

**Annual Review of Astronomy and Astrophysics, Volume 63, 2025**, edited by E. van Dishoeck & Robert C. Kennicutt (Annual Reviews), 2025. Pp. 523, 24 × 19 cm. Price from \$481 (print and on-line for institutions; about £360) (hardbound; ISBN 978 0 8243 0963 3).

Sadly, the latest volume of *Annual Review* does not start with the traditional autobiographical account by one of astronomy's grantees, but is nonetheless full of beautifully presented accounts of the hot topics in the field.

Planetary science looms large this year with the formation of giant planets discussed by Ikoma & Kobayashi, be they local or around more distant stars. With observations from ground-based and space telescopes, we can now examine the spectra of exoplanet atmospheres, as revealed by Snellen, while Vidotto models the interactions those exoplanets may have with their host stars. A further article on exoplanet research is that by Kenworthy & Haffert showing how high-contrast coronagraphy can now be used to probe such systems.

Moving on to stars, their formation processes, for both high- and low-mass objects, are compared and contrasted in the leading paper by Beuther *et al.* Perhaps the most interesting topic for me was the discussion of 'Blue Stragglers & Friends' by Mathieu & Pols, in which the results of binary interaction during evolution is now seen to produce not only blue stragglers — a field in which I once wandered — but also yellow stragglers.

Edging on to more massive objects still, a comprehensive study of how galaxies come together — entitled 'Extragalactic Archaeology' — is described by van de Ven *et al.*, while the kinematics of the Local Group is considered by Strigari. Coming on to high-energy matters, the impact of ionizing radiation from galaxies on the intergalactic medium is outlined by Jaskot; X-rays from AGN due to super-massive black holes are considered by Kara & García; energy production by relativistic magnetic reconnection sparked by black holes and neutron stars is described by Sironi *et al.*; and the nature and origin of ultrahigh-energy cosmic rays are whimsically portrayed by Globus & Blandford. — DAVID STICKLAND.

**The Solar System**, by William Sheehan & Clifford J. Cunningham (Reaktion), 2025. Pp. 407, 22 × 18 cm. Price £25.00 (hardbound; ISBN 978 1 83639 064 0).

This work published by Reaktion Books, one of thirteen volumes in a series edited by Peter Morris entitled *Kosmos*, investigates historical, contemporary and future developments in Solar System astronomy. Both authors are accomplished writers and researchers, uncovering many new insights into what could be considered a well-worn subject. They have created both a fine literary work and an accurate and authoritative account that has been a pleasure to read. Their commanding use of the English language is impressive. Be prepared both to be entertained by their prose and to learn some deeper truths about stories from the past. Evidence of their in-depth knowledge is provided by way of 19 pages of references covering the ten chapters of text and splendid illustrations.

In many places, they write to put the historical record straight given that 2025 provides the truest perspective yet of observational astronomy over the centuries leading up to the Space Age, and the almost seven decades of space-probe exploration of the Solar System since — a privileged vantage point indeed! A nice touch used throughout the book, which makes it very readable, is the wealth of apposite quotations and extracts from the literature, not only scientific but also many of literary merit. Some are verbal quotes — well-founded views of astronomers currently working in the relevant field.

I would have liked more detail in the last chapter, 'The Outer Solar System', in that it covers a diverse range of topics, including interstellar objects, yet occupies only one-eighth of the main text. The style is necessarily more concise there than in the rest of the volume. Illustrations and new findings made possible thanks to the *James Webb Space Telescope* are included, as are many fine *HST* and space-probe images, but more could have been made