

Mathematician Rockstars Mini Biographies Of Mathe

Enchantress of Numbers
 Seventeen Equations that Changed the World
 The Seduction of Curves
 Nature's Numbers
 Basic Notions of Algebra
 Murmur
 Birth of a Theorem
 Current Biography Yearbook
 No One Round Here Reads Tolstoy
 Birth of Modern Facts
 Encyclopedia of World Biography
 The Equation that Couldn't Be Solved
 Galileo
 Professor Stewart's Cabinet of Mathematical Curiosities
 Zero
 Einstein
 The Foundations of Mathematics
 Biography Index
 American National Biography
 Five Equations That Changed the World
 A New Kind of Science
 The Long and the Short of It
 Bowker's Complete Video Directory 2001
 Perfect Rigour
 Alex's Adventures in Numberland
 On Being Human
 The Riverside Dictionary of Biography
 Ziggyology
 Latino Periodicals
 Incerto 5-Book Bundle
 Genius at Play
 The Weil Conjectures
 Progressive Rock Reconsidered
 Re-educated
 Why Machines Learn
 Inspiration to Live Your Magic!
 Content Area Writing that Rocks (and Works!)
 Significant Figures
 Biography: A Very Short Introduction
 LLA Bulletin

Mathematician Rockstars Mini Biographies Of Mathe

Downloaded from hl.uconnect.hi.u.edu by guest

CAMERON BLAZE

Enchantress of Numbers Profile Books

A cumulative index to biographical material in books and magazines.

Seventeen Equations that Changed the World Random House

Mark Hodkinson grew up among the terrace houses of Rochdale in a house with just one book.

Today, Mark is an author, journalist and publisher. He still lives in Rochdale but is now surrounded by 3,500 titles, at the last count. No One Round Here Reads Tolstoy is his story of growing up a working-class lad during the 1970s and 1980s. It's about the schools, the music, the people - but pre-eminently and profoundly the books and authors that led the way and shaped his life. It's about a family who didn't see the point of reading, and a troubled grandad who taught Mark the power of stories. It's also a story of how writing and reading has changed over the last five decades.

The Seduction of Curves Profile Books

'An invaluable companion for anyone who wants a deep understanding of what's under the hood of often inscrutable machines' Melanie Mitchell A rich, narrative explanation of the mathematics that has brought us machine learning and the ongoing explosion of artificial intelligence Machine-learning systems are making life-altering decisions for us: approving mortgage loans, determining whether a tumour is cancerous, or deciding whether someone gets bail. They now influence discoveries in chemistry, biology and physics - the study of genomes, extra-solar planets, even the intricacies of quantum systems. We are living through a revolution in artificial intelligence that is not slowing down. This major shift is based on simple mathematics, some of which goes back centuries: linear algebra and calculus, the stuff of eighteenth-century mathematics. Indeed by the mid-1850s, a lot of the groundwork was all done. It took the development of computer science and the kindling of 1990s computer chips designed for video games to ignite the explosion of AI that we see all around us today. In this enlightening book, Anil Ananthaswamy explains the fundamental maths behind AI, which suggests that the basics of natural and artificial intelligence might follow the same mathematical rules. As Ananthaswamy resonantly concludes, to make the most of our most wondrous technologies we need to understand their profound limitations - the clues lie in the maths that makes AI possible.

Nature's Numbers Simon and Schuster

For over twenty years, James W. Cortada has pioneered research into how information shapes society. In this book he tells the story of how information evolved since the mid-nineteenth century. Cortada argues that information increased in quantity, became more specialized by discipline (e.g., mathematics, science, political science), and more organized. Information increased in volume due to a series of innovations, such as the electrification of communications and the development of computers, but also due to the organization of facts and knowledge by discipline, making it easier to manage and access. He looks at what major disciplines have done to shape the nature of modern information, devoting chapters to the most obvious ones. Cortada argues that understanding how some features of information evolved is useful for those who work in subjects that deal with their very construct and application, such as computer scientists and those exploring social media and, most recently, history. The Birth of Modern Facts builds on Cortada's prior books examining how information became a central feature of modern society, most notably as a sequel to All the Facts: A History of Information in the United States since 1870 (OUP, 2016) and Building Blocks of Society: History, Information Ecosystems, and Infrastructures (R&L, 2021).

Basic Notions of Algebra A&C Black

What do Bach's compositions, Rubik's Cube, the way we choose our mates, and the physics of subatomic particles have in common? All are governed by the laws of symmetry, which elegantly

unify scientific and artistic principles. Yet the mathematical language of symmetry-known as group theory-did not emerge from the study of symmetry at all, but from an equation that couldn't be solved. For thousands of years mathematicians solved progressively more difficult algebraic equations, until they encountered the quintic equation, which resisted solution for three centuries. Working independently, two great prodigies ultimately proved that the quintic cannot be solved by a simple formula. These geniuses, a Norwegian named Niels Henrik Abel and a romantic Frenchman named Évariste Galois, both died tragically young. Their incredible labor, however, produced the origins of group theory. The first extensive, popular account of the mathematics of symmetry and order, The Equation That Couldn't Be Solved is told not through abstract formulas but in a beautifully written and dramatic account of the lives and work of some of the greatest and most intriguing mathematicians in history.

Murmur Random House

The transition from school mathematics to university mathematics is seldom straightforward. Students are faced with a disconnect between the algorithmic and informal attitude to mathematics at school, versus a new emphasis on proof, based on logic, and a more abstract development of general concepts, based on set theory. The authors have many years' experience of the potential difficulties involved, through teaching first-year undergraduates and researching the ways in which students and mathematicians think. The book explains the motivation behind abstract foundational material based on students' experiences of school mathematics, and explicitly suggests ways students can make sense of formal ideas. This second edition takes a significant step forward by not only making the transition from intuitive to formal methods, but also by reversing the process- using structure theorems to prove that formal systems have visual and symbolic interpretations that enhance mathematical thinking. This is exemplified by a new chapter on the theory of groups. While the first edition extended counting to infinite cardinal numbers, the second also extends the real numbers rigorously to larger ordered fields. This links intuitive ideas in calculus to the formal epsilon-delta methods of analysis. The approach here is not the conventional one of 'nonstandard analysis', but a simpler, graphically based treatment which makes the notion of an infinitesimal natural and straightforward. This allows a further vision of the wider world of mathematical thinking in which formal definitions and proof lead to amazing new ways of defining, proving, visualising and symbolising mathematics beyond previous expectations.

Birth of a Theorem Penguin

In 2006, an eccentric Russian mathematician named Grigori Perelman solved one of the world's greatest intellectual puzzles. The Poincare conjecture is an extremely complex topological problem that had eluded the best minds for over a century. In 2000, the Clay Institute in Boston named it one of seven great unsolved mathematical problems, and promised a million dollars to anyone who could find a solution. Perelman was awarded the prize this year - and declined the money. Journalist Masha Gessen was determined to find out why. Drawing on interviews with Perelman's teachers, classmates, coaches, teammates, and colleagues in Russia and the US - and informed by her own background as a math whiz raised in Russia - she set out to uncover the nature of Perelman's astonishing abilities. In telling his story, Masha Gessen has constructed a gripping and tragic tale that sheds rare light on the unique burden of genius.

Current Biography Yearbook University of Chicago Press

Engage third through twelfth grade students with creative strategies to develop their writing skills with the help of Content Area Writing That Rocks. This standards-based resource provides teachers with strategies and suggestions to build writing skills based on students' interests in technology, social media, and other contemporary topics. Authored by Rebecca G. Harper, this guide supports overall writing instruction across the content areas.

No One Round Here Reads Tolstoy Macmillan + ORM

A Publishers Weekly best book of 1995! Dr. Michael Guillen, known to millions as the science editor of ABC's Good Morning America, tells the fascinating stories behind five mathematical equations. As a regular contributor to daytime's most popular morning news show and an instructor at Harvard University, Dr. Michael Guillen has earned the respect of millions as a clear and entertaining guide to the exhilarating world of science and mathematics. Now Dr. Guillen unravels the equations that have led to the inventions and events that characterize the modern world, one of which -- Albert Einstein's famous energy equation, $E=mc^2$ -- enabled the creation of the nuclear bomb. Also revealed are the mathematical foundations for the moon landing, airplane travel, the electric generator -- and even life itself. Praised by Publishers Weekly as "a wholly accessible, beautifully written exploration of the potent mathematical imagination," and named a Best Nonfiction Book of 1995, the stories behind The Five Equations That Changed the World, as told by Dr. Guillen, are not only chronicles of science, but also gripping dramas of jealousy, fame, war, and discovery.

Birth of Modern Facts Wolfram Media

NOW IN PAPERBACK"€"Starting from a collection of simple computer experiments"€"illustrated in the book by striking computer graphics"€"Stephen Wolfram shows how their unexpected results force a whole new way of looking at the operation of our universe.

Encyclopedia of World Biography Simon and Schuster

A mathematical sightseeing tour of the natural world from the author of THE MAGICAL MAZE Why do many flowers have five or eight petals, but very few six or seven? Why do snowflakes have sixfold symmetry? Why do tigers have stripes but leopards have spots? Mathematics is to nature as Sherlock Holmes is to evidence. Mathematics can look at a single snowflake and deduce the atomic geometry of its crystals; it can start with a violin string and uncover the existence of radio waves. And mathematics still has the power to open our eyes to new and unsuspected regularities - the secret structure of a cloud or the hidden rhythms of the weather. There are patterns in the world we are now seeing for the first time - patterns at the frontier of science, yet patterns so simple that anybody can see them once they know where to look.

The Equation that Couldn't Be Solved Oxford University Press, USA

Wholeheartedly recommended to every student and user of mathematics, this is an extremely original and highly informative essay on algebra and its place in modern mathematics and science. From the fields studied in every university maths course, through Lie groups to cohomology and category theory, the author shows how the origins of each concept can be related to attempts to model phenomena in physics or in other branches of mathematics. Required reading for mathematicians, from beginners to experts.

Galileo Yale University Press

In 2010, French mathematician Cédric Villani received the Fields Medal, the most coveted prize in mathematics, in recognition of a proof which he devised with his close collaborator Clément Mouhot to explain one of the most surprising theories in classical physics. Birth of aTheorem is Villani's own account of the years leading up to the award. It invites readers inside the mind of a great mathematician as he wrestles with the most important work of his career. But you don't have to understand nonlinear Landau damping to love Birth of aTheorem. It doesn't simplify or overexplain; rather, it invites readers into collaboration. Villani's diaries, emails, and musings enmesh you in the process of discovery. You join him in unproductive lulls and late-night breakthroughs. You're privy to the dining-hall conversations at the world's greatest research institutions. Villani shares his favorite songs, his love of manga, and the imaginative stories he tells his children. In mathematics, as in any creative work, it is the thinker's whole life that propels discovery—and with Birth of aTheorem, Cédric Villani welcomes you into his.

Professor Stewart's Cabinet of Mathematical Curiosities Princeton University Press

Presents brief biographical sketches which provide vital statistics as well as information on the importance of the person listed.

Zero Hachette Books

In this large-format book, lavishly illustrated in color throughout, Allan McRobie takes the reader on an alluring exploration of the beautiful curves that shape our world--from our bodies to Salvador Dalí's paintings and the space-time fabric of the universe itself. The book focuses on seven curves--

the fold, cusp, swallowtail, and butterfly, plus the hyperbolic, elliptical, and parabolic "umbilics"--and describes the surprising origins of their taxonomy in the catastrophe theory of mathematician René Thom.

Einstein Rowman & Littlefield

A NEW YORK TIMES NOTABLE BOOK The Babylonians invented it, the Greeks banned it, the Hindus worshipped it, and the Christian Church used it to fend off heretics. Today it's a timebomb ticking in the heart of astrophysics. For zero, infinity's twin, is not like other numbers. It is both nothing and everything. Zero has pitted East against West and faith against reason, and its intransigence persists in the dark core of a black hole and the brilliant flash of the Big Bang. Today, zero lies at the heart of one of the biggest scientific controversies of all time: the quest for a theory of everything. Within the concept of zero lies a philosophical and scientific history of humanity. Charles Seife's elegant and witty account takes us from Aristotle to superstring theory by way of Egyptian geometry, Kabbalism, Einstein, the Chandrasekhar limit and Stephen Hawking. Covering centuries of thought, it is a concise tour of a world of ideas, bound up in the simple notion of nothing.

The Foundations of Mathematics Profile Books

"Kagan ponders a series of important nodes of debate while challenging us to examine what we know and why we know it. Most critically he presents an elegant argument for functions of mind that cannot be replaced with sentences about brains while acknowledging that mind emerges from brain activity. He relies on the evidence to argue that thoughts and emotions are distinct from their biological and genetic bases. In separate chapters he deals with the meaning of words, kinds of knowing, the powerful influence of social class, the functions of education, emotion, morality, and other issues. And without fail he sheds light on these ideas while remaining honest to their complexity." -- Publisher's description.

Biography Index Hachette UK

"[A] whimsical book on aging . . . the author mixes art, science, and humor to brew a highly readable concoction, presenting one aging theory after another." —Publishers Weekly Everything that lives will die. That's the fundamental fact of life. But not everyone dies at the same age: people vary wildly in their patterns of aging and their life spans—and that variation is nothing compared to what's found in other animal and plant species. With *The Long and the Short of It*, biologist and writer Jonathan Silvertown offers readers a witty and fascinating tour through the scientific study of longevity and aging. Dividing his daunting subject by theme—death, life span, aging, heredity, evolution, and more—Silvertown draws on the latest scientific developments to paint a picture of what we know about how life span, senescence, and death vary within and across species. At every turn, he addresses fascinating questions that have far-reaching implications: What causes aging, and what determines the length of an individual life? What changes have caused the average human life span to increase so dramatically—fifteen minutes per hour—in the past two centuries? If evolution favors those who leave the most descendants, why haven't we evolved to be immortal? The answers to these puzzles and more emerge from close examination of the whole natural history of life span and aging, from fruit flies, nematodes, redwoods, and much more. *The Long and the Short of It* pairs a perpetually fascinating topic with a wholly engaging writer, and the result is a supremely accessible book that will reward curious readers of all ages. "Captivating and enlightening." —The New York Times Well Blog

American National Biography Random House

Winner of the 2019 Wellcome Book Prize Winner of the 2019 Republic of Consciousness Prize Shortlisted for the 2018 Goldsmiths Prize Shortlisted for the 2019 James Tait Black Prize Longlisted for the 2019 Rathbones Folio Prize Taking its cue from the arrest and legally enforced chemical castration of the mathematician Alan Turing, *Murmur* is the account of a man who responds to intolerable physical and mental stress with love, honour and a rigorous, unsentimental curiosity about the ways in which we perceive ourselves and the world. Formally audacious, daring in its intellectual inquiry and unwaveringly humane, Will Eaves's *Murmur* is a rare achievement.

Five Equations That Changed the World McFarland

Publisher Description