Cosmos: an illustrated history of astronomy and cosmology

by John North


Cosmos is a revised and expanded edition of the author’s 1994 Fontana (Norton in the USA) History of Astronomy and Cosmology, and covers the whole history of these subjects from prehistoric times to the present day, from Stonehenge to Stephen Hawking, in broadly chronological order. Whereas the first edition was a mass-market paperback with 623 pages and two dozen black-and-white illustrations, the new edition has nearly 800 pages and is in a larger format, making it much less portable than the original. In addition, Cosmos has well over two hundred black-and-white illustrations and there are also two short sections of colour plates. Professor Emeritus of the History of Philosophy and the Exact Sciences at the University of Groningen in the Netherlands, John North has had a distinguished academic career specialising in the history of astronomy and is the author of several major works, including The Measure of the Universe (1965) and a three-volume study of the medieval astronomer Richard of Wallingford (1976).

The outline of the book is the same as that of the first edition: twenty mostly substantial chapters, each divided into subsections. Particularly impressive is North’s coverage of ancient and medieval astronomy. Closer to modern times, the author writes eloquently on the increasing importance of astrophysics and photography in the nineteenth century. Apart from a small number of misprints, the text is very accurate. The book is written in a flowing style which is a pleasure to read, and from time to time North shows a sense of humour. However, although North mostly avoids using formulae, he frequently goes into considerable technical detail – for example, in his coverage of Kepler’s work on planetary motions – and a newcomer to the history of astronomy might well find some sections intimidating.

The black-and-white illustrations are well-chosen. The colour plates have been reproduced extremely well, but their selection is disappointing, as most of them are either related to pre-Copernican astronomy or are modern spacecraft images of astronomical objects. I would have liked to have seen some good colour images of the great observatories, telescopes and astronomers of the centuries between 1600 and our own time. Cosmos treats the entire history of astronomy and cosmology at a very high level and there is an invaluable, thirty-page bibliographical essay for those who wish to explore further. The book will be especially useful to students of the history of science, at which it seems to be primarily aimed, and I would also recommend it to amateur and professional astronomers with a serious interest in the history of astronomy and/or cosmology, although beginners might find it too advanced a work.

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