

Books & arts

elaborate plans to hide out on the day in 2013 when the Nobel decision was to be announced.

Close has a dazzling ability to condense complex ideas into accessible metaphors. Fermions and bosons are compared to cuckoos and penguins (the former can't nest together, the latter live in groups), gauge invariance is likened to air travel (the time needed for travel is independent of the time zone in which the journey started), bosons in the nucleus to bears in a cave. Occasionally, the metaphors come too fast – in a single paragraph, Close compares Higgs's research bibliography to a baseball score (“three hits, three runs, no errors”) and also to composers' works (“Salieri had a much larger oeuvre than Mozart, but who cares about him?”).

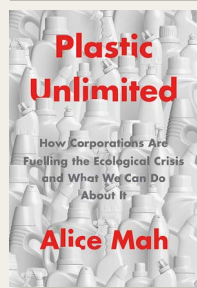
A reader learns to await the next over-the-top metaphor, and these become exhausting after a while – Higgs as a climber of Everest, Higgs as like Banquo in Shakespeare's *Macbeth*, Higgs as the “midwife of a revolution”. This last trope is downright false. The standard model had been around for nearly half a century before the LHC discovery; it was obvious that the model depended on a solution to the mass problem; and theorists had been making significant strides for years. Higgs was more like the person who designed a long-sought piece to hold together the field's communal meeting house.

Close's oversimplifications can be embarrassing when it comes to social causes, as when he writes of Higgs, on a visit to the United States in the 1960s, discovering that it was not “a nation of milk and honey” because it had “much poverty”. When Higgs's train to Washington DC is blocked by snow, it is jarring to read Close dropping in the extra fact – however well-intentioned – that the blizzard “killed large numbers of Black Americans living in wooden shanties”.

The back cover of *Elusive* declares that the book “will remake our understanding of modern physics”. What could justify that extravagant claim? Certainly not the descriptions of science; scientists and science writers have been explaining what Higgs did ever since he won his Nobel prize nine years ago. The book's chief interest is in what it shows – sometimes too chattily – about physicists. They are not abstract thinkers who study data points and logic to arrive at their conclusions, but individuals with passions and commitments whose research path is often indirect and marked by missed occasions and chance encounters. *Elusive* shows how the story of a physicist's life, told right, can reveal much about living as a physicist.

Robert P. Crease is chair of the Department of Philosophy at Stony Brook University in New York. His next book, *The Leak*, with Peter Bond, will be published in October.
e-mail: robert.crease@stonybrook.edu

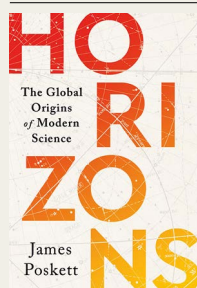
Books in brief



Plastic Unlimited

Alice Mah *Polity* (2022)

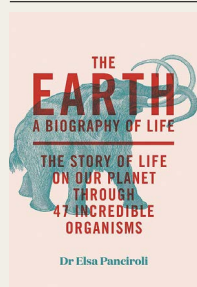
An excess of single-use plastics — accentuated by the COVID-19 pandemic — is plain to everyone. Also obvious is that “for all of the toxicity and pollution associated with plastic, it is difficult to imagine living without it”, writes sociologist Alice Mah in her lively and sophisticated study. Chapters deal with plastic toxicity, marine waste, the climate emergency, the pandemic and the cumulative plastics crisis. However much individuals might reduce their personal use, the root problem remains the capitalist drive for limitless growth.



Horizons

James Poskett *Mariner* (2022)

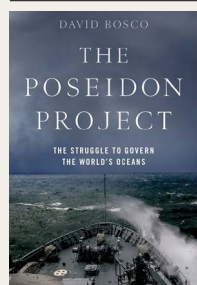
Science's internationalism is well recognized. But scientists tend to regard it as a recent phenomenon that arose from the ‘big science’ of the twentieth century, rather than one with a history of more than 500 years going back to the Islamic science that inspired astronomer Nicolaus Copernicus, and beyond, observes historian James Poskett. His revisionary “global history” boldly rebuts this: “The myth that modern science was invented in Europe is not only false, it is also deeply damaging.”



The Earth

Elsa Panciroli *Greenfinch/Quercus* (2022)

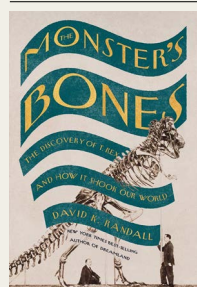
This highly illustrated history of life by palaeontologist Elsa Panciroli vivifies 47 plants and animals, starting 2.5 billion years ago with early eukaryotes — the group that includes most multicellular organisms — and ending with humans. The reader meets corals and graptolites, earthworms and dinosaurs, ants and woolly mammoths. Fossils are key to understanding geological time, as are the age, composition and distribution of rocks, but these can be misleading because “in deep time, solid rock can flow like water and crumple like paper”.



The Poseidon Project

David Bosco *Oxford Univ. Press* (2022)

The ancient Greek god of the sea was “unpredictable, almost always in motion, and dangerous”, notes international-relations specialist David Bosco. His ironically titled book is a complex but readable study of ocean governance, ranging from politics to science, starting with Dutch lawyer Hugo Grotius's 1609 defence of the freedom of the seas. The 1982 United Nations Convention on the Law of the Sea has yet to draw in the world's leading maritime power, the United States. Nevertheless, concludes Bosco, ocean regulation will increase.



The Monster's Bones

David K. Randall *W. W. Norton* (2022)

A monstrous, 66-million-year-old fossil of *Tyrannosaurus rex* symbolizes the American Museum of Natural History in New York City, much as the Rosetta Stone does the British Museum in London. But few know how it was found. Journalist David Randall's entertaining book focuses on an intrepid fossil hunter backed by a privileged socialite, and includes robber barons, eugenicists and cowboys. “Rather than a mirror into the past,” Randall says, “the creature proved to reflect the concerns of the present.” **Andrew Robinson**