

Deep Simplicity Chaos Complexity And The Emergence

This is likewise one of the factors by obtaining the soft documents of this **Deep Simplicity Chaos Complexity And The Emergence** by online. You might not require more mature to spend to go to the books start as capably as search for them. In some cases, you likewise accomplish not discover the broadcast Deep Simplicity Chaos Complexity And The Emergence that you are looking for. It will definitely squander the time.

However below, once you visit this web page, it will be hence agreed easy to acquire as well as download lead Deep Simplicity Chaos Complexity And The Emergence

It will not say you will many era as we run by before. You can complete it though con something else at home and even in your workplace. appropriately easy! So, are you question? Just exercise just what we come up with the money for under as with ease as evaluation **Deep Simplicity Chaos Complexity And The Emergence** what you in the manner of to read!

Frontiers of Complexity - Peter Coveney 1996-08-27

"SCIENCE JOURNALISM AT ITS BEST. . . An impeccably researched, amazingly up-to-date, crisply written and well-illustrated survey." --Nature At the cutting edge of the sciences, a dynamic new concept is emerging: complexity. In this groundbreaking new book, Peter Coveney and Roger Highfield explore how complexity in mathematics, physics, biology, chemistry, and even the social sciences is transforming not only the way we think about the universe, but also the very assumptions that underlie conventional science. Complexity is a watchword for a new way of thinking about the behavior of interacting units, whether they are atoms, ants in a colony, or neurons firing in a human brain. The rise of the electronic computer provided both the key and the catalyst to our exploration of complexity. A new generation of computers that runs on light and exploits the bizarre properties of quantum mechanics promises to deepen our understanding still further. The advances we have already witnessed are spectacular. The authors take us inside laboratories where scientists are evolving the genetic molecules that enabled life to emerge on earth and generating universes teeming with virtual creatures in cyber-space. We witness the utterly realistic behavior of a school of virtual fish--computer-generated replicas that have been trained to swim gracefully, hunt for food, and scatter at the approach of a leopard shark. Compelling in its clarity, far-reaching in its implications, vibrant with the excitement of new discovery, *Frontiers of Complexity* is an arresting account of how far science has come in the past fifty years and an essential guide to the rapidly approaching future. "[A] MARVELOUS AND COMPREHENSIVE WORK . . . Virtually any scientist or interested lay reader will find this book engrossing, edifying and inspiring." --Publishers Weekly (starred review)

Complexity - Mitchell M. Waldrop 1993-09

A look at the rebellious thinkers who are challenging old ideas with their insights into the ways countless elements of complex systems interact to produce spontaneous order out of confusion

Deep Simplicity - John Gribbin 2005

But the sensitive way in which systems respond to those basic laws, combined with feedback, can explain why, for example, just one vehicle braking on a motorway can cause a traffic jam; how a tiny genetic mutation or environmental change may make a species develop in a wholly different way.

Psyche's Veil - Terry Marks-Tarlow 2013-12-16

Historically, the language and concepts within clinical theory have been steeped in linear assumptions and reductionist thinking. Because the essence of psychotherapy involves change, *Psyche's Veil* suggests that clinical practice is inherently a nonlinear affair. In this book Terry Marks-Tarlow provides therapists with new language, models and metaphors to narrow the divide between theory and practice, while bridging the gap between psychology and the sciences. By applying contemporary perspectives of chaos theory, complexity theory and fractal geometry to clinical practice, the author discards traditional conceptions of health based on ideals of regularity, set points and normative statistics in favour of models that emphasize unique moments, variability, and irregularity. *Psyche's Veil* further explores philosophical and spiritual implications of contemporary science for psychotherapy. Written at the interface between artistic, scientific and spiritual aspects of therapy, *Psyche's Veil* is a case-based book that aspires to a paradigm shift in how practitioners conceptualize critical ingredients for internal healing. Novel treatment of sophisticated

psychoanalytical issues and tie-ins to interpersonal neurobiology make this book appeal to both the specialist practitioner, as well as the generalist reader. .

The Collapse of Chaos - Ian Stewart 2000-03-02

Do we live in a simple or a complex universe? Jack Cohen and Ian Stewart explore the ability of complicated rules to generate simple behaviour in nature through 'the collapse of chaos'. 'The most startling, thought-provoking book I've read all year. I was pleased to learn that most of the things I thought I knew were wrong' -- Terry Pratchett

Information—Consciousness—Reality - James B. Glattfelder 2019-04-10

This open access book chronicles the rise of a new scientific paradigm offering novel insights into the age-old enigmas of existence. Over 300 years ago, the human mind discovered the machine code of reality: mathematics. By utilizing abstract thought systems, humans began to decode the workings of the cosmos. From this understanding, the current scientific paradigm emerged, ultimately discovering the gift of technology. Today, however, our island of knowledge is surrounded by ever longer shores of ignorance. Science appears to have hit a dead end when confronted with the nature of reality and consciousness. In this fascinating and accessible volume, James Glattfelder explores a radical paradigm shift uncovering the ontology of reality. It is found to be information-theoretic and participatory, yielding a computational and programmable universe.

Bigger than Chaos - Michael Strevens 2009-06-30

Michael Strevens shows how simplicity can co-exist with the tangled interconnections within complex systems. By looking at the foundations of statistical reasoning about complex systems (gases, ecosystems and even social systems) he provides an understanding of how simplicity emerges from complexity.

Emergence - Steven Johnson 2012-09-11

In the tradition of *Being Digital* and *The Tipping Point*, Steven Johnson, acclaimed as a "cultural critic with a poet's heart" (*The Village Voice*), takes readers on an eye-opening journey through emergence theory and its applications. A NEW YORK TIMES NOTABLE BOOK A VOICE LITERARY SUPPLEMENT TOP 25 FAVORITE BOOKS OF THE YEAR AN ESQUIRE MAGAZINE BEST BOOK OF THE YEAR Explaining why the whole is sometimes smarter than the sum of its parts, Johnson presents surprising examples of feedback, self-organization, and adaptive learning. How does a lively neighborhood evolve out of a disconnected group of shopkeepers, bartenders, and real estate developers? How does a media event take on a life of its own? How will new software programs create an intelligent World Wide Web? In the coming years, the power of self-organization -- coupled with the connective technology of the Internet -- will usher in a revolution every bit as significant as the introduction of electricity. Provocative and engaging, *Emergence* puts you on the front lines of this exciting upheaval in science and thought.

Fitzroy - John Gribbin 2004-05-04

Admiral FitzRoy made his name as a captain on the HMS Beagle. It was for his second voyage on the ship (1831-36) that he decided to ask Charles Darwin to accompany him, and it was during this time that Darwin began to develop the ideas that would lead him to his theory of evolution by natural selection. But FitzRoy was not just 'Darwin's captain': he was an MP, he was the second Governor of New Zealand from 1843-45

when he made himself unpopular with the settlers by upholding Maori rights, and in 1854 he set up the Meteorological Office which made the lives of all sailors who came after him so much safer. John and Mary Gribbin's portrait of this multi-talented man whose impact on modern life is still felt will fascinate all who read it.

Models of My Life - Herbert A. Simon 1996-10-08

In this candid and witty autobiography, Nobel laureate Herbert A. Simon looks at his distinguished and varied career, continually asking himself whether (and how) what he learned as a scientist helps to explain other aspects of his life. A brilliant polymath in an age of increasing specialization, Simon is one of those rare scholars whose work defines fields of inquiry. Crossing disciplinary lines in half a dozen fields, Simon's story encompasses an explosion in the information sciences, the transformation of psychology by the information-processing paradigm, and the use of computer simulation for modeling the behavior of highly complex systems. Simon's theory of bounded rationality led to a Nobel Prize in economics, and his work on building machines that think—based on the notion that human intelligence is the rule-governed manipulation of symbols—laid conceptual foundations for the new cognitive science. Subsequently, contrasting metaphors of the maze (Simon's view) and of the mind (neural nets) have dominated the artificial intelligence debate. There is also a warm account of his successful marriage and of an unconsummated love affair, letters to his children, columns, a short story, and political and personal intrigue in academe.

Complexity - Melanie Mitchell 2009-04-01

What enables individually simple insects like ants to act with such precision and purpose as a group? How do trillions of neurons produce something as extraordinarily complex as consciousness? In this remarkably clear and companionable book, leading complex systems scientist Melanie Mitchell provides an intimate tour of the sciences of complexity, a broad set of efforts that seek to explain how large-scale complex, organized, and adaptive behavior can emerge from simple interactions among myriad individuals. Based on her work at the Santa Fe Institute and drawing on its interdisciplinary strategies, Mitchell brings clarity to the workings of complexity across a broad range of biological, technological, and social phenomena, seeking out the general principles or laws that apply to all of them. Richly illustrated, *Complexity: A Guided Tour*—winner of the 2010 Phi Beta Kappa Book Award in Science—offers a wide-ranging overview of the ideas underlying complex systems science, the current research at the forefront of this field, and the prospects for its contribution to solving some of the most important scientific questions of our time.

Deep Simplicity - John Gribbin 2005-04-05

Over the past two decades, no field of scientific inquiry has had a more striking impact across a wide array of disciplines—from biology to physics, computing to meteorology—than that known as chaos and complexity, the study of complex systems. Now astrophysicist John Gribbin draws on his expertise to explore, in prose that communicates not only the wonder but the substance of cutting-edge science, the principles behind chaos and complexity. He reveals the remarkable ways these two revolutionary theories have been applied over the last twenty years to explain all sorts of phenomena—from weather patterns to mass extinctions. Grounding these paradigm-shifting ideas in their historical context, Gribbin also traces their development from Newton to Darwin to Lorenz, Prigogine, and Lovelock, demonstrating how—far from overturning all that has gone before—chaos and complexity are the triumphant extensions of simple scientific laws. Ultimately, Gribbin illustrates how chaos and complexity permeate the universe on every scale, governing the evolution of life and galaxies alike.

FIASCO: Blood in the Water on Wall Street - Frank Partnoy 2009-04-06

A paperback edition of a best-selling tour of the cutthroat world of Wall Street derivatives in the 1990s features a new epilogue and tracks the author's experiences as a successful young Morgan Stanley employee, in an account that traces the period's speculative frenzies and the ways in which they directly contributed to highly publicized losses. Reprint.

Andrew Carnegie - Joseph Frazier Wall 1970

The definitive biography of an industrial genius, philanthropist, and enigma.

The Laws of Simplicity - John Maeda 2020-09-01

Ten laws of simplicity for business, technology, and design that teach us how to need less but get more.

Finally, we are learning that simplicity equals sanity. We're rebelling against technology that's too complicated, DVD players with too many menus, and software accompanied by 75-megabyte "read me" manuals. The iPod's clean gadgetry has made simplicity hip. But sometimes we find ourselves caught up in the simplicity paradox: we want something that's simple and easy to use, but also does all the complex things we might ever want it to do. In *The Laws of Simplicity*, John Maeda offers ten laws for balancing simplicity and complexity in business, technology, and design—guidelines for needing less and actually getting more. Maeda—a professor in MIT's Media Lab and a world-renowned graphic designer—explores the question of how we can redefine the notion of "improved" so that it doesn't always mean something more, something added on. Maeda's first law of simplicity is "Reduce." It's not necessarily beneficial to add technology features just because we can. And the features that we do have must be organized (Law 2) in a sensible hierarchy so users aren't distracted by features and functions they don't need. But simplicity is not less just for the sake of less. Skip ahead to Law 9: "Failure: Accept the fact that some things can never be made simple." Maeda's concise guide to simplicity in the digital age shows us how this idea can be a cornerstone of organizations and their products—how it can drive both business and technology. We can learn to simplify without sacrificing comfort and meaning, and we can achieve the balance described in Law 10. This law, which Maeda calls "The One," tells us: "Simplicity is about subtracting the obvious, and adding the meaningful."

Chaos, Complexity, and Sociology - Raymond A. Eve 1997-06-12

Provides a collection of articles which examine the emerging myths and theories surrounding the study of chaos and complexity. Useful to sociologists and others interested in chaos and complexity theory, this title focuses on methodological matters, and also presents conceptual models and applications.

Faraday, Maxwell, and the Electromagnetic Field - Nancy Forbes 2014-03-11

The story of two brilliant nineteenth-century scientists who discovered the electromagnetic field, laying the groundwork for the amazing technological and theoretical breakthroughs of the twentieth century. Two of the boldest and most creative scientists of all time were Michael Faraday (1791-1867) and James Clerk Maxwell (1831-1879). This is the story of how these two men - separated in age by forty years - discovered the existence of the electromagnetic field and devised a radically new theory which overturned the strictly mechanical view of the world that had prevailed since Newton's time. The authors, veteran science writers with special expertise in physics and engineering, have created a lively narrative that interweaves rich biographical detail from each man's life with clear explanations of their scientific accomplishments. Faraday was an autodidact, who overcame class prejudice and a lack of mathematical training to become renowned for his acute powers of experimental observation, technological skills, and prodigious scientific imagination. James Clerk Maxwell was highly regarded as one of the most brilliant mathematical physicists of the age. He made an enormous number of advances in his own right. But when he translated Faraday's ideas into mathematical language, thus creating field theory, this unified framework of electricity, magnetism and light became the basis for much of later, 20th-century physics. Faraday's and Maxwell's collaborative efforts gave rise to many of the technological innovations we take for granted today - from electric power generation to television, and much more. Told with panache, warmth, and clarity, this captivating story of their greatest work - in which each played an equal part - and their inspiring lives will bring new appreciation to these giants of science.

In Search of Schrodinger's Cat - John Gribbin 1984-08-01

Quantum theory is so shocking that Einstein could not bring himself to accept it. It is so important that it provides the fundamental underpinning of all modern sciences. Without it, we'd have no nuclear power or nuclear weapons, no TV, no computers, no science of molecular biology, no understanding of DNA, no genetic engineering. *In Search of Schrodinger's Cat* tells the complete story of quantum mechanics, a truth stranger than any fiction. John Gribbin takes us step by step into an ever more bizarre and fascinating place, requiring only that we approach it with an open mind. He introduces the scientists who developed quantum theory. He investigates the atom, radiation, time travel, the birth of the universe, superconductors and life itself. And in a world full of its own delights, mysteries and surprises, he searches for Schrodinger's Cat - a search for quantum reality - as he brings every reader to a clear understanding of the most important area of scientific study today - quantum physics. *In Search of Schrodinger's Cat* is a fascinating

and delightful introduction to the strange world of the quantum - an essential element in understanding today's world.

Systems Thinking - Jamshid Gharajedaghi 2011-08-09

Systems Thinking, Third Edition combines systems theory and interactive design to provide an operational methodology for defining problems and designing solutions in an environment increasingly characterized by chaos and complexity. This new edition has been updated to include all new chapters on self-organizing systems as well as holistic, operational, and design thinking. The book covers recent crises in financial systems and job markets, the housing bubble, and environment, assessing their impact on systems thinking. A companion website is available at interactdesign.com. This volume is ideal for senior executives as well as for chief information/operating officers and other executives charged with systems management and process improvement. It may also be a helpful resource for IT/MBA students and academics. Four NEW chapters on self-organizing systems, holistic thinking, operational thinking, and design thinking Covers the recent crises in financial systems and job markets globally, the housing bubble, and the environment, assessing their impact on systems thinking Companion website to accompany the book is available at interactdesign.com

The Birth of Time - John Gribbin 1999-01-01

"Gribbin takes us through the history of cosmological discoveries, focusing in particular on the seventy years since the Big Bang model of the origin of the universe. He explains how conflicting views of the age of the universe and stars converged in the 1990s because scientists (including Gribbin) were able to use data from the Hubble Space Telescope that measured distances across the universe."--BOOK JACKET.Title Summary field provided by Blackwell North America, Inc. All Rights Reserved

Scale - Geoffrey West 2018-05-15

"This is science writing as wonder and as inspiration." —The Wall Street Journal Wall Street Journal From one of the most influential scientists of our time, a dazzling exploration of the hidden laws that govern the life cycle of everything from plants and animals to the cities we live in. Visionary physicist Geoffrey West is a pioneer in the field of complexity science, the science of emergent systems and networks. The term "complexity" can be misleading, however, because what makes West's discoveries so beautiful is that he has found an underlying simplicity that unites the seemingly complex and diverse phenomena of living systems, including our bodies, our cities and our businesses. Fascinated by aging and mortality, West applied the rigor of a physicist to the biological question of why we live as long as we do and no longer. The result was astonishing, and changed science: West found that despite the riotous diversity in mammals, they are all, to a large degree, scaled versions of each other. If you know the size of a mammal, you can use scaling laws to learn everything from how much food it eats per day, what its heart-rate is, how long it will take to mature, its lifespan, and so on. Furthermore, the efficiency of the mammal's circulatory systems scales up precisely based on weight: if you compare a mouse, a human and an elephant on a logarithmic graph, you find with every doubling of average weight, a species gets 25% more efficient—and lives 25% longer. Fundamentally, he has proven, the issue has to do with the fractal geometry of the networks that supply energy and remove waste from the organism's body. West's work has been game-changing for biologists, but then he made the even bolder move of exploring his work's applicability. Cities, too, are constellations of networks and laws of scalability relate with eerie precision to them. Recently, West has applied his revolutionary work to the business world. This investigation has led to powerful insights into why some companies thrive while others fail. The implications of these discoveries are far-reaching, and are just beginning to be explored. *Scale* is a thrilling scientific adventure story about the elemental natural laws that bind us together in simple but profound ways. Through the brilliant mind of Geoffrey West, we can envision how cities, companies and biological life alike are dancing to the same simple, powerful tune.

Chaos and Dynamical Systems - David P. Feldman 2019-08-06

Chaos and Dynamical Systems presents an accessible, clear introduction to dynamical systems and chaos theory, important and exciting areas that have shaped many scientific fields. While the rules governing dynamical systems are well-specified and simple, the behavior of many dynamical systems is remarkably complex. Of particular note, simple deterministic dynamical systems produce output that appears random and for which long-term prediction is impossible. Using little math beyond basic algebra, David Feldman

gives readers a grounded, concrete, and concise overview. In initial chapters, Feldman introduces iterated functions and differential equations. He then surveys the key concepts and results to emerge from dynamical systems: chaos and the butterfly effect, deterministic randomness, bifurcations, universality, phase space, and strange attractors. Throughout, Feldman examines possible scientific implications of these phenomena for the study of complex systems, highlighting the relationships between simplicity and complexity, order and disorder. Filling the gap between popular accounts of dynamical systems and chaos and textbooks aimed at physicists and mathematicians, *Chaos and Dynamical Systems* will be highly useful not only to students at the undergraduate and advanced levels, but also to researchers in the natural, social, and biological sciences.

Engaging Emergence - Peggy Holman 2010

What's Possible Now? Change is everywhere these days—at times it seems like barely controlled chaos. Yet within this turmoil are the seeds of a higher order. When a new system arises from the ashes of the old, science calls the process "emergence." By engaging it, you can help yourself and your organization or community to successfully face disruption and emerge stronger than ever. In this profound, award winning (2011 Nautilus Gold medal winner) book, Peggy Holman offers principles, practices, and real-world stories to help you work with compassion, creativity, and wisdom through the entire arc of change—from disruption to coherence. You'll learn what to notice, what to explore, what to try, and what mindset opens new possibilities. This work can be challenging but also tremendously rewarding. It enables new and unlikely partnerships and develops breakthrough projects. You become part of a process that transforms the culture itself. "Very useful in giving structure and form to ways of dealing with the unpredictable and volatile way the world comes at us. A powerful antidote to the change management illusion that the future can be driven, engineered, managed, and drilled." —Peter Block, author of *Community* "A dance manual for how to move gracefully with the disruption, uncertainty, and mystery that are part of life's rhythms, how to welcome interruption and discontinuity as opportunities for creativity, community, and greater capacity." —Margaret J. Wheatley, author of *Leadership and the New Science* "Provides practical advice for orchestrating conflict and moving through discomfort to reach a new coherence." —Ronald Heifetz and Marty Linsky, cofounders of Cambridge Leadership Associates and coauthors of *Leadership on the Line* and *The Practice of Adaptive Leadership*

Complexity Theory and the Social Sciences - David Byrne 2013-09-11

For the past two decades, 'complexity' has informed a range of work across the social sciences. There are diverse schools of complexity thinking, and authors have used these ideas in a multiplicity of ways, from health inequalities to the organization of large scale firms. Some understand complexity as emergence from the rule-based interactions of simple agents and explore it through agent-based modelling. Others argue against such 'restricted complexity' and for the development of case-based narratives deploying a much wider set of approaches and techniques. Major social theorists have been reinterpreted through a complexity lens and the whole methodological programme of the social sciences has been recast in complexity terms. In four parts, this book seeks to establish 'the state of the art' of complexity-informed social science as it stands now, examining: the key issues in complexity theory the implications of complexity theory for social theory the methodology and methods of complexity theory complexity within disciplines and fields. It also points ways forward towards a complexity-informed social science for the twenty-first century, investigating the argument for a post-disciplinary, 'open' social science. Byrne and Callaghan consider how this might be developed as a programme of teaching and research within social science. This book will be particularly relevant for, and interesting to, students and scholars of social research methods, social theory, business and organization studies, health, education, urban studies and development studies.

Chaos Theory - Robert P. Murphy 2010

Simplexity - Jeffrey Kluger 2008-06-03

Why are the instruction manuals for cell phones incomprehensible? Why is a truck driver's job as hard as a CEO's? How can 10 percent of every medical dollar cure 90 percent of the world's disease? Why do bad teams win so many games? Complexity, as any scientist will tell you, is a slippery idea. Things that seem

complicated can be astoundingly simple; things that seem simple can be dizzyingly complex. A houseplant may be more intricate than a manufacturing plant. A colony of garden ants may be more complicated than a community of people. A sentence may be richer than a book, a couplet more complicated than a song. These and other paradoxes are driving a whole new science--simplicity--that is redefining how we look at the world and using that new view to improve our lives in fields as diverse as economics, biology, cosmology, chemistry, psychology, politics, child development, the arts, and more. Seen through the lens of this surprising new science, the world becomes a delicate place filled with predictable patterns--patterns we often fail to see as we're time and again fooled by our instincts, by our fear, by the size of things, and even by their beauty. In *Simplicity*, Time senior writer Jeffrey Kluger shows how a drinking straw can save thousands of lives; how a million cars can be on the streets but just a few hundred of them can lead to gridlock; how investors behave like atoms; how arithmetic governs abstract art and physics drives jazz; why swatting a TV indeed makes it work better. As simplicity moves from the research lab into popular consciousness it will challenge our models for modern living. Jeffrey Kluger adeptly translates newly evolving theory into a delightful theory of everything that will have you rethinking the rules of business, family, art--your world.

Leadership and the New Science - Margaret J. Wheatley 2010-06-21

A bestseller--more than 300,000 copies sold, translated into seventeen languages, and featured in the Los Angeles Times, Washington Post, Miami Herald, Harvard Business Review, Fast Company, and Fortune; Shows how discoveries in quantum physics, biology, and chaos theory enable us to deal successfully with change and uncertainty in our organizations and our lives; Includes a new chapter on how the new sciences can help us understand and cope with some of the major social challenges of our times We live in a time of chaos, rich in potential for new possibilities. A new world is being born. We need new ideas, new ways of seeing, and new relationships to help us now. New science--the new discoveries in biology, chaos theory, and quantum physics that are changing our understanding of how the world works--offers this guidance. It describes a world where chaos is natural, where order exists "for free." It displays the intricate webs of cooperation that connect us. It assures us that life seeks order, but uses messes to get there. Leadership and the New Science is the bestselling, most acclaimed, and most influential guide to applying the new science to organizations and management. In it, Wheatley describes how the new science radically alters our understanding of the world, and how it can teach us to live and work well together in these chaotic times. It will teach you how to move with greater certainty and easier grace into the new forms of organizations and communities that are taking shape.

The Recursive Universe - William Poundstone 2013-06-19

Fascinating journey explores key concepts in information theory in terms of Conway's "Game of Life" program. Topics include the limits of knowledge, paradox of complexity, Maxwell's demon, Big Bang theory, and much more. 1985 edition.

Deep Simplicity - John R. Gribbin 2004

The world around us seems to be a complex place. But, as John Gribbin explains, chaos and complexity obey simple laws - essentially, the same straightforward principles that Isaac Newton discovered more than 300 years ago.

The Scientists - John Gribbin 2019-07-30

A wonderfully readable account of scientific development over the past five hundred years, focusing on the lives and achievements of individual scientists, by the bestselling author of *In Search of Schrödinger's Cat* In this ambitious new book, John Gribbin tells the stories of the people who have made science, and of the times in which they lived and worked. He begins with Copernicus, during the Renaissance, when science replaced mysticism as a means of explaining the workings of the world, and he continues through the centuries, creating an unbroken genealogy of not only the greatest but also the more obscure names of Western science, a dot-to-dot line linking amateur to genius, and accidental discovery to brilliant deduction. By focusing on the scientists themselves, Gribbin has written an anecdotal narrative enlivened with stories of personal drama, success and failure. A bestselling science writer with an international reputation, Gribbin is among the few authors who could even attempt a work of this magnitude. Praised as "a sequence of witty, information-packed tales" and "a terrific read" by *The Times* upon its recent British publication,

The Scientists breathes new life into such venerable icons as Galileo, Isaac Newton, Albert Einstein and Linus Pauling, as well as lesser lights whose stories have been undeservedly neglected. Filled with pioneers, visionaries, eccentrics and madmen, this is the history of science as it has never been told before.

The Search for Superstrings, Symmetry, and the Theory of Everything - John Gribbin 2009-11-29

No one is more successful than this author when it comes to making the cutting edge of physics more accessible to a broad lay audience. In *Schrodinger's Kittens*, he took readers to the eerie world of subatomic particles & waves. Now, he explores the most exciting area of research in physics today: string theory. Following a series of major breakthroughs in the 1990s, physicists are putting together a clearer picture of how subatomic particles work. By hypothesizing particles as a single loop of vibrating "string," they are on the brink of discovering a way to explain all of nature's forces in a single theory. Grandly named "superstrings," & incorporating the ideas of "supersymmetry," these models are the prime candidate for the long sought-for "Theory of Everything." Written in clear & accessible language. *The Search for Superstrings, Symmetry, & the Theory of Everything* brings to life the remarkable scientific research that is on the cusp of radically altering our conception of the universe.

Erwin Schrodinger and the Quantum Revolution - John Gribbin 2012-03-29

Erwin Schrödinger was an Austrian physicist famous for his contribution to quantum physics. He won the Nobel Prize in 1933 and is best known for his thought experiment of a cat in a box, both alive and dead at the same time, which revealed the seemingly paradoxical nature of quantum mechanics. Schrödinger was working at one of the most fertile and creative moments in the whole history of science. By the time he started university in 1906, Einstein had already published his revolutionary papers on relativity. Now the baton of scientific progress was being passed to a new generation: Werner Heisenberg, Paul Dirac, Niels Bohr, and of course, Schrödinger himself. In this riveting biography John Gribbin takes us into the heart of the quantum revolution. He tells the story of Schrödinger's surprisingly colourful life (he arrived for a position at Oxford University with both his wife and mistress). And with his trademark accessible style and popular touch, he explains the fascinating world of quantum mechanics, which underpins all of modern science.

Ice Age - John R. Gribbin 2002

On 24 June 1837, Louis Agassiz stunned the learned members of the Swiss Society of Natural Sciences by addressing them, in his role as President, not with an anticipated lecture on fossil fishes, but with a passionate presentation on the existence of Ice Ages. No one was convinced. He even dragged the reluctant members of the Society up into the mountains to see the evidence for themselves, pointing out the scars on the hard rocks left by glaciation (which some of those present tried to explain away as having been produced by the wheels of passing carriages). Extraordinarily, it would take a further 140 years before the Ice Age theory was fully proved and understood.

Complexity and Postmodernism - Paul Cilliers 2002-09-11

In *Complexity and Postmodernism*, Paul Cilliers explores the idea of complexity in the light of contemporary perspectives from philosophy and science. Cilliers offers us a unique approach to understanding complexity and computational theory by integrating postmodern theory (like that of Derrida and Lyotard) into his discussion. *Complexity and Postmodernism* is an exciting and an original book that should be read by anyone interested in gaining a fresh understanding of complexity, postmodernism and connectionism.

What Is a Complex System? - James Ladyman 2020-08-05

A clear, concise introduction to the quickly growing field of complexity science that explains its conceptual and mathematical foundations What is a complex system? Although "complexity science" is used to understand phenomena as diverse as the behavior of honeybees, the economic markets, the human brain, and the climate, there is no agreement about its foundations. In this introduction for students, academics, and general readers, philosopher of science James Ladyman and physicist Karoline Wiesner develop an account of complexity that brings the different concepts and mathematical measures applied to complex systems into a single framework. They introduce the different features of complex systems, discuss different conceptions of complexity, and develop their own account. They explain why complexity science is so important in today's world.

Complexity Theory and the Social Sciences - David Byrne 2002-01-04

Chaos and complexity are the new buzz words in both science and contemporary society. The ideas they represent have enormous implications for the way we understand and engage with the world. Complexity Theory and the Social Sciences introduces students to the central ideas which surround the chaos/complexity theories. It discusses key concepts before using them as a way of investigating the nature of social research. By applying them to such familiar topics as urban studies, education and health, David Byrne allows readers new to the subject to appreciate the contribution which complexity theory can make to social research and to illuminating the crucial social issues of our day.

[The Emergence of Complexity](#) - Jochen Fromm 2004

Strategic Thinking and the New Science - T. Irene Sanders 1998-05-05

Describes how business managers can use scientific concepts to anticipate industrial trends and stay a step ahead of their competitors

Ice Age - John Gribbin 2001

"John and Mary Gribbin tell the remarkable story of how we came to understand the phenomenon of Ice Ages, focusing on the key personalities obsessed with the search for answers. How frequently do Ice Ages

occur? How do astronomical rhythms affect the Earth's climate? Have there always been two polar ice caps? Is it true that tiny changes in the heat balance of the Earth could plunge us back into full Ice Age conditions? With startling new material on how the last major Ice Epoch could have hastened human evolution, Ice Age explains why the Earth was once covered in ice - and how that made us human."--BOOK JACKET.

Deep Simplicity - John Gribbin 2009-08-27

'Gribbin takes us through the basics with his customary talent for accessibility and clarity' Sunday Times
The world around us can be a complex, confusing place. Earthquakes happen without warning, stock markets fluctuate, weather forecasters seldom seem to get it right - even other people continue to baffle us. How do we make sense of it all? In fact, John Gribbin reveals, our seemingly random universe is actually built on simple laws of cause and effect that can explain why, for example, just one vehicle braking can cause a traffic jam; why wild storms result from a slight atmospheric change; even how we evolved from the most basic materials. Like a zen painting, a fractal image or the pattern on a butterfly's wings, simple elements form the bedrock of a sophisticated whole. Synthesizing chaos and complexity theory for the perplexed, *Deep Simplicity* brilliantly illuminates the harmony underlying our existence.