

larger than usual typeface and interline spacing. It is a rather faithful rendition of the video lectures, which I recommend to those who prefer that medium to books. I'll probably read the other books in the series and if I find myself able to watch video but not read perhaps even watch all of the lectures. Groucho Marx noted that if one isn't having fun then one is doing something wrong and that the fear of the thorn shouldn't keep one from the rose. Both apply here, as Susskind's enthusiasm comes through well, acting as a glove to help one approach a somewhat thorny topic. — PHILLIP HELBIG.

References

- (1) P. Helbig, *The Observatory*, **133**, 293, 2024.
- (2) L. Susskind & A. Cabannes, *General Relativity: The Theoretical Minimum* (Penguin), 2023.

An Introduction to Brown Dwarfs. From very-low-mass stars to super-Jupiters, by John Gizis (IoP Publishing), 2024. Pp. 124, 26 × 18.5 cm. Price £75 (hardbound; ISBN 978 0 7503 3385 6).

An Introduction to Brown Dwarfs is an overview of the field of brown dwarfs, designed to bridge the gap from a general astronomy undergraduate education to doing research in the specific sub-field of brown dwarfs. I think that anyone interested in learning the basics of brown-dwarf astronomy will enjoy this textbook, as the tone throughout is both informative and accessible. The text includes insightful footnotes and interesting remarks on the history of the field, along with dozens of beautiful, colour figures that illustrate concepts clearly. In just eight chapters, Dr. Gizis covers all of the main areas of research in the brown-dwarf field, and explains many of the assumptions and customs of the field that are often discussed, yet rarely justified at conferences and in the literature.

The book explores brown dwarfs through a variety of lenses and contexts, but primarily focusses on two main paradigms: star-like and super-Jupiter-like. The text illustrates the similarities brown dwarfs share with both of these types of objects and the lessons that can be borrowed from both stellar and exoplanetary astronomy. The presentation and order of the text is logical and the narrative is easy to follow. Throughout the text, Dr. Gizis provides numerous resources for observational data, interior and atmospheric models, and other software and tools for brown-dwarf research. Highlights include tables of key photometric filters, thoughtful discussion of standard surveys and calibrations, helpful references to and figures of spectroscopic standards, highlights of key papers from the literature, and lists of models and software for different areas of research.

This text has only a couple of very minor issues, including a few errors and typos in the text and figures. Some minor choices in figure labelling or units could be more precise (for example, axes or legends occasionally omit key quantities), but these do not hinder comprehension. I also feel that some of the more interesting aspects of brown-dwarf research were overlooked, including rotation rates and angular-momentum evolution, as well as the role of magnetic fields and the presence of aurorae in brown atmospheres. However, after reading this textbook the reader will be well prepared to explore the literature on these topics themselves.

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