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KEY=PERSPECTIVE - WASHINGTON CONNER

THE COSMIC PERSPECTIVE

Addison-Wesley Building on a long tradition of effective pedagogy and comprehensive coverage, **The Cosmic Perspective, Sixth Edition** provides the most engaging and up-to-date introduction to astronomy for non-science majors. The text provides a wealth of features to help enhance student skill building, including new Visual Skills Check end-of-chapter questions that provide an opportunity for students to test their visual interpretation skills, new Cosmic Context Figures that help students synthesize key concepts and processes, and a new comprehensive visual overview of scale to help students explore the scale of time and space. The Sixth Edition has also been fully updated to include the latest astronomical observations, research, and theoretical developments. The text is supported by the most robust package of instructor ancillaries, and MasteringAstronomy (tm) , the market-leading online tutorial and homework system, has been updated to include a wealth of new content to help students learn and review more efficiently outside of class. Two volumes of this text are also available: **The Cosmic Perspective: The Solar System, Sixth Edition** (includes Chapters 1-13, 24) **The Cosmic Perspective: Stars, Galaxies, and Cosmology, Sixth Edition** (includes Chapters 1-6, S2-S4, 14-24)

THE COSMIC PERSPECTIVE

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THE COSMIC PERSPECTIVE

Addison-Wesley Building on a long tradition of effective pedagogy and comprehensive coverage, **The Cosmic Perspective, Seventh Edition** provides a thoroughly engaging and up-to-date introduction to astronomy for non-science majors. The text provides a wealth of features that enhance skill-building, including new group work exercises that help you retain concepts longer and build communication skills for the future. The Seventh Edition has also been fully updated to include the latest astronomical observations, results from recent space missions, research, and theoretical developments that inform our understanding of the early universe. Two volumes of this text are also available: **The Cosmic Perspective: The Solar System, Seventh Edition** (includes Chapters 1–13, 24) **The Cosmic Perspective: Stars, Galaxies, and Cosmology, Seventh Edition** (includes Chapters 1–6, S2–S4, 14–24)

THE COSMIC PERSPECTIVE

THE SOLAR SYSTEM

Addison-Wesley Building on a long tradition of effective pedagogy and comprehensive coverage, **The Cosmic Perspective: The Solar System, Sixth Edition** provides the most engaging and up-to-date introduction to astronomy for non-science majors. The text provides a wealth of features to help enhance student skill building, including new Visual Skills Check

end-of-chapter questions that provide an opportunity for students to test their visual interpretation skills, new Cosmic Context Figures that help students synthesize key concepts and processes, and a new comprehensive visual overview of scale to help students explore the scale of time and space. The Sixth Edition has also been fully updated to include the latest astronomical observations, research, and theoretical developments. The text is supported by the most robust package of instructor ancillaries, and MasteringAstronomy (tm) , the market-leading online tutorial and homework system, has been updated to include a wealth of new content to help students learn and review more efficiently outside of class. This Volume includes Chapters Chapters 1-13, 14, and 24 of the main text.

THE SOLAR SYSTEM

THE COSMIC PERSPECTIVE

THE COSMIC PERSPECTIVE

THE SOLAR SYSTEM

Pearson For two-semester courses in astronomy. Teaching the Process of Science through Astronomy Building on a long tradition of effective pedagogy and comprehensive coverage, The Cosmic Perspective, Eighth Edition provides a thoroughly engaging and up-to-date introduction to astronomy for non-science majors. This text offers a wealth of features that enhance student understanding of the process of science and actively engage students in the learning process for key concepts. The fully updated Eighth Edition includes the latest scientific discoveries, revises several subjects based on our most current understanding of the cosmos, and now emphasizes deeper understanding of the twists and turns of the process of science and the relevance of concepts to student's lives. This text is also available in two volumes, which can be purchased separately: The Cosmic Perspective: The Solar System, Eighth Edition (includes Chapters 1-13, 14, S1, 24) The Cosmic Perspective: Stars, Galaxies, and Cosmology, Eighth Edition (includes Chapters 1-3, S1, 4-6, S2-S4, 14-24) Also available as a Pearson eText or packaged with Mastering Astronomy Pearson eText is a simple-to-use, mobile-optimized, personalized reading experience that can be adopted on its own as the main course material. It lets students highlight, take notes, and review key vocabulary all in one place, even when offline. Seamlessly integrated videos and other rich media engage students and give them access to the help they need, when they need it. Educators can easily share their own notes with students so they see the connection between their eText and what they learn in class – motivating them to keep reading, and keep learning. Mastering Astronomy is the leading online homework, tutorial, and assessment system, designed to improve results by engaging students before, during, and after class with powerful content. Instructors ensure students arrive ready to learn by assigning educationally effective content before class, and encourage critical thinking and retention with in-class resources. Students can further master concepts after class through homework assignments that provide interactivity, hints and answer-specific feedback. Note: You are purchasing a standalone book; Pearson eText and Mastering Astronomy do not come packaged with this content. Students, ask your instructor for the correct package ISBN and Course ID. Instructors, contact your Pearson representative for more information. If your instructor has assigned Pearson eText as your main course material, search for: • 0135234441 / 9780135234440 Pearson eText The Cosmic Perspective, 8/e -- Access Card OR • 0135234417 / 9780135234419 Pearson eText The Cosmic Perspective, 8/e -- Instant Access If you would like to purchase both the physical text and Mastering Astronomy, search for: 0134058291 / 9780134058290 Cosmic Perspective Plus MasteringAstronomy with eText -- Access Card Package, The Package consists of: 0134059069 / 9780134059068 Cosmic Perspective, The 0134080572 / 9780134080574 MasteringAstronomy with Pearson eText -- ValuePack Access Card -- for The Cosmic Perspective 0321765184 / 9780321765185 SkyGazer 5.0 Student Access Code Card (Integrated component)

THE ESSENTIAL COSMIC PERSPECTIVE

Addison-Wesley Professional The Essential Cosmic Perspective, Sixth Edition retains all of the features that have made this text so popular and effective. New features and updates based on current research will engage students as they learn about astronomy. The textbook package also includes updated supplements to support the book's pedagogy, making it the most effective text in the one-semester astronomy market. The Sixth Edition includes new visual foldout diagrams on the scale of space and time, key concepts in understanding the scope of the universe and individual objects within it. The book also includes Group Work Exercises to foster active participation in collaborative, in-class learning. This package contains: The Essential Cosmic Perspective, Sixth Edition

THE COSMIC PERSPECTIVE

"Building on a long tradition of effective pedagogy and comprehensive presentation, The Cosmic Perspective includes an enhanced art program. This student-friendly text is now even more accessible through robust visual pedagogy via new Cosmic Context two-page illustrations, which walk students through key processes and summarize the major points of each Part, and via updated zoom-in figures which provide students with a sense of orientation, scale, and relation between images. In addition to an enhanced art program, the text also features new See It For Yourself boxes with practical hands-on activities for in-class use or self-study, and a new subset of Process of Science end-of-chapter questions that challenge students to think through how we know what we know about astronomy."--Product description.

THE COSMIC CODE

[Simon and Schuster](#) **Reveals Zecharia Sitchin's groundbreaking research into the code left behind by the creators of humanity.** • Explains how the Anunnaki were not merely the mythical gods of the Sumerians, but rather the founders of human life on Earth. • Using Biblical and ancient Sumerian sources, explains how to decode these messages our star ancestors left behind. Daring to challenge our long-held beliefs about the origins of man, Zecharia Sitchin suggests that humans are not the children of God, but rather the children of the Anunnaki, an ancient race from the planet Nibiru. His revolutionary theories are supported by his intense scrutiny of not only ancient Sumerian texts but also stone structures all over the world. The similarities and astrological significance of these formations suggests that rather than looking for guidance from leaders here on Earth, humanity should instead look to the sky for answers. The Earth Chronicles deal with the history and prehistory of Earth and humankind. Each book in the series is based upon information written on clay tablets by the ancient civilizations of the Near East. For the first time, the entire Earth Chronicles series is now available in a hardcover collector's edition.

21ST CENTURY ASTRONOMY

THE SOLAR SYSTEM

[W. W. Norton](#) Influenced by astronomy education research, 21st Century Astronomy offers a complete pedagogical and media package that facilitates learning by doing, while the new one-column design makes the Fifth Edition the most accessible introductory text available today.

EVOLUTION AND THE EMERGENT SELF

THE RISE OF COMPLEXITY AND BEHAVIORAL VERSATILITY IN NATURE

[Columbia University Press](#) **Evolution and the Emergent Self** is an eloquent and evocative new synthesis that explores how the human species emerged from the cosmic dust. Lucidly presenting ideas about the rise of complexity in our genetic, neuronal, ecological, and ultimately cosmological settings, the author takes readers on a provocative tour of modern science's quest to understand our place in nature and in our universe. Readers fascinated with "Big History" and drawn to examine big ideas will be challenged and enthralled by Raymond L. Neubauer's ambitious narrative. How did humans emerge from the cosmos and the pre-biotic Earth, and what mechanisms of biological, chemical, and physical sciences drove this increasingly complex process? Neubauer presents a view of nature that describes the rising complexity of life in terms of increasing information content, first in genes and then in brains. The evolution of the nervous system expanded the capacity of organisms to store information, making learning possible. In key chapters, the author portrays four species with high brain:body ratios—chimpanzees, elephants, ravens, and dolphins—showing how each species shares with humans the capacity for complex communication, elaborate social relationships, flexible behavior, tool use, and powers of abstraction. A large brain can have a hierarchical arrangement of circuits that facilitates higher levels of abstraction. Neubauer describes this constellation of qualities as an emergent self, arguing that self-awareness is nascent in several species besides humans and that potential human characteristics are embedded in the evolutionary process and have emerged repeatedly in a variety of lineages on our planet. He ultimately demonstrates that human culture is not a unique offshoot of a language-specialized primate, but an analogue of fundamental mechanisms that organisms have used since the beginning of life on Earth to gather and process information in order to buffer themselves from fluctuations in the environment. Neubauer also views these developments in a cosmic setting, detailing open thermodynamic systems that grow more complex as the energy flowing through them increases. Similar processes of increasing complexity can be found in the "self-organizing" structures of both living and nonliving forms. Recent evidence from astronomy indicates that planet formation may be nearly as frequent as star formation. Since life makes use of the elements commonly seeded into space by burning and expiring stars, it is reasonable to speculate that the evolution of life and intelligence that happened on our planet may be found across the universe.

SOLAR PLANETARY SYSTEMS

STARDUST TO TERRESTRIAL AND EXTRATERRESTRIAL PLANETARY SCIENCES

[CRC Press](#) The authors have put forth great efforts in gathering present day knowledge about different objects within our solar system and universe. This book features the most current information on the subject with information acquired from noted scientists in this area. The main objective is to convey the importance of the subject and provide detailed information on the physical makeup of our planetary system and technologies used for research. Information on educational projects has also been included in the Radio Astronomy chapters. This information is a real plus for students and educators considering a career in Planetary Science or for increasing their knowledge about our planetary system.

THE COSMIC PERSPECTIVE WITH MASTERING ASTRONOMY

Building on a long tradition of effective pedagogy and comprehensive coverage, The Cosmic Perspective, Sixth Edition provides the most engaging and up-to-date introduction to astronomy for non-science readers. The book provides a wealth of features to help enhance reader skill building, including new Visual Skills Check end-of-chapter questions that provide an opportunity for readers to test their visual interpretation skills, new Cosmic Context Figures that help

readers synthesize key concepts and processes, and a new comprehensive visual overview of scale to help readers explore the scale of time and space. The Sixth Edition has also been fully updated to include the latest astronomical observations, research, and theoretical developments. Our Place in the Universe, Discovering the Universe for Yourself, The Science of Astronomy, Making Sense of the Universe: Understanding Motion, Energy, and Gravity, Light and Matter: Reading Messages from the Cosmos, Telescopes: Portals of Discovery, Our Solar System, Formation of the Solar System, Planetary Geology: Earth and the Other Terrestrial Worlds, Planetary Atmospheres: Earth and the Other Terrestrial Worlds, Jovian Planet Systems, Asteroids, Comets, and Dwarf Planets: Their Nature, Orbits, and Impacts, Other Planetary Systems: The New Science of Distant Worlds, Our Star, Surveying the Stars, Star Birth, Star Stuff, The Bizarre Stellar Graveyard, Our Galaxy, Galaxies and the Foundation of Modern Cosmology, Galaxy Evolution, Dark Matter, Dark Energy, and the Fate of the Universe, The Beginning of Time, Life in the Universe Inteded for those interested in learning the basics of astronomy.

THE COSMIC PERSPECTIVE FUNDAMENTALS

Addison-Wesley **NOTE:** You are purchasing a standalone product; MasteringAstronomy does not come packaged with this content. If you would like to purchase both the physical text and MasteringAstronomy search for 0133858642 / 9780133858648 The Cosmic Perspective Fundamentals Plus MasteringAstronomy with eText, Access Card Package: Package consists of: 0133889564 / 9780133889567 Cosmic Perspective Fundamentals, The 0133905306 / 9780133905304 MasteringAstronomy with Pearson eText -- ValuePack Access Card -- for The Cosmic Perspective Fundamentals 0321712951 / 9780321712950 Starry Night College Student Access Code Card 0321765184 / 9780321765185 SkyGazer 5.0 Student Access Code Card (Integrated component) MasteringAstronomy should only be purchased when required by an instructor. For one-semester college courses in Introductory Astronomy. Teaching the Process of Science through Astronomy Inspired by an activities-based classroom approach, The Cosmic Perspective Fundamentals is the briefest introduction to astronomy in the Bennett series. By focusing on the process of science and fundamental concepts of astronomy, The Cosmic Perspective Fundamentals allows time for the use of other instructional tools in the course. Each concisely written chapter is formatted into two main sections followed by a Process of Science section, making learning targeted and expectations clear for students. The Second Edition of The Cosmic Perspective Fundamentals presents recent dramatic advances in astronomy and how they change our understanding of the cosmos. This new edition focuses on essential subjects of astronomy chosen for their importance to the field, interest, and engagement level, using goal-oriented lessons and practical tools to bring astronomy to life. The textbook is now supported in MasteringAstronomy to create an unrivalled learning suite for students and instructors.

ASTRONOMY

Astronomy is written in clear non-technical language, with the occasional touch of humor and a wide range of clarifying illustrations. It has many analogies drawn from everyday life to help non-science majors appreciate, on their own terms, what our modern exploration of the universe is revealing. The book can be used for either a one-semester or two-semester introductory course (bear in mind, you can customize your version and include only those chapters or sections you will be teaching.) It is made available free of charge in electronic form (and low cost in printed form) to students around the world. If you have ever thrown up your hands in despair over the spiraling cost of astronomy textbooks, you owe your students a good look at this one. Coverage and Scope Astronomy was written, updated, and reviewed by a broad range of astronomers and astronomy educators in a strong community effort. It is designed to meet scope and sequence requirements of introductory astronomy courses nationwide. Chapter 1: Science and the Universe: A Brief Tour Chapter 2: Observing the Sky: The Birth of Astronomy Chapter 3: Orbits and Gravity Chapter 4: Earth, Moon, and Sky Chapter 5: Radiation and Spectra Chapter 6: Astronomical Instruments Chapter 7: Other Worlds: An Introduction to the Solar System Chapter 8: Earth as a Planet Chapter 9: Cratered Worlds Chapter 10: Earthlike Planets: Venus and Mars Chapter 11: The Giant Planets Chapter 12: Rings, Moons, and Pluto Chapter 13: Comets and Asteroids: Debris of the Solar System Chapter 14: Cosmic Samples and the Origin of the Solar System Chapter 15: The Sun: A Garden-Variety Star Chapter 16: The Sun: A Nuclear Powerhouse Chapter 17: Analyzing Starlight Chapter 18: The Stars: A Celestial Census Chapter 19: Celestial Distances Chapter 20: Between the Stars: Gas and Dust in Space Chapter 21: The Birth of Stars and the Discovery of Planets outside the Solar System Chapter 22: Stars from Adolescence to Old Age Chapter 23: The Death of Stars Chapter 24: Black Holes and Curved Spacetime Chapter 25: The Milky Way Galaxy Chapter 26: Galaxies Chapter 27: Active Galaxies, Quasars, and Supermassive Black Holes Chapter 28: The Evolution and Distribution of Galaxies Chapter 29: The Big Bang Chapter 30: Life in the Universe Appendix A: How to Study for Your Introductory Astronomy Course Appendix B: Astronomy Websites, Pictures, and Apps Appendix C: Scientific Notation Appendix D: Units Used in Science Appendix E: Some Useful Constants for Astronomy Appendix F: Physical and Orbital Data for the Planets Appendix G: Selected Moons of the Planets Appendix H: Upcoming Total Eclipses Appendix I: The Nearest Stars, Brown Dwarfs, and White Dwarfs Appendix J: The Brightest Twenty Stars Appendix K: The Chemical Elements Appendix L: The Constellations Appendix M: Star Charts and Sky Event Resources

FROM BLUE MOONS TO BLACK HOLES

A BASIC GUIDE TO ASTRONOMY, OUTER SPACE, AND SPACE EXPLORATION

Prometheus Books Written specifically for those who have been intrigued by or have been developing a growing interest in astronomy and space but have had little time to explore the amazing world of exploding stars, distant galaxies,

rovers on other planets, and more. -Astronomical Society of the Pacific A wealth of information in an enjoyable and easy to understand form. Wonderfully clear explanations . . . a perfect reference for any space buff. I read every word, cover to cover, and learned something new on just about every page (really!). -Glenn E. Cunningham, Former Project Manager of Nasa's Mars Observer and Mars Global Surveyor missions This is a fabulous treasure trove of space-related information. Delightfully written and illustrated.... This will be a helpful addition to the bookshelves of students and space buffs young and old. Many of us in the space professions whose memories or powers of simple explanation sometimes fail us will also find it a very valuable resource. - Kathy Sullivan, President and CEO, COSI (Ohio's Center of Science & Industry) and NASA Astronaut (Ret.) Our universe is a magnificent place, full of exotic entities like black holes and blue moons, white dwarfs and red giants. And it's out there for anyone who takes the time to look up! As this engrossing popular astronomy book makes clear, you don't need a degree in astrophysics to explore the vast reaches of outer space. All you need is curiosity and a little imagination. From Blue Moons to Black Holes is written specifically for those who have always been intrigued by or have been developing a growing interest in astronomy and space, but have had little time to explore the amazing world of exploding stars, distant galaxies, rovers on other planets, and more. The book consists of three sections: Questions and Answers, Quick Facts, and A Brief History of Lunar and Planetary Exploration. Knocke - who has often lectured at the prestigious Mount Wilson and Lowell Observatories - provides answers to the most frequently asked questions regarding astronomy, outer space, and space exploration in the Questions and Answers section. She gives simple and easy-to-understand answers to such provocative questions as: What is a blue moon? Could you travel through a black hole? Is the North Star the brightest star in the sky? Is Pluto really a planet? The Quick Facts section offers the reader an easy way to look up fascinating statistics about the moon and planets, bright stars, constellations, and more. This section also includes a guide to upcoming meteor showers and lunar and solar eclipses. A Brief History of Lunar and Planetary Exploration includes a chronological listing of every mission that has been launched to the moon and planets. By listing both the successes and failures, readers gain a better understanding of just how difficult it is to travel beyond our own planet. This generously illustrated volume will also include a color insert containing, among other pictures, beautiful images of Saturn from the Cassini spacecraft, currently in orbit around the planet. Whether read from cover to cover or used as a reference tool to search for specific answers, From Blue Moons to Black Holes will prove to be fun, accessible, and wonderfully thought provoking. Melanie Melton Knocke (La Crescenta, CA), the former director of science education and public outreach at the Mount Wilson Observatory and Lowell Observatory, is a writer and Web editor for The Planetary Society (<http://planetary.org>) and the author of Observing for the Fun of It, Will Black Holes Devour the Universe? And 100 Other Questions & Answers about Astronomy, and Astronomy with Binoculars.

WONDERS OF THE SOLAR SYSTEM

[HarperCollins UK](#) Recommended for viewing on a colour tablet. In Wonders of the Solar System - the book of the acclaimed BBC TV series - Professor Brian Cox will take us on a journey of discovery where alien worlds from your imagination become places we can see, feel and visit.

BEYOND PLUTO

EXPLORING THE OUTER LIMITS OF THE SOLAR SYSTEM

[Cambridge University Press](#) In the ten years preceding publication, the known solar system more than doubled in size. For the first time in almost two centuries an entirely new population of planetary objects was found. This 'Kuiper Belt' of minor planets beyond Neptune revolutionised our understanding of the solar system's formation and finally explained the origin of the enigmatic outer planet Pluto. This is the fascinating story of how theoretical physicists decided that there must be a population of unknown bodies beyond Neptune and how a small band of astronomers set out to find them. What they discovered was a family of ancient planetesimals whose orbits and physical properties were far more complicated than anyone expected. We follow the story of this discovery, and see how astronomers, theoretical physicists and one incredibly dedicated amateur observer came together to explore the frozen boundary of the solar system.

FUNDAMENTAL ASTRONOMY

[Springer Science & Business Media](#) Fundamental Astronomy is a well-balanced, comprehensive introduction to classical and modern astronomy. While emphasizing both the astronomical concepts and the underlying physical principles, the text provides a sound basis for more profound studies in the astronomical sciences. This is the fifth edition of the successful undergraduate textbook and reference work. It has been extensively modernized and extended in the parts dealing with extragalactic astronomy and cosmology. You will also find augmented sections on the solar system and extrasolar planets as well as a new chapter on astrobiology. Long considered a standard text for physical science majors, Fundamental Astronomy is also an excellent reference work for dedicated amateur astronomers.

OCEAN WORLDS

THE STORY OF SEAS ON EARTH AND OTHER PLANETS

[Oxford University Press, USA](#) Traces the history and evolution of oceans on Earth as well as their importance and the changes wrought by humans that threaten all aspects of their existence, and looks beyond Earth to oceans on other planets.

ESSENTIAL COSMIC PERSPECTIVE WITH MASTERINGASTRONOMY AND VOYAGER

Based on the most up-to-date astronomical research, this edition retains all of the existing features as well as including new features to help students learn about the process of science and how to interpret visual data.

RARE EARTH

WHY COMPLEX LIFE IS UNCOMMON IN THE UNIVERSE

Springer What determines whether complex life will arise on a planet, or even any life at all? Questions such as these are investigated in this groundbreaking book. In doing so, the authors synthesize information from astronomy, biology, and paleontology, and apply it to what we know about the rise of life on Earth and to what could possibly happen elsewhere in the universe. Everyone who has been thrilled by the recent discoveries of extrasolar planets and the indications of life on Mars and the Jovian moon Europa will be fascinated by Rare Earth, and its implications for those who look to the heavens for companionship.

THE CAMBRIDGE GUIDE TO THE SOLAR SYSTEM

Cambridge University Press Richly illustrated with full-color images, this book is a comprehensive, up-to-date description of the planets, their moons, and recent exoplanet discoveries. This second edition of a now classic reference is brought up to date with fascinating new discoveries from 12 recent Solar System missions. Examples include water on the Moon, volcanism on Mercury's previously unseen half, vast buried glaciers on Mars, geysers on Saturn's moon Enceladus, lakes of hydrocarbons on Titan, encounter with asteroid Itokawa, and sample return from comet Wild 2. The book is further enhanced by hundreds of striking new images of the planets and moons. Written at an introductory level appropriate for undergraduate and high-school students, it provides fresh insights that appeal to anyone with an interest in planetary science. A website hosted by the author contains all the images in the book with an overview of their importance. A link to this can be found at www.cambridge.org/solarsystem.

THE BIRTH OF MODERN ASTRONOMY

Springer This richly illustrated book discusses the ways in which astronomy expanded after 1945 from a modest discipline to a robust and modern science. It begins with an introduction to the state of astronomy in 1945 before recounting how in the following years, initial observations were made in hitherto unexplored ranges of wavelengths, such as X-radiation, infrared radiation and radio waves. These led to the serendipitous discovery of more than a dozen new phenomena, including quasars and neutron stars, that each triggered a new area of research. The book goes on to discuss how after 1985, the further, systematic exploration of the earlier discoveries led to long-term planning and the construction of new, large telescopes on Earth and in Space. Key scientific highlights described in the text are the detection of exoplanets (1995), the unexpected discovery of the accelerated expansion of the Universe (1999), a generally accepted model for the large-scale properties of the Universe (2003) and the Λ CDM theory (2005) that explains how the galaxies and stars of the present Universe were formed from minute irregularities in the (almost) homogenous gas that filled the early Universe. All these major scientific achievements came at a price, namely the need to introduce two new phenomena that are as yet unexplained by physics: inflation and dark energy. Probably the deepest unsolved question has to be: Why did all of this start with a Big Bang?

LOOSE-LEAF VERSION FOR UNIVERSE

W. H. Freeman

COSMIC PERSPECTIVES

Cambridge University Press Modern cosmology and its relationship to the development of human civilization is the subject of this book. Astronomers, cosmologists and historians have contributed fourteen essays covering a wide range of subjects. These include the place of astronomy in China by Joseph Needham, frontiers in cosmology by Fred Hoyle, the dark matter problem by Bernard Carr and the origin of life by Cyril Ponnampertuma. There are also contributions on astrology, science fiction and science.

OUR COSMIC HABITAT

NEW EDITION

Princeton University Press Our universe seems strangely "biophilic," or hospitable to life. Is this happenstance, providence, or coincidence? According to cosmologist Martin Rees, the answer depends on the answer to another question, the one posed by Einstein's famous remark: "What interests me most is whether God could have made the world differently." This highly engaging book explores the fascinating consequences of the answer being "yes." Rees explores the notion that our universe is just a part of a vast "multiverse," or ensemble of universes, in which most of the other universes are lifeless. What we call the laws of nature would then be no more than local bylaws, imposed in the aftermath of our own Big Bang. In this scenario, our cosmic habitat would be a special, possibly unique universe where the prevailing laws of physics allowed life to emerge. Rees begins by exploring the nature of our solar system and examining a range of related issues such as whether our universe is or isn't infinite. He asks, for example: How likely is life? How credible is the Big Bang theory? Rees then peers into the long-range cosmic future before tracing the

causal chain backward to the beginning. He concludes by trying to untangle the paradoxical notion that our entire universe, stretching 10 billion light-years in all directions, emerged from an infinitesimal speck. As Rees argues, we may already have intimations of other universes. But the fate of the multiverse concept depends on the still-unknown bedrock nature of space and time on scales a trillion trillion times smaller than atoms, in the realm governed by the quantum physics of gravity. Expanding our comprehension of the cosmos, *Our Cosmic Habitat* will be read and enjoyed by all those--scientists and nonscientists alike--who are as fascinated by the universe we inhabit as is the author himself.

CARL SAGAN'S COSMIC CONNECTION

AN EXTRATERRESTRIAL PERSPECTIVE

[Cambridge University Press](#) A classic book by the world's most famous scientist and science visionary, back in print with a new perspective.

THE THEORY OF CELESTIAL INFLUENCE

[Lulu.com](#) Before Paulo Coelho and Eckhart Tolle came Rodney Collin. A huge 466 page book full of essential knowledge. *How To Become Supernatural Man, The Universe and Cosmic Mystery* is an exploration of the universe and man's place in it. Rodney Collin examines 20th-century scientific discoveries and traditional esoteric teachings and concludes that the driving force behind everything is neither procreation nor survival, but expansion of awareness. Collin sets out to reconcile the considerable contradictions of the rational and imaginative minds and of the ways we see the external world versus our inner selves. For readers familiar with Gurdjieff's cosmology will here find further examinations of the systems outlined in by Ouspensky in *Search of the Miraculous*.

PALE BLUE DOT

A VISION OF THE HUMAN FUTURE IN SPACE

[Ballantine Books](#) "Fascinating . . . memorable . . . revealing . . . perhaps the best of Carl Sagan's books."—*The Washington Post Book World* (front page review) In *Cosmos*, the late astronomer Carl Sagan cast his gaze over the magnificent mystery of the Universe and made it accessible to millions of people around the world. Now in this stunning sequel, Carl Sagan completes his revolutionary journey through space and time. Future generations will look back on our epoch as the time when the human race finally broke into a radically new frontier—space. In *Pale Blue Dot*, Sagan traces the spellbinding history of our launch into the cosmos and assesses the future that looms before us as we move out into our own solar system and on to distant galaxies beyond. The exploration and eventual settlement of other worlds is neither a fantasy nor luxury, insists Sagan, but rather a necessary condition for the survival of the human race. "Takes readers far beyond *Cosmos* . . . Sagan sees humanity's future in the stars."—*Chicago Tribune*

EXPANDING WORLDVIEWS: ASTROBIOLOGY, BIG HISTORY AND COSMIC PERSPECTIVES

[Springer Nature](#) This book collates papers presented at two international conferences (held at the Australian National University in 2018 and Birkbeck College London in 2019) exploring the relationships between big history and astrobiology and their wider implications for society. These two relatively new academic disciplines aim to integrate human history with the wider history of the universe and the search for life elsewhere. The book will show that, despite differences in emphasis, big history and astrobiology share much in common, especially their interdisciplinary approaches and the cosmic and evolutionary perspectives that they both engender. Specifically, the book addresses the unified, all-embracing, nature of knowledge, the impact of big history on humanity and the world at large, the possible impact of SETI on astrobiology and big history, the cultural signature of Earth's inhabitants beyond our own planet, and the political implications of a planetary worldview. The principal readership is envisaged to comprise scholars working in the fields of astrobiology, big history and space exploration interested in forging interdisciplinary links between these diverse topics, together with educators, and a wider public, interested in the societal implications of the cosmic and evolutionary perspectives engendered by research in these fields.

UNIVERSE

[Macmillan Higher Education](#) This comprehensive textbook for the two-term course focuses students on not only the foundational concepts of astronomy but on the process of scientific discovery itself—how we know what we know about the cosmos. Engagingly written and filled helpful pedagogical tools, the book also excels at dispelling widely held misconceptions and helping students avoid common pitfalls as they explore the heavens. Thoroughly updated, the new edition features the latest discoveries and new pedagogy, and is supported by an expanded media/supplements package centered on W. H. Freeman's extraordinary new online course space, LaunchPad.

THE COSMIC PERSPECTIVE

[Addison Wesley Publishing Company](#) Built from the ground up on our new understanding of the universe, this reader-friendly book focuses on central ideas and unifying themes to provide a concise cosmic context. Scientific concepts are linked to everyday experience to help readers develop an appreciation for the scientific method and to see how physics and astronomy are foundations for understanding their world. Recent discoveries spark readers' curiosity in the universe as a whole. Updates include discoveries such as the accelerating universe/cosmological constant, the

detection of more planets around other stars, the potential of water flow on Mars, and the latest theories on the very early universe. For college instructors and students, or anyone interested in astronomy and physics.

THE ESSENTIAL COSMIC PERSPECTIVE

LIFE IN THE UNIVERSE

Createspace Independent Publishing Platform **Life in the Universe** By Jeffrey O. Bennett

THE STARS MY DESTINATION

Orion Publishing Group **One of the very best must-read SF novels of all time.**

SCIENCE AND CREATIONISM

A VIEW FROM THE NATIONAL ACADEMY OF SCIENCES

National Academies Press **This edition of Science and Creationism summarizes key aspects of several of the most important lines of evidence supporting evolution. It describes some of the positions taken by advocates of creation science and presents an analysis of these claims. This document lays out for a broader audience the case against presenting religious concepts in science classes. The document covers the origin of the universe, Earth, and life; evidence supporting biological evolution; and human evolution. (Contains 31 references.) (CCM)**

COSMIC EVOLUTION

THE RISE OF COMPLEXITY IN NATURE

Harvard University Press **Chaisson addresses some of the most basic issues we can contemplate: the origin of matter and the origin of life, and the ways matter, life, and radiation interact and change with time. He designs for us an expansive yet intricate model depicting the origin and evolution of all material structures.**

EXTRATERRESTRIAL

THE FIRST SIGN OF INTELLIGENT LIFE BEYOND EARTH

Houghton Mifflin **Harvard's top astronomer lays out his controversial theory that our solar system was recently visited by advanced alien technology from a distant star**

FORGING THE FUTURE OF SPACE SCIENCE

THE NEXT 50 YEARS

National Academies Press **From September 2007 to June 2008 the Space Studies Board conducted an international public seminar series, with each monthly talk highlighting a different topic in space and Earth science. The principal lectures from the series are compiled in Forging the Future of Space Science. The topics of these events covered the full spectrum of space and Earth science research, from global climate change, to the cosmic origins of life, to the exploration of the Moon and Mars, to the scientific research required to support human spaceflight. The prevailing messages throughout the seminar series as demonstrated by the lectures in this book are how much we have accomplished over the past 50 years, how profound are our discoveries, how much contributions from the space program affect our daily lives, and yet how much remains to be done. The age of discovery in space and Earth science is just beginning. Opportunities abound that will forever alter our destiny.**