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When it comes to science, too often people say "I just don't have the brains for it" -- and leave it at that. Why is science so intimidating, and why do people let themselves feel this way? What makes one person a scientist and another disinclined even to learn how to read graphs? The idea that scientists are people who wear lab coats and are somehow smarter than the rest of us is a common, yet dangerous, misconception that puts science on an intimidating pedestal. How did science become so divorced from everyday experience? In Eureka, science popularizer Chad Orzel argues that even the people who are most forthright about hating science are doing science, often without even knowing it. Orzel shows that science is central to the human experience: every human can think like a scientist, and regularly does so in the course of everyday activities. The common misconception is that science is a body of (boring, abstract, often mathematical) facts. In truth, science is a process: Looking at the world, Thinking about what makes it work, Testing your mental model by comparing it to reality, and Telling others about your results -- all things that people do daily. By revealing the connection between the everyday activities that people do -- solving crossword puzzles, playing sports, or even watching mystery shows on television -- and the processes used to make great scientific discoveries, Eureka shows that this process is one everybody uses regularly, and something that anyone can do. They say you can't teach an old dog new tricks. But what about relativity? Physics professor Chad Orzel and his inquisitive canine companion, Emmy, tackle the concepts of general relativity in this irresistible introduction to Einstein's physics. Through armchair- and sometimes passenger-seat-conversations with Emmy about the relative speeds of dog and cat motion or the logistics of squirrel-chasing, Orzel translates complex Einsteinian ideas -- the slowing of time for a moving observer, the shrinking of moving objects, the effects of gravity on light and time, black holes, the Big Bang, and of course, E=mc2 -- into examples simple enough for a dog to understand. A lively romp through one of the great theories of modern physics, How to Teach Relativity to Your Dog will teach you everything you ever wanted to know about space, time, and anything else you might have slept through in high school physics class. Finally figure out physics! Teach Yourself Physics introduces you to physics gradually by building a foundation of appropriate mathematical skills. Easy-to-understand diagrams help you understand key points. This volume is important because despite various external representations, such as analogies, metaphors, and visualizations being commonly used by physics teachers, educators and researchers, the notion of using the pedagogical functions of multiple representations to support teaching and learning is still a gap in physics education. The research presented in the three sections of the book is introduced by descriptions of various psychological theories that are applied in different ways for designing physics teaching and learning in classroom settings. The following chapters of the book illustrate teaching and learning with respect to applying specific physics multiple representations in different levels of the education system and in different physics topics using analogies and models, different modes, and in reasoning and representational competence. When multiple representations are used in physics for teaching, the expectation is that they should be successful. To ensure this is the case, the implementation of representations should consider design principles for using multiple representations. Investigations regarding their effect on classroom communication as well as on the learning results in all levels of schooling and for different topics of physics are reported. The book is intended for physics educators and their students at universities and for physics teachers in schools to apply multiple representations in physics in a productive way. This book presents research contributions focussing on the introduction of contemporary physics topics – mainly, but not exclusively, quantum physics – into high school currciula. Despite the important advances and discoveries in quantum physics and relativity which have revolutionized our views of nature and our everyday lives, the presence of these topics in high school physics education is still lacking. In this book physics education researchers report on the teaching and learning of quantum physics from different perspectives and discuss the design and use of different pedagogical approaches and educational pathways. There is still much debate as to what content is appropriate at high school level as well what pedagogical approaches and strategies should be adopted to support student learning. Currently there is a greater focus on how to teach modern physics at the high school level rather than classical physics. However, teachers still lack experience and availability of appropriate teaching and learning materials to support the coherent integration of Quantum Physics in high school curricula. All of the 19 papers presented in this book discuss innovative approaches for enhancing physics education in schools. When physics professor Chad Orzel went to the pound to adopt a dog, he never imagined Emmy. She wasn't just a friendly mutt who needed a home; she was a talking dog with an active interest in what her new owner did for a living and how it could work for her. Soon Emmy was trying to use the strange ideas of quantum mechanics for the really important things in her life: chasing critters, getting treats, and going for walks. She peppered Chad with questions: Could she use quantum tunneling to get through the neighbor's fence and chase bunnies? What about quantum teleportation to catch squirrels before they climb out of reach? Where are all the universes in which Chad drops steak on the floor? And what about the bunnies made of cheese that ought to be appearing out of nothing in the backyard? With great humor and clarity, Chad Orzel explains to Emmy, and to human readers, just what quantum mechanics is and how it works -- and why, although you can't use it to catch squirrels or eat steak, it's still bizarre, amazing, and important to every dog and human. Follow along as Chad and Emmy discuss the central elements of quantum theory, from particles that behave like waves and Heisenberg's uncertainty principle to entanglement ("spooky action at a distance") and virtual particles. Along the way, they discuss the history of the theory, such as the experiments that discovered that electrons are waves and particles at the same time, and Albert Einstein and Niels Bohr's decades-long debate over what quantum theory really meant

(Einstein may have been smarter, but Bohr was right more often). Don't get caught looking less informed than Emmy. How to Teach Physics to Your Dog will show you the universe that lies beneath everyday reality, in all its randomness, uncertainty, and wonder. "Forget Schrödinger's Cat," says Emmy, "quantum physics is all about dogs." And once you see quantum physics explained to a dog, you'll never see the world the same way again. A Sunday Times Book of the Year From the author of the international bestseller How to Teach Quantum Physics to Your Dog Your humble alarm clock, digital cameras, the smell of coffee, the glow of a grill, fibre broadband, smoke detectors… all hold secrets about quantum physics. Beginning at sunrise, Chad Orzel reveals the extraordinary science that underpins the simplest activities we all do every day, from making toast to shopping online. It’s all around us, the wonderful weirdness of quantum – you just have to know where to look. It’s fast becoming a geek world out there, and all moms need to show off their tech smarts and superhero-like skills in order to keep their savvy kids entertained and engaged. Geek Mom: Projects, Tips, and Adventures for Moms and Their 21st-Century Families explores the many fun and interesting ways that digital-age parents and kids can get their geek on together. Imaginative ideas for all ages and budgets include thrifty Halloween costumes, homemade lava lamps, hobbit feasts, and magical role-playing games. There are even projects for moms to try when they have a few precious moments alone. With six sections spanning everything from home-science experiments to superheroes, this comprehensive handbook from the editors of Wired.com’s popular GeekMom blog is packed with ideas guaranteed to inspire a love of learning and discovery. Along the way, parents will also find important tips on topics such as determining safe online communities for children, organizing a home learning center, and encouraging girls to love science. Being geeky is all about exploring the world with endless curiosity. Geek Mom is your invitation to introducing the same sense of wonder and imagination to the next generation. TEACHING PHYSICS is a book about learning to be a more effective physics teacher. It is meant for anyone who is interested in learning about recent developments in physics education. It is not a review of specific topics in physics with hints for how to teach them and lists of common student difficulties. Rather, it is a handbook with a variety of tools for improving both teaching and learning of physics from new kinds of homework and exam problems, to surveys for figuring out what has happened in your class, to tools for taking and analyzing data using computers and video. TEACHING PHYSICS includes: an introduction to the cognitive model of thinking and learning that underlies modern physics education research principles and guidelines for making use of and understanding the implications of this cognitive model for the classroom a discussion of formative and summative evaluation with a variety of "thinking problems" useful for homework and exams a discussion of assessment of the success of instruction using research-based concept and attitude surveys discussion of 11 research-based curricular materials for use in lecture, lab, recitation, and workshops environments tips and guidelines for how to improve your instruction In addition, the book comes with a Resource CD containing 14 conceptual and 3 attitude surveys, more than 250 thinking problems covering all areas of introductory physics, resource materials from commercial vendors on use of computerized data acquisition and video, and a variety of other useful reference materials. TEACHING PHYSICS is a companion guide to using the Physics Suite, an integrated collection of research-based instructional material for lecture, laboratory, recitation, and workshop/studio environments. The elements of the Suite share the underlying philosophy of education described in this book. A playful and entertaining look at science on The Simpsons This amusing book explores science as presented on the longest-running and most popular animated TV series ever made: The Simpsons. Over the years, the show has examined such issues as genetic mutation, time travel, artificial intelligence, and even aliens. "What's Science Ever Done for Us?" examines these and many other topics through the lens of America's favorite cartoon. This spirited science guide will inform Simpsons fans and entertain science buffs with a delightful combination of fun and fact. It will be the perfect companion to the upcoming Simpsons movie. The Simpsons is a magnificent roadmap of modern issues in science. This completely unauthorized, informative, and fun exploration of the science and technology, connected with the world's most famous cartoon family, looks at classic episodes from the show to launch fascinating scientific discussions mixed with intriguing speculative ideas and a dose of humor. Could gravitational lensing create optical illusions, such as when Homer saw someone invisible to everyone else? Is the Coriolis effect strong enough to make all toilets in the Southern Hemisphere flush clockwise, as Bart was so keen to find out? If Earth were in peril, would it make sense to board a rocket, as Marge, Lisa, and Maggie did, and head to Mars? While Bart and Millhouse can't stop time and have fun forever, Paul Halpern explores the theoretical possibilities involving Einstein's theory of time dilation. Paul Halpern, PhD (Philadelphia, PA) is Professor of Physics and Mathematics at the University of the Sciences in Philadelphia and a 2002 recipient of a John Simon Guggenheim Memorial Fellowship. He is also the author of The Great Beyond (0-471-46595-X). This book shows how the web-based PhysGL programming environment (http://physgl.org) can be used to teach and learn elementary mechanics (physics) using simple coding exercises. The book's theme is that the lessons encountered in such a course can be used to generate physics-based animations, providing students with compelling and self-made visuals to aid their learning. Topics presented are parallel to those found in a traditional physics text, making for straightforward integration into a typical lecture-based physics course. Users will appreciate the ease at which compelling OpenGL-based graphics and animations can be produced using PhysGL, as well as its clean, simple language constructs. The author argues that coding should be a standard part of lower-division STEM courses, and provides many anecdotal experiences and observations, that include observed benefits of the coding work. Nations around the globe consider physics education an important tool of economic and social development and currently advocate the use of innovative strategies to prepare students for knowledge and skills acquisition. Particularly in the last decade, a series of revisions were made to physics curricula in an attempt to cope with the changing needs and expectations of society. Educational transformation is a major challenge due to educational systems’ resistance to change. Updated curriculum content, pedagogical facilities (for example, computers in a school), new teaching and learning strategies and the prejudice against girls in physics classes are all issues that have to be addressed. Educational research provides a way to build schemas and resources to promote changes in physics education. This volume presents physics teaching and learning research connected with the main educational scenarios. We encounter physics before we've even left the house in the morning; an alarm clock tracks time, a mirror reflects light waves and our mobile phones rely on satellites held in their orbit by gravity. Where would we be without the Bernoulli equation to explain how planes fly, electromagnetic waves enabling us to communicate around the world or the discovery of X-rays? In 50 Physics Ideas You Really Need to Know Joanne Baker will uncover the physics all around us, from basic concepts like gravity, light and energy through to the complexities of quantum theory, chaos and dark energy. Featuring short biographies of iconic physicists, explanatory diagrams and timelines showing discoveries within their historical context, this book is the perfect guide to the fundamental concepts of physics, making even the most challenging theories easy to understand. Contents include: Newton's law of gravitation, Brownian motion, Chaos theory, Fleming's right hand rule, Planck's law, Heisenberg's uncertainty principle, Schrodinger's cat, Superconductivity, Rutherford's atom, Nuclear fission and fusion, The God particle, String theory, Special and general relativity, The big bang and the Anthropic principle. Celebrated for his brilliantly quirky insights into the physical world, Nobel laureate Richard Feynman also possessed an extraordinary talent for explaining difficult concepts to the general public. Here Feynman provides a classic and definitive introduction to QED (namely, quantum electrodynamics), that part of quantum field theory describing the interactions of light with charged particles. Using everyday language, spatial concepts, visualizations, and his renowned "Feynman diagrams" instead of advanced mathematics, Feynman clearly and humorously communicates both the substance and spirit of QED to the layperson. A. Zee's introduction places Feynman’s book and his seminal contribution to QED in historical context and further highlights Feynman’s uniquely appealing and illuminating style. Written by a leading international negotiation expert, Sustainable Negotiation introduces a completely new perspective on international negotiation, providing practical, field-tested examples, experiments and guidance to enable readers to implement new negotiation techniques that deliver results in a diverse and global world. Enhance your teaching with expert advice and support for Key Stages 3 and 4 Physics from the Teaching Secondary series - the trusted teacher's guide for NQTs, non-specialists and experienced teachers. Written in association with ASE, this updated edition provides best practice teaching strategies from academic experts and practising teachers. - Refresh your subject knowledge, whatever your level of expertise - Gain strategies for delivering the big ideas of science using suggested teaching sequences - Engage students and develop their understanding with practical activities for each topic - Enrich your lessons and extend knowledge beyond the curriculum with enhancement ideas - Improve key skills with opportunities to introduce mathematics and scientific literacy highlighted throughout - Support the use of technology with ideas for online tasks, video suggestions and guidance on using cutting-edge software - Place science in context; this book highlights where you can apply science theory to real-life scenarios, as well as how the content can be used to introduce different STEM careers Also available: Teaching Secondary Chemistry, Teaching Secondary Biology This manual contains experiments, demonstrations, and displays involving toys that can be used to introduce most of the major topics covered in a typical introductory physics class. These activities provide a sense that everyday objects are closely related to the topics studied in physics. Using toys in teaching physics will certainly add excitement and enthusiasm to your classroom. This widely admired standalone guide is packed with creative tips on how to enhance and expand your physics class instruction techniques. It's an invaluable companion for novice and veteran professors teaching any physics course. Understand Physics gives you a solid understanding of the key skills and ideas that run through the subject. You will explore the important concepts of force and motion, electricity, light, molecules, matter and space and discover the frontiers of physics. With numerous questions, answers and worked examples throughout, you will feel confident in approaching the science and applying your knowledge. NOT GOT MUCH TIME? One, five and ten-minute introductions to key principles to get you started. AUTHOR INSIGHTS Lots of instant help with common problems and quick tips for success, based on the author's many years of experience. TEST YOURSELF Tests in the book and online to keep track of your progress. EXTEND YOUR KNOWLEDGE Extra online articles at www.teachyourself.com to give you a richer understanding of physics. FIVE THINGS TO REMEMBER Quick refreshers to help you remember the key facts. TRY THIS Innovative exercises illustrate what you've learnt and how to use it. Original publication and copyright date: 2009. Ages 0 to 3 years Quantum Physics for Babies by Chris Ferrie is a colourfully simple introduction to the principle that gives quantum physics its name. Baby will find out that energy is "quantized" and the weird world of atoms never comes to a standstill. It is never too early to become a quantum physicist! This is the first in a series of books designed to stimulate your baby and introduce them to the world of science. Also coming in May are: ? Newtonian Physics for Babies ? General Relativity for Babies ? Rocket Science for Babies This book discusses novel research on and practices in the field of physics teaching and learning. It gathers selected high-quality studies that were presented at the GIREP-ICPE-EPEC 2017 conference, which was jointly organised by the International Research Group on Physics Teaching (GIREP); European Physical Society – Physics Education Division, and the Physics Education Commission of the International Union of Pure and Applied Physics (IUPAP). The respective chapters address a wide variety of topics and approaches, pursued in various contexts and settings, all of which represent valuable contributions to the field of physics education research. Examples include the design of curricula and strategies to develop student competencies—including knowledge, skills, attitudes and values; workshop approaches to teacher education; and pedagogical strategies used to engage and motivate students. This book shares essential insights into current research on physics education and will be of interest to physics teachers, teacher educators and physics education researchers around the world who are working to combine research and practice in physics teaching and learning. Richard P. Feynman (1918–1988) was widely recognized as the most creative physicist of the post–World War II period. His career was extraordinarily expansive. From his contributions to the development of the atomic bomb a Los Alamos during World War II to his work in quantum electrodynamics, for which he was awarded the Nobel Prize in 1965, Feynman was celebrated for his brilliant and irreverent approach to physics.It was Feynman's outrageous and scintillating method of teaching that earned him legendary status among students and professors of physics. From 1961–1963, Feynman, at the California Institute of Technology, delivered a series of lectures that revolutionized the teaching of physics around the world. Six Easy Pieces, taken from the famous Lectures on Physics, represents the most accessible material from this series. In these six chapters, Feynman introduces the general reader to the following topics: atoms, basic physics, the relationship of physics to other topics, energy, gravitation, and quantum force. With his dazzling and inimitable wit, Feynman presents each discussion without equations or technical jargon.Readers will remember how—using ice water and rubber—Feynman demonstrated with stunning simplicity to a nationally televised audience the physics of the 1986 Challenger disaster. It is precisely this ability—the clear and direct illustration of complex

theories—that made Richard Feynman one of the most distinguished educators in the world. Filled with wonderful examples and clever illustrations, Six Easy Pieces is the ideal introduction to the fundamentals of physics by one of the most admired and accessible scientists of our time. This book on the teaching and learning of physics is intended for college-level instructors, but high school instructors might also find it very useful.Some ideas found in this book might be a small 'tweak' to existing practices whereas others require more substantial revisions to instruction. The discussions of student learning herein are based on research evidence accumulated over decades from various fields, including cognitive psychology, educational psychology, the learning sciences, and discipline-based education research including physics education research. Likewise, the teaching suggestions are also based on research findings. As for any other scientific endeavor, physics education research is an empirical field where experiments are performed, data are analyzed and conclusions drawn. Evidence from such research is then used to inform physics teaching and learning.While the focus here is on introductory physics taken by most students when they are enrolled, however, the ideas can also be used to improve teaching and learning in both upper-division undergraduate physics courses, as well as graduate-level courses. Whether you are new to teaching physics or a seasoned veteran, various ideas and strategies presented in the book will be suitable for active consideration. In easy-to-understand language, this resource presents engaging, ready-to-use learning experiences that address the "big ideas" in K–8 science education and help students make larger, real-world connections. This book is an invaluable resource for physics teachers. It contains an updated version of the author's A Guide to Introductory Physics Teaching (1990), Homework and Test Questions (1994), and a previously unpublished monograph "Introduction to Classical Conservation Laws". This book is about mathematics in physics education, the difficulties students have in learning physics, and the way in which mathematization can help to improve physics teaching and learning. The book brings together different teaching and learning perspectives, and addresses both fundamental considerations and practical aspects. Divided into four parts, the book starts out with theoretical viewpoints that enlighten the interplay of physics and mathematics also including historical developments. The second part delves into the learners' perspective. It addresses aspects of the learning by secondary school students as well as by students just entering university, or teacher students. Topics discussed range from problem solving over the role of graphs to integrated mathematics and physics learning. The third part includes a broad range of subjects from teachers' views and knowledge, the analysis of classroom discourse and an evaluated teaching proposal. The last part describes approaches that take up mathematization in a broader interpretation, and includes the presentation of a model for physics teachers' pedagogical content knowledge (PCK) specific to the role of mathematics in physics. A UNESCO source book. Covering the theory of computation, information and communications, the physical aspects of computation, and the physical limits of computers, this text is based on the notes taken by one of its editors, Tony Hey, on a lecture course on computation given b Here is the most practical, complete, and easy-to-use book available for understanding physics. Even if you do not consider yourself a science student, this book helps make learning a pleasure. The Big Ideas in Physics and How to Teach Them provides all of the knowledge and skills you need to teach physics effectively at secondary level. Each chapter provides the historical narrative behind a Big Idea, explaining its significance, the key figures behind it, and its place in scientific history. Accompanied by detailed ready-to-use lesson plans and classroom activities, the book expertly fuses the 'what to teach' and the 'how to teach it', creating an invaluable resource which contains not only a thorough explanation of physics, but also the applied pedagogy to ensure its effective translation to students in the classroom. Including a wide range of teaching strategies, archetypal assessment questions and model answers, the book tackles misconceptions and offers succinct and simple explanations of complex topics. Each of the five big ideas in physics are covered in detail: electricity forces energy particles the universe. Aimed at new and trainee physics teachers, particularly non-specialists, this book provides the knowledge and skills you need to teach physics successfully at secondary level, and will inject new life into your physics teaching. This book offers a comprehensive overview of the theoretical background and practice of physics teaching and learning and assists in the integration of highly interesting topics into physics lessons. Researchers in the field, including experienced educators, discuss basic theories, the methods and some contents of physics teaching and learning, highlighting new and traditional perspectives on physics instruction. A major aim is to explain how physics can be taught and learned effectively and in a manner enjoyable for both the teacher and the student. Close attention is paid to aspects such as teacher competences and requirements, lesson structure, and the use of experiments in physics lessons. The roles of mathematical and physical modeling, multiple representations, instructional explanations, and digital media in physics teaching are all examined. Quantitative and qualitative research on science education in schools is discussed, as quality assessment of physics instruction. The book is of great value to researchers involved in the teaching and learning of physics, to those training physics teachers, and to pre-service and practising physics teachers. Activity resource book teaching scientific principles in a vivid way with Lego, balloons etc. Physics does not have to be daunting. This book, complete with practice questions and answers, forms a course which will take you from beginner or intermediate level to having a confident grasp of physics. The book includes: simple step-by-step explanations, to help you grasp new topics or those that have previously confused you; practice questions throughout, to help you embed your learning and improve your confidence; and end of chapter summaries to help you remember the key points you've learnt - all in one great-value book, so you don't need any separate workbooks or course books. Chapters include: Starting physics, motion, forces in action, thermal physics, engines and thermodynamics, electricity, the nature of light, materials and molecules, quantum theory and relativity, the structure of matter, nuclear energy, space and the universe, and the frontiers of physics. The Complete Introduction series from Teach Yourself is the ultimate one-stop guide for anyone wanting a comprehensive and accessible entry point into subjects as diverse as philosophy, mathematics, psychology, economics and practical electronics. Loved by students and perfect for general readers who simply want to learn more about the world around them, these books are your first choice for discovering something new. This is a practical guide to teaching biology to 11-16 year olds. Supported by the ASE, the book provides support for non-specialists and new teachers on the basic science for each topic, plus extension ideas for more experienced teachers. In our world today, scientists and technologists speak one language of reality. Everyone else, whether they be prime ministers, lawyers, or primary school teachers speak an outdated Newtonian language of reality. While Newton saw time and space as rigid and absolute, Einstein showed that time is relative – it depends on height and velocity – and that space can stretch and distort. The modern Einsteinian perspective represents a significant paradigm shift compared with the Newtonian paradigm that underpins most of the school education today. Research has shown that young learners quickly access and accept Einsteinian concepts and the modern language of reality. Students enjoy learning about curved space, photons, gravitational waves, and time dilation; often, they ask for more! A consistent education within the Einsteinian paradigm requires rethinking of science education across the entire school curriculum, and this is now attracting attention around the world. This book brings together a coherent set of chapters written by leading experts in the field of Einsteinian physics education. The book begins by exploring the fundamental concepts of space, time, light, and gravity and how teachers can introduce these topics at an early age. A radical change in the curriculum requires new learning instruments and innovative instructional approaches. Throughout the book, the authors emphasise and discuss evidence-based approaches to Einsteinian concepts, including computer- based tools, geometrical methods, models and analogies, and simplified mathematical treatments. Teaching Einsteinian Physics in Schools is designed as a resource for teacher education students, primary and secondary science teachers, and for anyone interested in a scientifically accurate description of physical reality at a level appropriate for school education. Everything you ever need to know about making it as a scientist. Despite your graduate education, brainpower, and technical prowess, your career in scientific research is far from assured. Permanent positions are scarce, science survival is rarely part of formal graduate training, and a good mentor is hard to find. In A Ph.D. Is Not Enough!, physicist Peter J. Feibelman lays out a rational path to a fulfilling long-term research career. He offers sound advice on selecting a thesis or postdoctoral adviser; choosing among research jobs in academia, government laboratories, and industry; preparing for an employment interview; and defining a research program. The guidance offered in A Ph.D. Is Not Enough! will help you make your oral presentations more effective, your journal articles more compelling, and your grant proposals more successful. A classic guide for recent and soon-to-be graduates, A Ph.D. Is Not Enough! remains required reading for anyone on the threshold of a career in science. This new edition includes two new chapters and is revised and updated throughout to reflect how the revolution in electronic communication has transformed the field. This is a handbook containing all the advice and recommendations about learning physics I wished someone had told me when I was younger. It is neither a career guide nor a comprehensive textbook. What's inside? - Understand why self-learning is an effective strategy. Learn why most university students never develop a deep understanding and what alternatives are possible. - Grasp the internal structure of physics. Learn how the fundamental theories of physics are connected and why physics works at all. - Develop an understanding of the landscape. Read bird's eye overviews that give a first taste of what the various theories of physics are all about. - Everything you need to get started. Read detailed reading and learning recommendations that allow you to carve out a personal learning path. As Kenneth W. Ford shows us in The Quantum World, the laws governing the very small and the very swift defy common sense and stretch our minds to the limit. Drawing on a deep familiarity with the discoveries of the twentieth century, Ford gives an appealing account of quantum physics that will help the serious reader make sense of a science that, for all its successes, remains mysterious. In order to make the book even more suitable for classroom use, the author, assisted by Diane Goldstein, has included a new section of Quantum Questions at the back of the book. A separate answer manual to these 300+ questions is available; visit The Quantum World website for ordering information. There is also a cloth edition of this book, which does not include the Quantum Questions included in this paperback edition.