

## Encyclopedia of the History of Astronomy and Astrophysics

Beginning with its ancient origins world-wide, this comprehensive encyclopedia traces the key advances in astronomy up to the latest developments in astrophysics and space-based research. The initial articles, which are largely organised to cover astronomical developments chronologically, are followed by thematic historical articles on the solar system, types of stars, stellar evolution, active galaxies, cosmology, and so on. These are followed by articles on tools and techniques from the history of spectroscopy to that of adaptive optics. The last part of the encyclopedia is devoted to the history of ground- and space-based telescopes and observatories, covering the full spectral range from gamma-rays through the optical waveband to radio waves. Informative and accessibly written, each article is followed by an extensive bibliography to facilitate further research, whilst consistent coverage from ancient times to the present makes this an ideal resource for scholars, students and amateur astronomers alike.

David Leverington received his first degree in Physics from Oxford University in 1963. Since then he has held a number of senior positions in the space industry, working for both the European Space Agency and British Aerospace before taking early retirement in 1992. Subsequently he has written three books: *A History of Astronomy from 1890 to the Present* (1996), *New Cosmic Horizons; Space Astronomy from the V2 to the Hubble Space Telescope* (Cambridge University Press, 2000), and *Babylon to Voyager and Beyond; A History of Planetary Astronomy* (Cambridge University Press, 2003). He was also technical consultant for ABC-CLIO's *Space Exploration and Humanity; A Historical Encyclopedia* (2010), supported by the History Committee of the American Astronautical Society.

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## Preface

This encyclopedia starts with a series of articles on ancient astronomy, followed by articles summarising the main developments in astronomy in a time-based series from the early seventeenth century to the present. These are then followed by the main part of the encyclopedia, which includes historical articles on astronomical objects in Parts 2 to 4, astronomical tools and techniques in Part 5, and finally by those on individual ground- and space-based telescopes and observatories operating in all wavebands from gamma rays to radio waves in Parts 6 to 10. These latter parts also contain overview or summary articles outlining the main developments of their particular type of telescope or observatory over time. Consequently information on the development of our knowledge of individual astronomical

objects or the development of individual telescopes or observatories can be found in a number of places in this encyclopedia. But, naturally, the main article will be the one devoted to that individual object or the observatory concerned.

As a result of this arrangement, this book can be read either as a straight reference book by going directly to the detailed subject of interest or as a summary history by reading the period overviews in Part 1, supplemented by the other overview articles at the beginning of Parts 6 to 10.

Evidently a book of this length can do little more than introduce the vast majority of subjects covered. Consequently a bibliography is provided after each article to enable the reader to delve further as required.

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