Mechanics (3rd ed., 2002) and Tom W. B. Kibble and Frank H. Berkshire's Classical Mechanics (5th ed., 2004). Goldstein's book is a wonderful resource for advanced physics undergraduates but assigning it to first-year students would throw them into the deep end. The arguments in Kibble and Berkshire's textbook are impressively elegant and rigorous,

although I did catch an error in one of the worked examples when I looked at the book recently. Both established books have their strengths, and Foundations of Classical Mechanics stands proudly next to those classics.

In his new book, Deshmukh provides a rigorous yet accessible introduction to classical mechanics that is suitable for first- or second-year physics and engineering students. Foundations of Classical Mechanics successfully uses a less Western-centric historical perspective to place the field in the context of exciting topics in modern physics.

Robert B. Scott University of Western Brittany Brest, France

NEW BOOKS & MEDIA

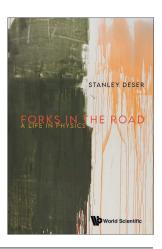
Forks in the Road

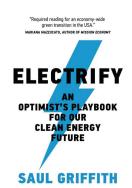
A Life in Physics

Stanley Deser

World Scientific, 2021. \$58.00

Few physicists alive today can claim to have met such luminaries as Wolfgang Pauli, J. Robert Oppenheimer, and Niels Bohr. Stanley Deser is one of those few. In Forks in the Road, the theorist recounts not only his colorful experiences with many such figures in physics but also his own tumultuous life story. Born in 1931 into a Jewish family in Poland, Deser made a harrowing escape with his parents in 1940-41 from Nazi-occupied France to the US via neutral Spain and Portugal. At the end of World War II, he began his study of physics, just as the field started to balloon from a clubby, Old World-based coterie into the massive globe-spanning community it is today. Along with presenting fascinating anecdotes about figures both famous and long forgotten, Forks in the Road documents a field's transformation from the inside.





Electrify

An Optimist's Playbook for Our Clean Energy Future Saul Griffith

MIT Press, 2021. \$24.95

As inventor and entrepreneur Saul Griffith puts it in his new book Electrify, "It's now time for end-game decarbonization"—namely, to halt the use of fossil fuels immediately. Fortunately, he argues, we have the technology to switch to renewable energy without changing our lifestyles. All we need to do, as the title indicates, is electrify everything, especially cars and heating systems, and build enough renewable energy sources to power it all. Although Griffith largely focuses on the big picture, he also includes helpful advice on how individuals can electrify what he terms our own personal infrastructure. Buying an electric car, installing solar panels on houses, replacing gas- and oil-powered heating systems with electric heat pumps, and choosing energy-efficient electric appliances are all actions individuals can take that significantly reduce carbon emissions. Griffith's refreshingly positive tone undergirds his call to action.

Philosophy of Physics

A Very Short Introduction

David Wallace

Oxford U. Press, 2021. \$11.95 (paper)

The latest installment in Oxford University Press's venerable Very Short Introductions series focuses on the philosophy of physics. True to series form, the slim volume authored by philosopher David Wallace presents readers with an overview of the philosophical implications of topics like statistical mechanics, relativity theory, and guantum mechanics. A particular highlight is the first chapter, which, in a breezy 16 pages, covers fundamental guestions in philosophy, such as that of scientific realism: Do physical entities like electrons and black holes—which we cannot directly observe—really exist, or are they merely figments of theory that allow us to make predictions? Wallace does an excellent job of presenting all the reasonable philosophical positions on a given topic, even those that he does not personally believe. The book is a superb introduction to a knotty field, and it should appeal both to the educated public and to curious physicists who don't just want to "shut up and calculate."

