

The printed version of the text comes in at 128 pages and while no exercises or problems are provided, a collection of PYTHON JUPYTER NOTEBOOKS intended to reproduce the plots and calculations of the text is advertised in the first paragraph of Chapter 1. At the time of writing this review, these Notebooks were not yet publicly available. — MEGAN E. TANNOCK.

Our Accidental Universe: Stories of Discovery from Asteroids to Aliens,
by Chris Lintott (Torva), 2024. Pp. 265, 24 × 16 cm. Price £22 (hardbound;
ISBN 978 1 911709 18 3).

Chris Lintott is well known as successor to Patrick Moore as presenter of the BBC's *The Sky at Night*, as well as a professor of astrophysics in Oxford and co-founder of the Galaxy Zoo citizen-science galaxy-classification project (which was integrated into to the Zooniverse platform of which Lintott was also the PI for 15 years). This isn't his first book but is the first which I have read. As the subtitle says, it is a book about actual (*e.g.*, pulsars), and potential (*e.g.*, extraterrestrial life) discoveries, many of them accidental. The chapters (the content of which isn't always obvious from their names) cover SETI; craters in general and Enceladus in particular; 'Oumuamua (an entire book¹ about which was reviewed in these pages²); comets, meteorites, asteroids, space weather, and near-Earth objects; the claims of detection of phosphine on Venus and Titan in general; deep-field astronomy and *Gaia*; radio astronomy and gravitational waves (with pulsars providing the connection); and the cosmic microwave background. The last chapter covers many more topics with less detail on each, such as the Carte du Ciel, modern surveys such as the Sloan Digital Sky Survey, Galaxy Zoo, exoplanets, brightness variations in Betelgeuse and Boyajian's Star, and a look to the future in the context of the *Vera Rubin Observatory*.

Many interesting facts are mentioned, some familiar (a (sidereal) day on Venus is longer than a year — though it's strange that its retrograde rotation isn't mentioned), some less familiar (fascinating details in the life of Grote Reber), and some a bit confusing (radio astronomy at Jodrell Bank jumps from the *Lovell* telescope to *e-MERLIN* without mentioning the highly successful *MERLIN*, the main difference being that the older *MERLIN* was an interferometer connected *via* microwave communication while *e-MERLIN* uses fibre-optic cables to connect the same telescopes). One of the usual cosmology errors occurs: although our Universe has a positive cosmological constant and will expand forever, the former is neither necessary nor sufficient for the latter. Like in the two books I read immediately before this one^{3–6}, there is the standard complaint about naming a telescope after James Webb (see ref. 4 for details).

There are a few errors I put down to carelessness: Venus is high in the western sky when at greatest eastern, not western, elongation; Harrison Schmitt and not Schmidt was the first scientist (and last astronaut) to set foot on the Moon — maybe just a typo; more puzzling is dating the dinosaur-killing Alvarez impact at five rather than sixty-six million years ago, though the periods before and after, Cretaceous and Paleogene, are correctly named; it's the Domesday and not the Doomsday book (perhaps the author was thinking of asteroid impacts).

There are many topics in science about which there is not yet a consensus, but I don't understand why Avi Loeb is criticized so harshly. While it is true that his book¹ on 'Oumuamua does contain “a reading list of over two hundred

separate works, every single one of them with Loeb as a co-author” (most astrophysicists won’t write that many papers in their entire career; at last count, Loeb is approaching a thousand refereed-journal papers), the end notes do provide references to the works of others mentioned in the text, whether or not they agree with Loeb.

There are a few black-and-white photos scattered throughout the book. Notes are footnotes, often providing additional humour. The main text is followed by a substantial collection of backmatter: a couple of pages of glossary, six on further reading (by chapter), a page of picture credits, almost ten pages of index in small print, and one paragraph about the author. This is not an attempt to survey astronomy systematically as a whole or even a part of it; rather than the definitive collection, it’s more a ‘best of’, highlighting topics of interest to the author and probably the reader, providing more details than is usually the case on many of them. Despite my minor qualms, the book is an enjoyable read, presenting some topics not often encountered in popular-astronomy books and other more common ones from a new perspective. — PHILLIP HELBIG.

References

- (1) A. Loeb, *Extraterrestrial: The First Sign of Intelligent Life Beyond Earth* (John Murray), 2022.
- (2) P. Helbig, *The Observatory*, **142**, 184, 2022.
- (3) R. Trotta, *Starborn: How the Stars Made Us — and Who We Would be Without Them* (Basic Books), 2023.
- (4) P. Helbig, *The Observatory*, **145**, 180, 2025.
- (5) A. May, *Eyes in the Sky: Space Telescopes from Hubble to Webb* (Icon Books), 2024.
- (6) P. Helbig, *The Observatory*, **145**, 186, 2025.

Eyes in the Sky: Space Telescopes from Hubble to Webb, by Andrew May (Icon Books), 2024. Pp. 176, 20 × 13 cm. Price £10.99 (hardbound; ISBN 978 1 8377 31275 5).

Not to be confused with any of a number of non-astronomy books or other items with identical or similar titles (such as the film *Eye in the Sky* with Helen Mirren or the unrelated song of the same name by The Alan Parsons Project), nor with *Eye on the Sky*^{1,2} nor with *Eyes on the Skies*^{3,4}, nor *Eyes on the Sky*^{5*}, this little book is about telescopes in space or, more accurately, about what they observe (it is not about the technical details of the telescopes themselves). May has a PhD in astrophysics and worked in academia and in government and private sectors before becoming a freelance writer and consultant. This book is part of the *Hot Science* series edited by Brian Clegg, in which both May and Clegg have written several books each; some of the latter’s have been reviewed in these pages^{6–9}. The author takes us through various space telescopes such as *HST*, *JWST*[†], *Spitzer*, *Chandra*, *Fermi*, *Kepler*, *TESS*, *Herschel*, *Gaia*, and *Planck*, along the way providing the necessary essential background (the electromagnetic spectrum, different types of telescope optics, etc.), and highlighting their most important observations and basic astrophysical details about the objects observed. Of course, not all telescopes in space could be covered, but conspicuous by its absence is the very successful *ROSAT*.

*Amazingly, not reviewed in these pages!

[†]Including the now apparently obligatory (but here fortunately brief) remark that it should have not been named after Webb.