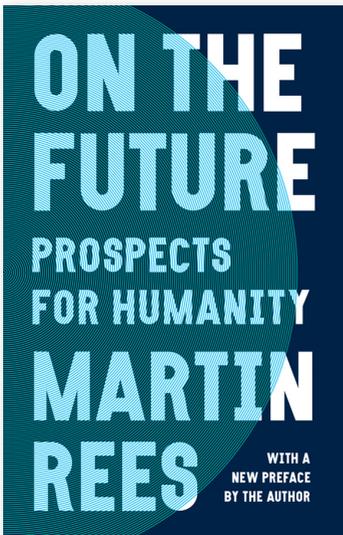
The nanotechnology revolution changing human health and longevity

## Nano Comes to Life

*Nano Comes to Life* opens a window onto the nanoscale—the infinitesimal realm of proteins and DNA where physics and cellular and molecular biology meet—and introduces readers to the rapidly evolving nanotechnologies that are allowing us to manipulate the very building blocks of life. Drawing on her perspective as one of today’s leading researchers in the field, Sonia Contera gives an insider’s perspective on this new frontier, revealing how nanotechnology enables a new kind of multidisciplinary science that is poised to give us control over our own biology, our health, and our lives.

**Sonia Contera** is professor of biological physics in the Department of Physics at the University of Oxford.

2021. 240 pages. 12 color + 11 b/w illus.  
Paperback 9780691206448 \$18.95 | £14.99 ebook 9780691189284



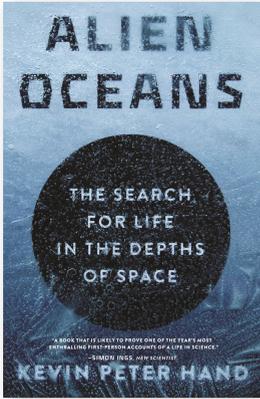
How to survive the century—starting now

## On the Future

Humanity has reached a critical moment. Our world is unsettled and rapidly changing, and we face existential risks over the next century. Various outcomes—good and bad—are possible. Yet our approach to the future is characterized by short-term thinking, polarizing debates, alarmist rhetoric, and pessimism. Renowned scientist and bestselling author Martin Rees argues that humanity’s prospects depend on our taking a different approach to planning for tomorrow. Rich with insights into cutting-edge science and technology, this book will captivate anyone who wants to understand the critical issues that will define the future of humanity on Earth and beyond.

**Martin Rees** is Astronomer Royal, and has been Master of Trinity College and Director of the Institute of Astronomy at Cambridge University.

2021. 280 pages.  
Paperback 9780691231068 \$12.95 | £9.99  
ebook 9780691231051 Audiobook 9780691192994

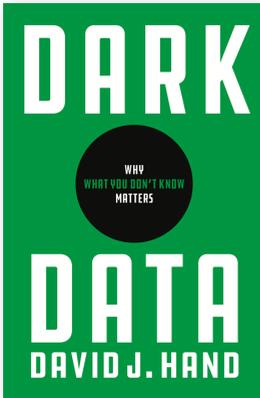


## Alien Oceans

Beneath the frozen crusts of the ice-covered moons of Jupiter and Saturn lurk vast oceans that may have existed for as long as Earth itself. Kevin Peter Hand explains how we know these oceans exist and shows how the exploration of Earth’s oceans is informing our understanding of the potential habitability of these distant worlds. *Alien Oceans* sets the stage for the transformative discoveries that may await us.

**Kevin Peter Hand** is a scientist at NASA’s Jet Propulsion Laboratory.

2021. 304 pages. 15 color + 22 b/w illus.  
 Paperback 9780691227283 \$18.95 | £14.99  
 ebook 9780691189642 Audiobook 9780691205595

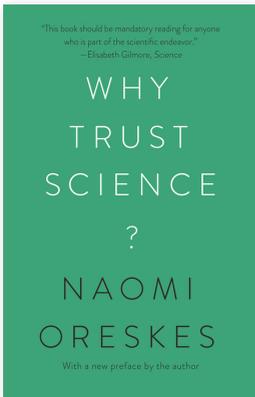


## Dark Data

In the era of big data, it is easy to imagine that we have all the information we need to make good decisions. In *Dark Data*, data expert David Hand takes us on a fascinating and enlightening journey into the world of the data we *don’t* see. Today, we all make decisions using data. *Dark Data* shows us all how to reduce the risk of making bad ones.

**David J. Hand** is emeritus professor of mathematics and senior research investigator at Imperial College London.

February 2022. 344 pages. 6 b/w illus. 6 tables.  
 Paperback 9780691234465 \$19.95 | £14.99  
 ebook 9780691198859 Audiobook 9780691199177

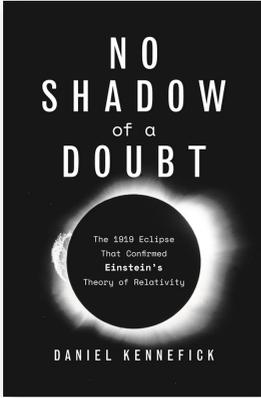


## Why Trust Science?

Naomi Oreskes offers a bold defense of science, revealing why the social character of scientific knowledge is its greatest strength—and the greatest reason we can trust it. Tracing the history and philosophy of science from the late nineteenth century to today, this timely book features a new preface by Oreskes and critical responses, as well as a foreword by political theorist Stephen Macedo.

**Naomi Oreskes** is the Henry Charles Lea Professor of the History of Science and affiliated professor of Earth and planetary sciences at Harvard University.

The University Center for Human Values Series  
 2021. 392 pages. 2 b/w illus. 1 table.  
 Paperback 9780691212265 \$18.95 | £14.99  
 ebook 9780691223370 Audiobook 9780691199139

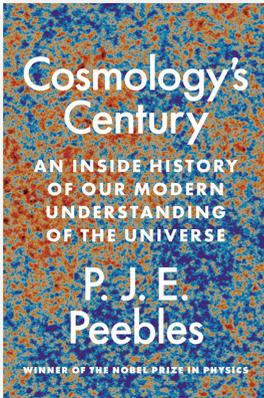


## No Shadow of a Doubt

In 1919, British scientists led expeditions to Brazil and Africa to test Albert Einstein’s new theory of general relativity in what became the century’s most celebrated scientific experiment. In *No Shadow of a Doubt*, Daniel Kennefick provides definitive answers by offering the most comprehensive and authoritative account of how expedition scientists overcame war, bad weather, and equipment problems to make the experiment a triumphant success.

**Daniel Kennefick** is associate professor of physics at the University of Arkansas, Fayetteville.

2021. 416 pages. 25 b/w illus.  
 Paperback 9780691217154 \$19.95 | £14.99 ebook 9780691190051

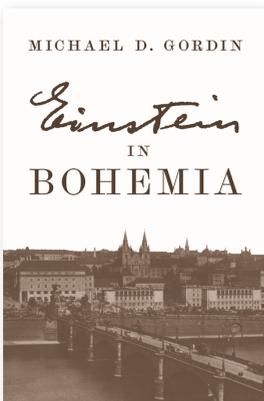


## Cosmology’s Century

Modern cosmology began with Albert Einstein’s general theory of relativity and his notion of a homogenous, philosophically satisfying cosmos. *Cosmology’s Century* is the story of how generations of scientists built on these ideas and many new measurements to arrive at a well-tested physical theory of the structure and evolution of our expanding universe. This book shares recollections from major players while providing a rare look at how science is really done.

**P. J. E. Peebles** is the Albert Einstein Professor of Science Emeritus in the Department of Physics at Princeton University.

April 2022. 440 pages. 16 color + 33 b/w illus. 3 tables.  
 Paperback 9780691234472 \$24.95 | £20.00 ebook 9780691201665

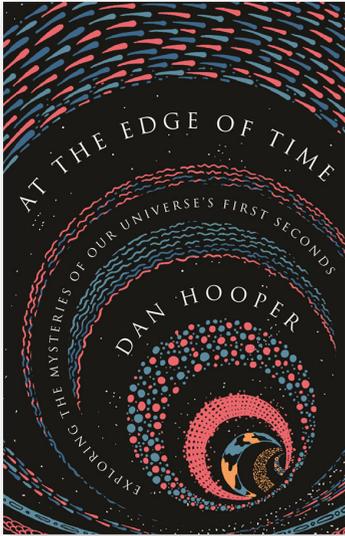


## Einstein in Bohemia

In the spring of 1911, Albert Einstein moved with his wife and two sons to Prague where he accepted a post as a professor of theoretical physics. He lived there for just sixteen months, an interlude that his biographies typically dismiss as a brief and inconsequential episode. *Einstein in Bohemia* sheds light on this transformative period of Einstein’s life and career, and brings vividly to life a beguiling city in the last years of the Austro-Hungarian Empire.

**Michael D. Gordin** is the Rosengarten Professor of Modern and Contemporary History at Princeton University.

February 2022. 360 pages. 7 b/w illus.  
 Paperback 9780691203829 \$19.95 | £14.99 ebook 9780691199849



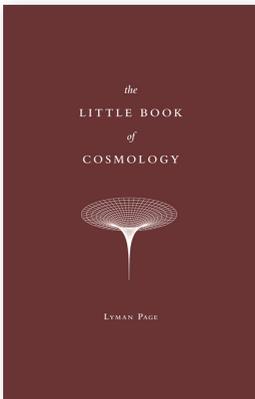
A new look at the first few seconds after the Big Bang—and how research into these moments continues to revolutionize our understanding of our universe

## At the Edge of Time

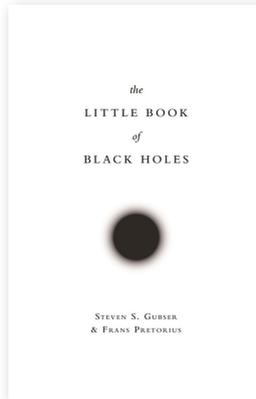
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**Dan Hooper** is a senior scientist and the head of the Theoretical Astrophysics Group at the Fermi National Accelerator Laboratory and a professor of astronomy and astrophysics at the University of Chicago.

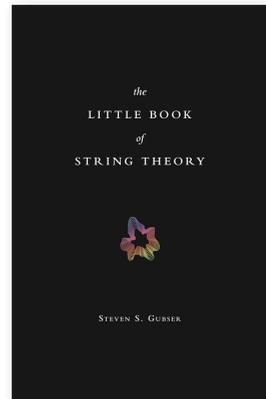
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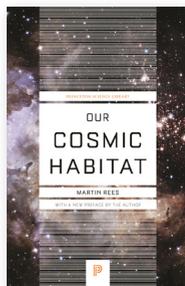
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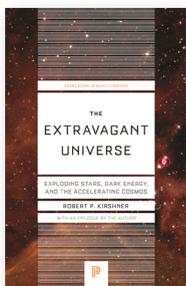
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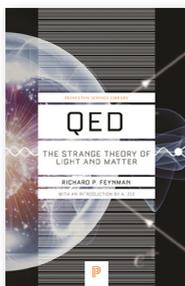
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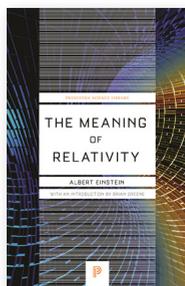
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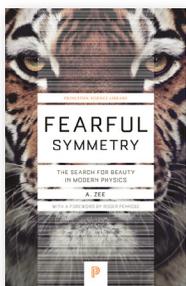
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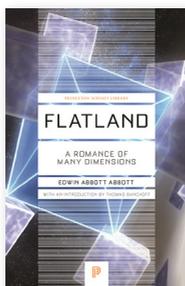
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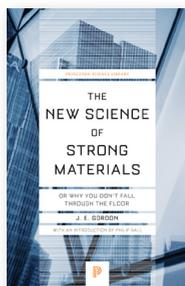
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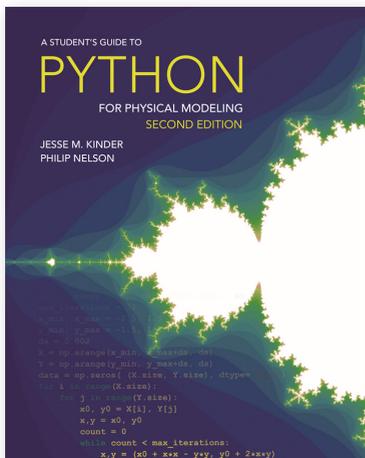
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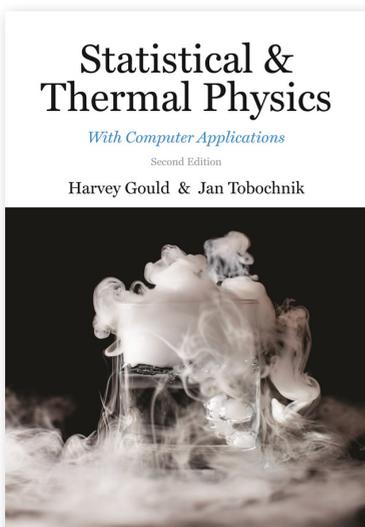
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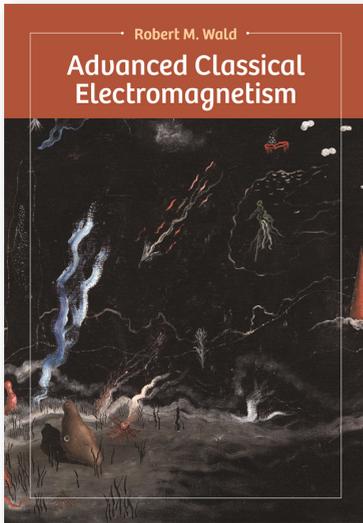
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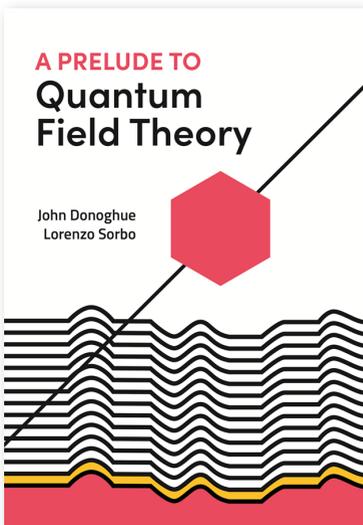
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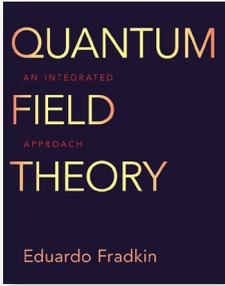
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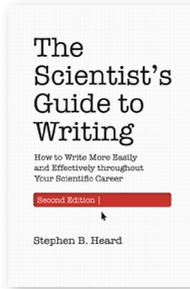
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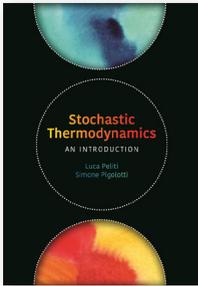
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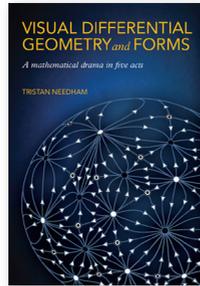
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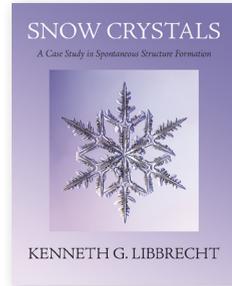
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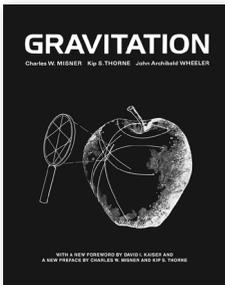
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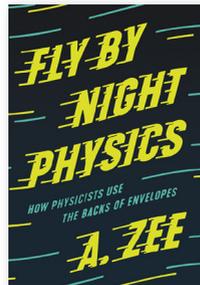
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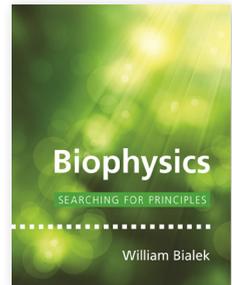
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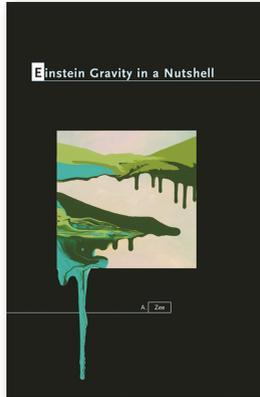
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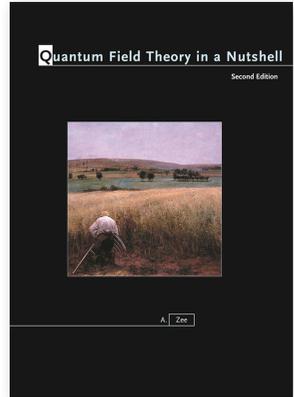
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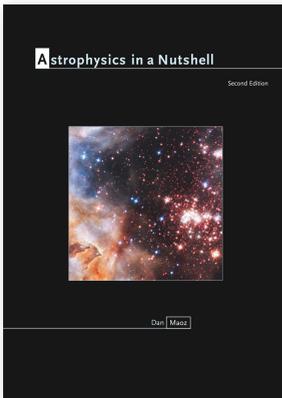
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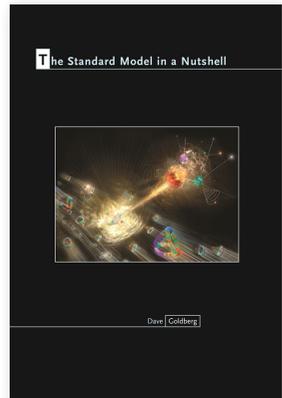
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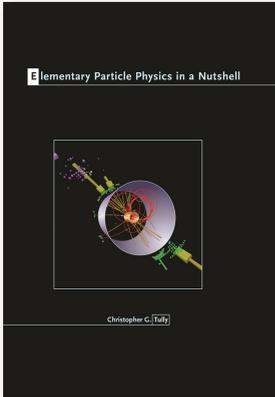
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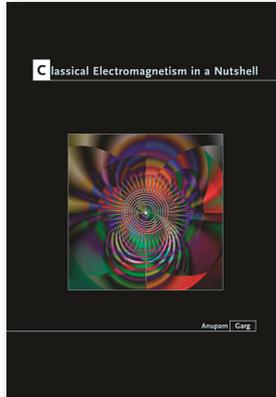
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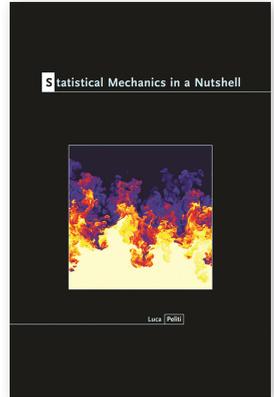
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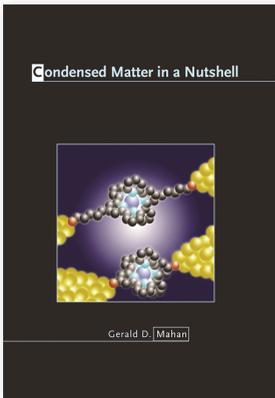
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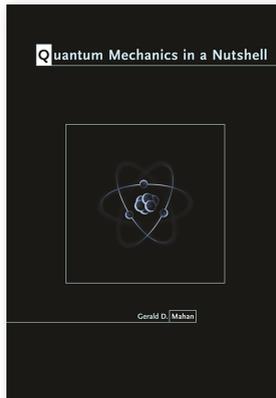
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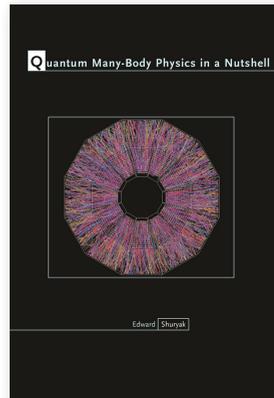
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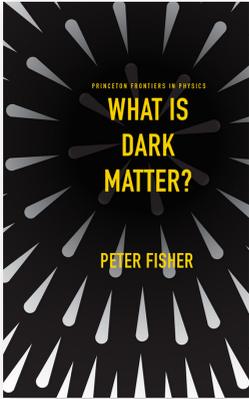
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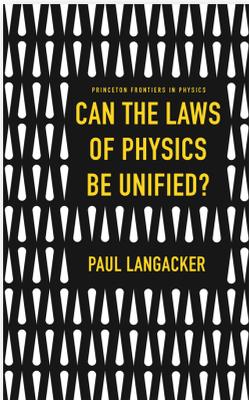


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**Peter Fisher** is the Thomas A. Frank (1977) Professor of Physics and serves as head of the Physics Department at the Massachusetts Institute of Technology.

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**Paul Langacker** is senior scientist at Princeton University, visitor at the Institute for Advanced Study in Princeton, and professor emeritus of physics at the University of Pennsylvania.

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**John Asher Johnson** is professor of astronomy at Harvard University.

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**Abraham Loeb** is professor of astronomy and director of the Institute for Theory and Computation at Harvard University.

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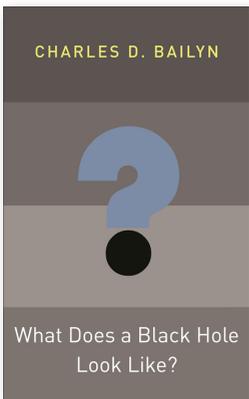


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**Joshua S. Bloom** is associate professor of astronomy at the University of California, Berkeley.

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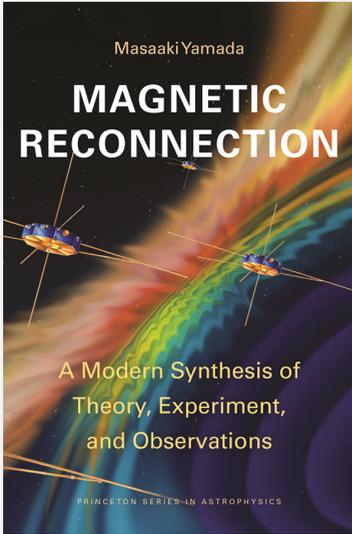


## What Does a Black Hole Look Like?

Black holes mark the edge of the universe—both physically and in our scientific understanding. Charles Bailyn goes behind the theory and physics of black holes to describe how astronomers are observing these enigmatic objects and developing a detailed picture of what they look like and how they interact with their surroundings. An introduction to a subject that was once on the border between physics and science fiction, this book shows how black holes are becoming routine objects of empirical scientific study.

**Charles D. Bailyn** is the A. Bartlett Giamatti Professor of Astronomy and Physics at Yale University.

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The essential introduction to magnetic reconnection—written by a leading pioneer of the field

## Magnetic Reconnection

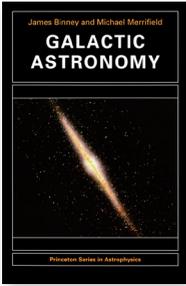
Plasmas comprise more than 99 percent of the visible universe; and, wherever plasmas are, magnetic reconnection occurs. In this common yet incompletely understood physical process, oppositely directed magnetic fields in a plasma meet, break, and then reconnect, converting the huge amounts of energy stored in magnetic fields into kinetic and thermal energy. In *Magnetic Reconnection*, Masaaki Yamada offers an illuminating synthesis of modern research and advances on this important topic. Magnetic reconnection produces such phenomena as solar flares and the northern lights, and occurs in nuclear fusion devices. A better understanding of this crucial cosmic activity is essential to comprehending the universe and varied technological applications, such as satellite communications.

Most of our knowledge of magnetic reconnection comes from theoretical and computational models and laboratory experiments, but space missions launched in recent years have added up-close observation and measurements to researchers' tools. Describing the fundamental physics of magnetic reconnection, Yamada links the theory with the latest results from laboratory experiments and space-based observations, including the Magnetic Reconnection Experiment (MRX) and the Magnetospheric Multiscale (MMS) Mission. He concludes by considering outstanding problems and laying out a road map for future research.

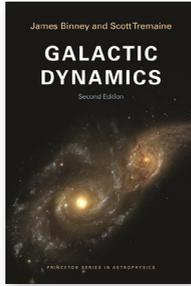
Aimed at advanced graduate students and researchers in plasma astrophysics, solar physics, and space physics, *Magnetic Reconnection* provides cutting-edge information on a vital area of scientific investigation.

**Masaaki Yamada** is Distinguished Laboratory Research Fellow at the Princeton Plasma Physics Laboratory and head of the Magnetic Reconnection Experiment.

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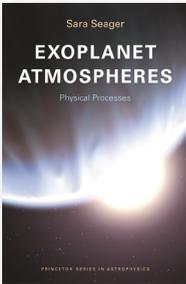
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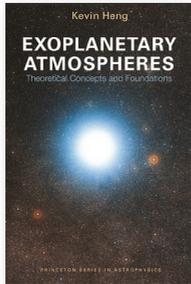
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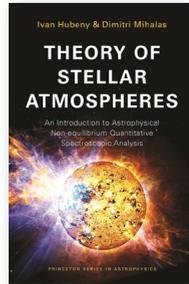
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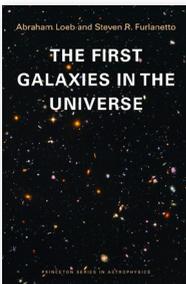
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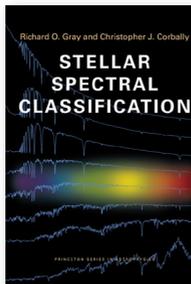
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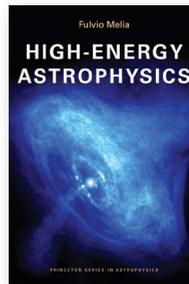
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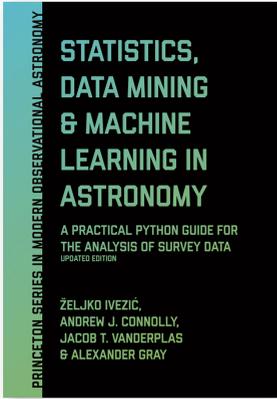
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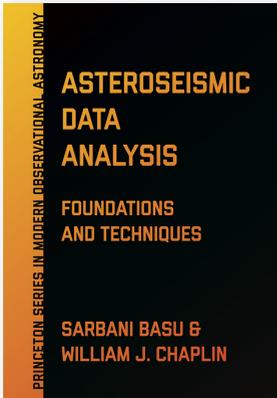


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Željko Ivezić is professor of astronomy at the University of Washington. Andrew J. Connolly is professor of astronomy at the University of Washington. Jacob T. VanderPlas is a software engineer at Google. Alexander Gray is vice president of AI science at IBM.

2019. 560 pages. 12 color + 187 b/w illus. 13 tables.  
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Sarbani Basu is a professor in the Department of Astronomy at Yale University. William J. Chaplin is a professor in the School of Physics and Astronomy at the University of Birmingham.

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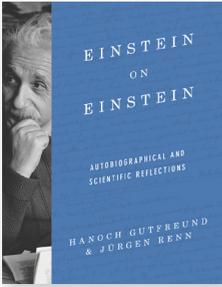
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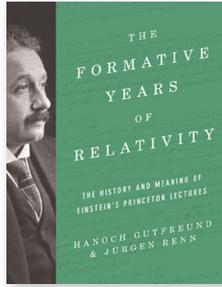
James J. Condon and Scott M. Ransom are astronomers at the National Radio Astronomy Observatory and research professors of astronomy at the University of Virginia.

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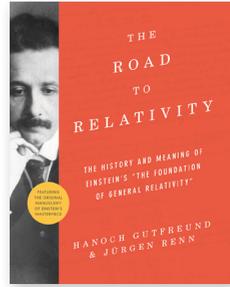
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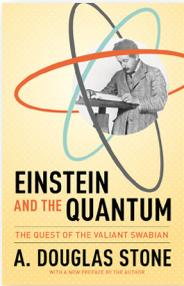
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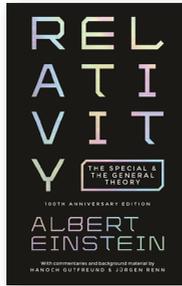
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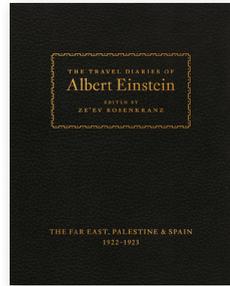
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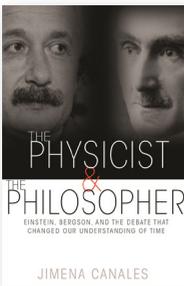
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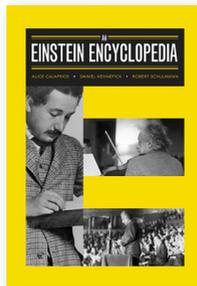
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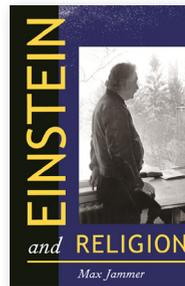
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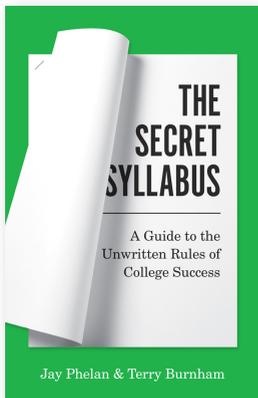
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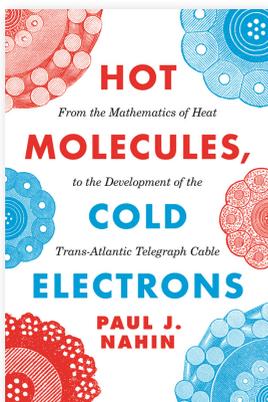


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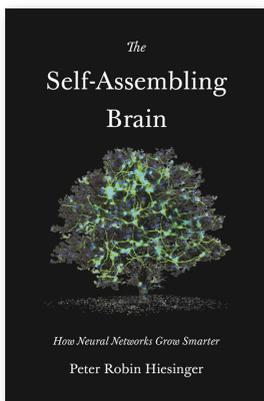


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