

Reh, Jane Stafford, and Marjorie Van de Water and the topics that they covered: archaeology, medicine, and psychology, respectively. The intersection between professional and personal motivations, the impact of chronic underpayment, and the profound commitment that contributing writers demonstrated under difficult circumstances begin to come into focus. Reh, for example, sent dispatches to Science Service from Mexico while she waited for her divorce to be finalized, but editors typically declined to pay her an advance. When Science Service fell short of meeting her needs, Reh sent her work to other publishers, including *Scientific American* and the *New York Times*, reaching new audiences.

At its heart, *Writing for Their Lives* is an homage to archivists. Photographs are at once intimate and professional, beautifully evoking the lives and personalities of LaFollette's subjects at work. An independent historian and a research associate at the Smithsonian Institution Archives, LaFollette draws most heavily from the Smithsonian's collections, including Science Service employment records and professional correspondence.

The result is a cabinet of curiosities, filled with details that other authors might have passed over. In presenting, for example, the managing editor's personal stationery that highlighted his wife's chemistry degree, or the cost of travel for a freelancer—\$45.93 for a trip to Saint Louis, including "railroad fare and Pullman charge . . . 'hotel, meals, tips, taxis . . . and the pressing of a frock'" —LaFollette invites the reader to explore the records alongside her.

The book unveils early and important, yet incomplete, steps toward including women's voices in science journalism. Science Service editors made space for women writers but also urged them to revise their copy for greater splash and home-economics appeal, supporting stories that resonated with traditional Western attitudes—like that of the "blonde girl explorer." The organization's first director, Edwin Slosson, advised one aspiring contributor to trim her stories by saying, "You put too much meat into your preparations. Remember that a housewife's skill is based upon her ability to make a tasty dish out of a scrap of leftover." Unsurprising for

the era, but nonetheless disheartening, LaFollette notes only one woman of color who worked for the service during its first five decades. Some staff writers also hinted at the social impact of gender discrepancies in the fields they covered. "The test atomic explosions have been peculiarly man's work," wrote Helen Augusta Miles Davis about nuclear tests in Nevada and at Bikini Atoll after World War II. Despite being married to the managing editor at Science Service, Davis often wrote without compensation and without recognition on the masthead.

Writing for Their Lives pulls back the curtain on a complex mix of progress and disparity but often refrains from critique. It celebrates women in science journalism who challenged the early-20th-century social norms that had excluded them. It also reveals, indirectly, the considerable cultural distance between 1933 and 2023. The book is a reminder not only of how far society has come but also of how much road still lies ahead in working toward full equity and inclusion.

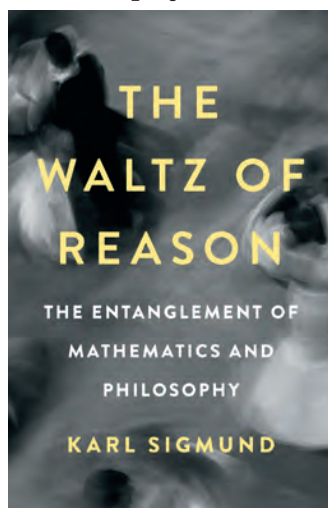
Michelle Frank

Leon Levy Center for Biography

NEW BOOKS & MEDIA

The Waltz of Reason

The Entanglement of Mathematics and Philosophy



Karl Sigmund
Basic Books, 2023. \$32.50

In this book, the mathematician Karl Sigmund delves into the relationship between philosophy and his own field. Chapters cover such topics as logic, infinity, limits, randomness, voting, language, fairness, and the social contract. Physicists may be interested in learning that many mathematicians also take a "shut up and calculate"—style attitude toward the foundations of their field. But as Sigmund notes, many compelling questions remain. For example, does the imaginary number i

actually exist, or did we invent it? Could an alien civilization develop an alternate form of mathematics, or would they inevitably develop the same one we have? Sigmund's witty tone inspires readers to delve into those questions and others.

—RD

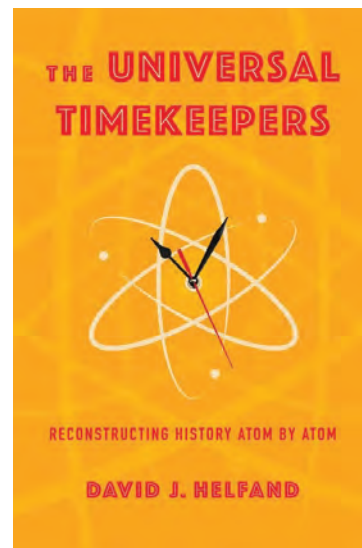
The Universal Timekeepers

Reconstructing History Atom by Atom

David J. Helfand
Columbia U. Press, 2023.
\$24.95

How can atoms, which are predominately empty space, be used to study human history as well as that of Earth, the solar system, and the universe itself? In *The Universal Timekeepers*, the physicist David Helfand discusses the discovery and structure of atoms, subatomic particles, nuclei, and molecules before moving on to how their radioactive decay has proved to be an accurate clock with which to explore the past. In his "tales of atomic detective work," Helfand explains the diverse and wide-ranging applications of radioactive dating, including detecting art forgeries and investigating Earth's paleoclimate, the death of the dinosaurs, evolution, the Sun's birth, and the Big Bang.

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Putting Ourselves Back in the Equation

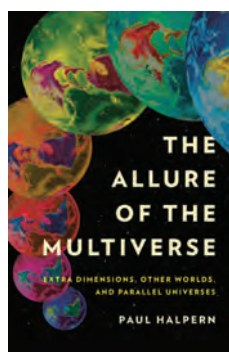
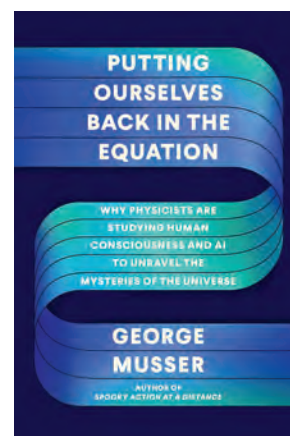
Why Physicists Are Studying Human Consciousness and AI to Unravel the Mysteries of the Universe

George Musser

Farrar, Straus and Giroux, 2023. \$30.00

To develop a true theory of everything, physicists must understand the nature of human consciousness, argues the science writer George Musser in *Putting Ourselves Back in the Equation*. The book addresses what Musser defines as the “inside/outside problem”—namely, what happens when physical theories that represent the world from a third-person perspective conflict with the way we perceive the world from our first-person vantage point. After all, quantum mechanics implies that the very act of observation affects measurement. To solve the inside/outside problem, physicists are starting to delve into neuroscience and investigate artificial intelligence (AI). Based on interviews with physicists, neuroscientists, philosophers, and AI researchers, Musser’s book is engaging and provocative.

—RD



The Allure of the Multiverse

Extra Dimensions, Other Worlds, and Parallel Universes

Paul Halpern

Basic Books, 2024. \$30.00

Popularized in the public’s mind by numerous Marvel films, the concept of the multiverse is increasingly in vogue in physics as well. But if we live in a multiverse, asks the physicist and science writer Paul Halpern, how would we ever know? Moreover, if we can’t detect possible other universes, is it even worth our time to ponder their existence? Halpern suggests that it is. He describes how physicists frustrated by the lack of experimental evidence for physical postulates that aim to explain phenomena beyond the standard model, such as string theory and M-theory, are increasingly turning to multiverse theories. Whether or not you agree that the multiverse concept will prove fruitful, his book is a fascinating read.

—RD

Her Space, Her Time

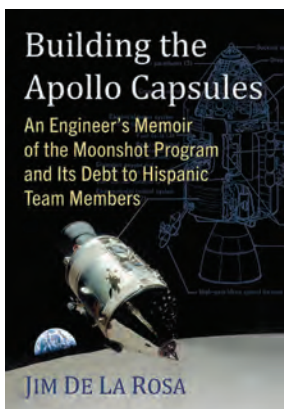
How Trailblazing Women Scientists Decoded the Hidden Universe

Shohini Ghose

MIT Press, 2023. \$29.95

Over the past 150 years, women have made significant contributions to important scientific discoveries in a range of fields, including astronomy, space exploration, radioactivity, and subatomic photography. Those achievements, however, have often been downplayed or simply ignored. In *Her Space, Her Time*, the physicist Shohini Ghose tries to set the record straight by highlighting some of the most important women of the modern scientific age, providing biographical background and recognizing their innovative work. Interweaving those stories with anecdotes about her own childhood and educational and professional experiences over the past several decades, Ghose shows how much has—and hasn’t—changed for women pursuing careers in science, technology, engineering, and mathematics.

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Building the Apollo Capsules

An Engineer’s Memoir of the Moonshot Program and Its Debt to Hispanic Team Members

Jim De La Rosa

McFarland, 2023. \$39.95 (paper)

In *Building the Apollo Capsules*, the aerospace engineer Jim De La Rosa provides an in-depth, behind-the-scenes look at NASA’s Apollo program, which landed the first humans on the Moon in 1969—one of the greatest achievements of the 20th century. Part history and part memoir, the book begins in 1964 when De La Rosa joined the team working on AFRM 009, the first major test of an Apollo spacecraft, and continues through 1969, when he left the Apollo program to work on the space shuttle. Throughout, he not only highlights the many engineers and technicians who contributed to the Apollo program but also pays particular tribute to his fellow Hispanic team members, who he believes have not received the recognition that they deserve.

—CC PT