

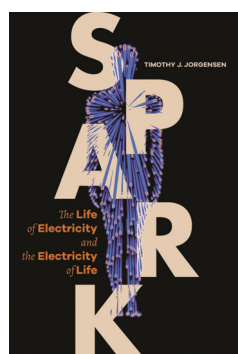
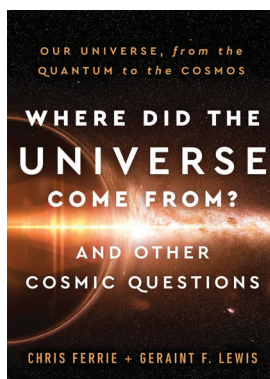
NEW BOOKS & MEDIA

Where Did the Universe Come From? And Other Cosmic Questions

Our Universe, from the Quantum to the Cosmos

Chris Ferrie and Geraint F. Lewis
Sourcebooks, 2021. \$17.99

Quantum physicist Chris Ferrie and astrophysicist Geraint Lewis have teamed up to discuss the formation and evolution of the universe, both on the tiniest of scales and on the grandest. Aimed at the general reader, the book explains in conversational, nontechnical language two theories that form the basis of modern physics—quantum mechanics and general relativity—and uses them to address such difficult topics as how matter was created and how long the universe will last. Although a grand unified theory has yet to be proposed, the authors show how the two theories are intricately intertwined and work together, despite their vast separation in scale. —CC



Spark

The Life of Electricity and the Electricity of Life

Timothy J. Jorgensen
Princeton U. Press, 2021. \$29.95

Did you know that the word “electricity” derives from a Latin word meaning “amber-like”? Or that giraffes are particularly susceptible to lightning strikes? Those are just two of the diverse and diverting topics touched on in *Spark*, authored by Timothy J. Jorgensen. A professor of radiation medicine and biochemistry, Jorgensen focuses

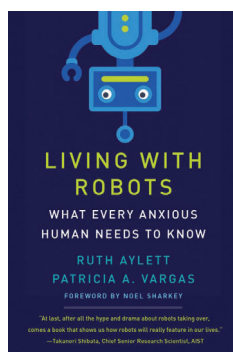
not on electricity as a power source for appliances and electronic devices, but rather on its role in biology. After first explaining what electricity is and how humans discovered it and began experimenting with it, he moves on to its present-day use in medical research, such as in developing neuroprosthetic limbs and treating mental disorders like depression. Written for a general audience, *Spark* is intended to both educate and entertain. —CC

Living with Robots

What Every Anxious Human Needs to Know

Ruth Aylett and Patricia A. Vargas
MIT Press, 2021. \$27.95

Given the technological advances of the last decades, should we fear robots? Or are they simply helpful companions? In *Living with Robots*, Ruth Aylett and Patricia A. Vargas, two roboticists, provide readers with an overview of the different types of such machines, including industrial robots, household vacuum cleaners, and military and sex robots. On the one hand, they warn that we should be concerned about such dystopian possibilities as killer drones that operate without human control and sexbots that contribute to the objectification of women. On the other hand, roboticists still struggle to build machines that can perform simple human tasks like walking or holding a cup of coffee. Ultimately, the authors note, “We really cannot build a robot that is just like us.” —RD

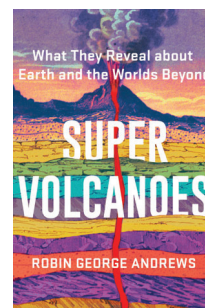


Super Volcanoes

What They Reveal about Earth and the Worlds Beyond

Robin George Andrews
W. W. Norton, 2021.
\$27.95

Although science journalist Robin George Andrews concedes that volcanoes can be incredibly destructive, he argues that they are “for the most part, good.” Trained as a volcanologist, Andrews changed careers when he realized that he wanted to share stories about volcanoes rather than conduct scientific research. He succeeds in that task with *Super Volcanoes*, in which he takes a rollicking tour from Hawaii to Mars and demonstrates that volcanoes are scientific gold mines that tell us much about a planet’s history. Along the way, readers learn many surprising things about the fiery cauldrons, including that scientists have only directly observed at most two underwater volcanic eruptions. Andrews’s passion for volcanoes and his exuberant writing style make the book an easy recommendation. —RD



Thinking Better

The Art of the Shortcut in Math and Life

Marcus du Sautoy
Basic Books, 2021.
\$30.00

Whether creating an artistic masterpiece, starting an entrepreneurial venture, or simply plotting the best route from A to B, Marcus du Sautoy has a clever strategy, or shortcut, to facilitate the process. Each of the 10 chapters of the mathematician’s book *Thinking Better* centers on a particular type of shortcut, such as patterns, probabilities, or networks. He begins by positing a puzzle and then, through a series of historical anecdotes and mathematical discussions, shows how he arrived at the solution. Using a humorous and conversational narrative style, du Sautoy presents some fairly complex mathematical concepts in a way that is both educational and entertaining. —CC **DT**

