
The Science Of Interstellar Kip Thorne

The Fabric of the Cosmos
Beyond the God Particle
Interstellar
Cosmic Wormholes
Like a Splinter in Your Mind
Time Travel and Warp Drives
The Future of Spacetime
Optics
The Interstellar Age
The Wraparound Universe
100 Years of Relativity
Outside the Lines
Lazarus
Sleepless in Hollywood
Interstellar
Downwinders
Welcome to the Universe
The History of Medicine: A Very Short Introduction
Black Holes and Time Warps
Black Hole Blues and Other Songs from Outer Space
Making Starships and Stargates
The Biggest Ideas in the Universe
The End Is Always Near
The Elegant Universe
Relativity and Cosmology
Gravitation
The Pleasure of Finding Things Out
Interstellar: The Official Movie Novelization
Lab Coats in Hollywood
The Science Delusion
The Science of Interstellar
Elasticity and Fluid Dynamics: Volume 3 of Modern Classical Physics
The Butterfly Effect
Aliens
Modern Classical Physics
The Whole Shebang
Black Holes
Out There
Warped Passages
Death By Black Hole

*The Science Of
Interstellar* Kip Thorne

Downloaded from
process.ogleschool.edu by
guest

ROSS FARMER

The Fabric of the Cosmos University of Chicago Press

This collection from scientist and Nobel Peace Prize winner highlights the achievements of a man whose career reshaped the world's understanding of quantum electrodynamics. The Pleasure of Finding Things Out is a magnificent treasury of the best short works of Richard P. Feynman—from interviews and speeches to lectures and printed articles. A sweeping, wide-ranging collection, it presents an intimate and fascinating view of a life in science—a life like no other. From his ruminations on science in our culture to his Nobel Prize acceptance speech, this book will fascinate anyone interested in the world of ideas.

Beyond the God Particle Faber & Faber

Two leading physicists discuss the importance of the Higgs Boson, the future of particle physics, and the mysteries of the universe yet to be unraveled. Starting where Nobel Laureate Leon Lederman's bestseller *The God Particle* left off, this incisive new book explains what's next.

Interstellar Harper Collins

Now a New York Times Bestseller. The creator of the wildly popular award-winning podcast *Hardcore History* looks at some of the apocalyptic moments from the past as a way to frame the challenges of the future. Do tough times create tougher people? Can humanity handle the power of its weapons without destroying itself? Will human technology or capabilities ever peak or regress? No one knows the answers to such

questions, but no one asks them in a more interesting way than Dan Carlin. In *The End is Always Near*, Dan Carlin looks at questions and historical events that force us to consider what sounds like fantasy; that we might suffer the same fate that all previous eras did. Will our world ever become a ruin for future archaeologists to dig up and explore? The questions themselves are both philosophical and like something out of *The Twilight Zone*. Combining his trademark mix of storytelling, history and weirdness Dan Carlin connects the past and future in fascinating and colorful ways. At the same time the questions he asks us to consider involve the most important issue imaginable: human survival. From the collapse of the Bronze Age to the challenges of the nuclear era the issue has hung over humanity like a persistent Sword of Damocles. Inspired by his podcast, *The End is Always Near* challenges the way we look at the past and ourselves. In this absorbing compendium, Carlin embarks on a whole new set of stories and major cliffhangers that will keep readers enthralled. Idiosyncratic and erudite, offbeat yet profound, *The End is Always Near* examines issues that are rarely presented, and makes the past immediately relevant to our very turbulent present.

Cosmic Wormholes Princeton University Press

The veteran producer and author of the bestseller *Hello, He Lied* takes a witty and critical look at the new Hollywood. Over the past decade, producer Lynda Obst gradually realized she was working in a Hollywood that was undergoing a drastic transformation. The industry where everything had once been familiar to her was suddenly disturbingly strange. Combining her own industry

experience and interviews with the brightest minds in the business, Obst explains what has stalled the vast moviemaking machine. The calamitous DVD collapse helped usher in what she calls the New Abnormal (because Hollywood was never normal to begin with), where studios are now heavily dependent on foreign markets for profit, a situation which directly impacts the kind of entertainment we get to see. Can comedy survive if they don't get our jokes in Seoul or allow them in China? Why are studios making fewer movies than ever—and why are they bigger, more expensive and nearly always sequels or recycled ideas? Obst writes with affection, regret, humor and hope, and her behind-the-scenes vantage point allows her to explore what has changed in Hollywood like no one else has. This candid, insightful account explains what has happened to the movie business and explores whether it'll ever return to making the movies we love—the classics that make us laugh or cry, or that we just can't stop talking about.

Like a Splinter in Your Mind Grand Central Publishing

Summarizes what science has learned about the universe as of the end of the twentieth century, and offers predictions about what may emerge in the near future.

Time Travel and Warp Drives Simon and Schuster

What shape is the universe? Is it curved and closed in on itself? Is it expanding? Where is it headed? Could space be wrapped around itself, such that it produces ghost images of faraway galaxies? Such are the questions posed by Jean-Pierre Luminet in *The Wraparound Universe*, which he then addresses in clear and accessible language. An expert in black holes and

the big bang, he leads us on a voyage through the surprising byways of spacetime, where possible topologies of the universe, explorations of the infinite, and cosmic mirages combine their mysterious traits and unlock the imagination. *The Wraparound Universe* is a general-audience book about the overall topology or shape of the universe. The central question addressed is whether it is possible that the universe is wrapped around in an interesting way, and what impact this would have on astronomical observations and our understanding of cosmology. Along the way many of the general features and much of the history of the modern picture of cosmology are discussed.

The Future of Spacetime Anchor

Spacetime physics -- Physics in flat spacetime -- The mathematics of curved spacetime -- Einstein's geometric theory of gravity -- Relativistic stars -- The universe -- Gravitational collapse and black holes -- Gravitational waves -- Experimental tests of general relativity -- Frontiers

Optics Wiley-Blackwell

Introduces the superstring theory that attempts to unite general relativity and quantum mechanics

The Interstellar Age Vintage

A groundbreaking textbook on twenty-first-century fluids and elastic solids and their applications Kip Thorne and Roger Blandford's monumental *Modern Classical Physics* is now available in five stand-alone volumes that make ideal textbooks for individual graduate or advanced undergraduate courses on statistical physics; optics; elasticity and fluid dynamics; plasma physics; and relativity and cosmology. Each volume teaches the fundamental concepts, emphasizes modern, real-world applications, and gives students a

physical and intuitive understanding of the subject. *Elasticity and Fluid Dynamics* provides an essential introduction to these subjects. Fluids and elastic solids are everywhere—from Earth’s crust and skyscrapers to ocean currents and 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—so much so that a basic understanding of the behavior of elastic solids and fluids should be part of the repertoire of every physicist and engineer and almost every other natural scientist. 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, with the first two chapters introducing and covering elasticity and the last six doing the same for fluid dynamics. The book also can serve as supplementary reading for many other courses, including in astrophysics, geophysics, and aerodynamics. Includes many exercise problems Features color figures, suggestions for further reading, extensive cross-references, and a detailed index Optional “Track 2” sections make this an ideal book for a one-quarter or one-semester course in elasticity, fluid dynamics, or continuum physics An online illustration package is available to professors The five volumes, which are available individually as paperbacks and ebooks, are *Statistical Physics*; *Optics*; *Elasticity and Fluid Dynamics*; *Plasma Physics*; and *Relativity and Cosmology*. *The Wraparound Universe* Dutton Thanks to Einstein's relativity theories,

our notions of space and time underwent profound revisions about a 100 years ago. The resulting interplay between geometry and physics has dominated all of fundamental physics since then. This volume contains contributions from leading researchers, worldwide, who have thought deeply about the nature and consequences of this interplay. The articles take a long-range view of the subject and distill the most important advances in broad terms, making them easily accessible to non-specialists. The first part is devoted to a summary of how relativity theories were born (J Stachel). The second part discusses the most dramatic ramifications of general relativity, such as black holes (P Chrusciel and R Price), space-time singularities (H Nicolai and A Rendall), gravitational waves (P Laguna and P Saulson), the large scale structure of the cosmos (T Padmanabhan); experimental status of this theory (C Will) as well as its practical application to the GPS system (N Ashby). The last part looks beyond Einstein and provides glimpses into what is in store for us in the 21st century. Contributions here include summaries of radical changes in the notions of space and time that are emerging from quantum field theory in curved space-times (Ford), string theory (T Banks), loop quantum gravity (A Ashtekar), quantum cosmology (M Bojowald), discrete approaches (Dowker, Gambini and Pullin) and twistor theory (R Penrose). *100 Years of Relativity* W. W. Norton & Company The official movie novelization to the eagerly anticipated new film by Christopher Nolan. *Interstellar* chronicles the adventures of a group of explorers who make use of a newly discovered wormhole to surpass the limitations on

human space travel and conquer the vast distances involved in an interstellar voyage. Based on the film from Warner Bros. Pictures and Paramount Pictures INTERSTELLAR and all related characters and elements are trademarks of and © Warner Bros. Entertainment Inc. (s14) Outside the Lines Picador USA

The New York Times bestselling tour of the cosmos from three of today's leading astrophysicists 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. Describing the latest discoveries in astrophysics, the informative and entertaining narrative propels you from our home solar system to the outermost frontiers of space. How do stars live and die? Why did Pluto lose its planetary status? What are the prospects of intelligent life elsewhere in the universe? How did the universe begin? Why is it expanding and why is its expansion accelerating? Is our universe alone or part of an infinite multiverse? Answering these and many other questions, the authors open your eyes to the wonders of the cosmos, sharing their knowledge of how the universe works. Breathtaking in scope and stunningly illustrated throughout, Welcome to the Universe is for those who hunger for insights into our evolving universe that only world-class astrophysicists can provide.

Lazarus Simon and Schuster

How science consultants make movie science plausible, in films ranging from 2001: A Space Odyssey to Finding Nemo.

Stanley Kubrick's 2001: A Space Odyssey, released in 1968, is perhaps the most scientifically accurate film ever produced. The film presented such a plausible, realistic vision of space flight that many moon hoax proponents believe that Kubrick staged the 1969 moon landing using the same studios and techniques. Kubrick's scientific verisimilitude in 2001 came courtesy of his science consultants—including two former NASA scientists—and the more than sixty-five companies, research organizations, and government agencies that offered technical advice. Although most filmmakers don't consult experts as extensively as Kubrick did, films ranging from A Beautiful Mind and Contact to Finding Nemo and The Hulk have achieved some degree of scientific credibility because of science consultants. In Lab Coats in Hollywood, David Kirby examines the interaction of science and cinema: how science consultants make movie science plausible, how filmmakers negotiate scientific accuracy within production constraints, and how movies affect popular perceptions of science. Drawing on interviews and archival material, Kirby examines such science consulting tasks as fact checking and shaping visual iconography. Kirby finds that cinema can influence science as well: Depictions of science in popular films can promote research agendas, stimulate technological development, and even stir citizens into political action.

Sleepless in Hollywood W. W. Norton & Company

"Kip Thorne and Roger Blandford's monumental Modern Classical Physics is now available in five stand-alone volumes that make ideal textbooks for individual graduate or advanced

undergraduate courses on statistical physics; optics; elasticity and fluid dynamics; plasma physics; and relativity and cosmology. Each volume teaches the fundamental concepts, emphasizes modern, real-world applications, and gives students a physical and intuitive understanding of the subject. 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--particularly statistical mechanics--by presenting applications not only to the usual kinds of things, such as gases, liquids, solids, and magnetic materials, but also to a much wider range of phenomena, including black holes, the universe, information and communication, and signal processing amid noise. Includes many exercise problems Features color figures, suggestions for further reading, extensive cross-references, and a detailed index Optional "Track 2" sections make this an ideal book for a one-quarter, half-semester, or full-semester course An online illustration package is available to professors The five volumes, which are available individually as paperbacks and ebooks, are Statistical Physics; Optics; Elasticity and Fluid Dynamics; Plasma Physics; and Relativity and Cosmology." --

Amazon.com.

[Interstellar](#) Titan Books (US, CA)
 NATIONAL BESTSELLER • From one of the world's leading physicists and author of the Pulitzer Prize finalist *The Elegant Universe*, comes "an astonishing ride" through the universe (*The New York Times*) that makes us look at reality in a

completely different way. Space and time form the very fabric of the cosmos. Yet they remain among the most mysterious of concepts. Is space an entity? Why does time have a direction? Could the universe exist without space and time? Can we travel to the past? Greene has set himself a daunting task: to explain non-intuitive, mathematical concepts like String Theory, the Heisenberg Uncertainty Principle, and Inflationary Cosmology with analogies drawn from common experience. From Newton's unchanging realm in which space and time are absolute, to Einstein's fluid conception of spacetime, to quantum mechanics' entangled arena where vastly distant objects can instantaneously coordinate their behavior, Greene takes us all, regardless of our scientific backgrounds, on an irresistible and revelatory journey to the new layers of reality that modern physics has discovered lying just beneath the surface of our everyday world.

Downwinders World Scientific

The authoritative story of the headline-making discovery of gravitational waves—by an eminent theoretical astrophysicist and award-winning writer. From the author of *How the Universe Got Its Spots* and *A Madman Dreams of Turing Machines*, the epic story of the scientific campaign to record the soundtrack of our universe. Black holes are dark. That is their essence. When black holes collide, they will do so unilluminated. Yet the black hole collision is an event more powerful than any since the origin of the universe. The profusion of energy will emanate as waves in the shape of spacetime: gravitational waves. No telescope will ever record the event; instead, the only evidence would be the sound of

spacetime ringing. In 1916, Einstein predicted the existence of gravitational waves, his top priority after he proposed his theory of curved spacetime. One century later, we are recording the first sounds from space, the soundtrack to accompany astronomy's silent movie. In *Black Hole Blues and Other Songs from Outer Space*, Janna Levin recounts the fascinating story of the obsessions, the aspirations, and the trials of the scientists who embarked on an arduous, fifty-year endeavor to capture these elusive waves. An experimental ambition that began as an amusing thought experiment, a mad idea, became the object of fixation for the original architects—Rai Weiss, Kip Thorne, and Ron Drever. Striving to make the ambition a reality, the original three gradually accumulated an international team of hundreds. As this book was written, two massive instruments of remarkably delicate sensitivity were brought to advanced capability. As the book draws to a close, five decades after the experimental ambition began, the team races to intercept a wisp of a sound with two colossal machines, hoping to succeed in time for the centenary of Einstein's most radical idea. Janna Levin's absorbing account of the surprises, disappointments, achievements, and risks in this unfolding story offers a portrait of modern science that is unlike anything we've seen before.

Welcome to the Universe Basic Books

The universe has many secrets. It may hide additional dimensions of space other than the familiar three we recognize. There might even be another universe adjacent to ours, invisible and unattainable . . . for now. *Warped Passages* is a brilliantly readable and altogether exhilarating journey that

tracks the arc of discovery from early twentieth-century physics to the razor's edge of modern scientific theory. One of the world's leading theoretical physicists, Lisa Randall provides astonishing scientific possibilities that, until recently, were restricted to the realm of science fiction. Unraveling the twisted threads of the most current debates on relativity, quantum mechanics, and gravity, she explores some of the most fundamental questions posed by Nature—taking us into the warped, hidden dimensions underpinning the universe we live in, demystifying the science of the myriad worlds that may exist just beyond our own.

The History of Medicine: A Very Short Introduction Princeton University Press

A groundbreaking text and reference book on twenty-first-century classical physics and its applications 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 that every masters- or PhD-level physicist should be exposed to, but often isn't: statistical physics, optics (waves of all sorts), elastodynamics, fluid mechanics, plasma physics, and special and general relativity and cosmology. Growing out of a full-year course that the eminent researchers Kip Thorne and Roger Blandford taught at Caltech for almost three decades, this book is designed to broaden the training of physicists. Its six main topical sections are also designed so they can be used in separate courses, and the book provides an invaluable reference for researchers. Presents all the major fields of classical physics except three prerequisites: classical mechanics, electromagnetism, and elementary thermodynamics Elucidates

the interconnections between diverse fields and explains their shared concepts and tools Focuses on fundamental concepts and modern, real-world applications Takes applications from fundamental, experimental, and applied physics; astrophysics and cosmology; geophysics, oceanography, and meteorology; biophysics and chemical physics; engineering and optical science and technology; and information science and technology Emphasizes the quantum roots of classical physics and how to use quantum techniques to elucidate classical concepts or simplify classical calculations Features hundreds of color figures, some five hundred exercises, extensive cross-references, and a detailed index An online illustration package is available [Black Holes and Time Warps](#) CRC Press Against the backdrop of unprecedented concern for the future of health care, this i Very Short Introduction/i surveys the history of medicine from classical times to the present. Focussing on the key turning points in the history of Western medicine - such as the advent of hospitals and therise of experimental medicine - but also offering reflections on alternative traditions such as Chinese

medicine, Bill Bynum offers insights into medicine's past, while at the same time engaging with contemporary issues, discoveries, and controversies.

[Black Hole Blues and Other Songs from Outer Space](#) HarperCollins

Like a Splinter in Your Mind leads readers through the myriad of philosophical themes within the Matrix trilogy, helping them to gain a better understanding of the films and of philosophy itself. Offers a way into philosophy through the Matrix films. Covers thirteen of the biggest philosophical questions in thirteen self-sufficient chapters suitable for course use. Demonstrates how each of these questions is illustrated through the events and characters of the films. Considers whether sentient machines are possible, and whether we should expect them to face the same existentialist issues that we do. Familiarises readers with key issues in metaphysics, epistemology, ethics, philosophy of mind, race and gender, existentialism, Taoism and mysticism. Includes a chapter that explains some of the technical elements of the films and confusing aspects of the plot. Also includes a Matrix glossary, and a cast of characters and their related symbolism.

Best Sellers - Books :

- [The Courage To Be Free: Florida's Blueprint For America's Revival](#) By Ron Desantis
- [Fast Like A Girl: A Woman's Guide To Using The Healing Power Of Fasting To Burn Fat, Boost Energy, And Balance Hormones](#)
- [The Creative Act: A Way Of Being](#)
- [A Court Of Mist And Fury \(a Court Of Thorns And Roses, 2\)](#) By Sarah J. Maas
- [The Five-star Weekend](#) By Elin Hilderbrand
- [The Light We Carry: Overcoming In Uncertain Times](#)
- [It's Not Summer Without You](#)
- [Rich Dad Poor Dad: What The Rich Teach Their Kids About Money That The Poor And Middle Class Do Not!](#)
- [Kindergarten, Here I Come!](#) By D.j. Steinberg
- [Saved: A War Reporter's Mission To Make It Home](#)