The Birth of Modern Astronomy

By Harm J. Habing

SPRINGER INTERNATIONAL PUBLISHING: 2019. XL, 568PP. £109.99.

Since the end of the Second World War, astronomy has grown from a rather niche scientific field to a massive international endeavour. This book narrates the history of modern astronomy over this period. The narrative is divided into the 'anything goes' era of 1945 to 1984, when the development of optical, radio and high-energy telescopes allowed a cavalcade of new discoveries, and the period from 1985 to 2015, when the field witnessed a second boom spurred by the construction of flagship facilities like NASA's Hubble Space Telescope and ESO's Very Large Telescope. Looking to the future, the author singles out dark matter, dark energy and inflation as the three grand hypotheses still remaining to be proven.

Relativity: The Special and the General Theory (100th Anniversary Edition)

By Albert Einstein with commentaries and background material by Hanoch Gutfreund and Jürgen Renn

PRINCETON UNIVERSITY PRESS: 2019. 320PP. £13.99.

It is an undeniable fact that Einstein's general theory of relativity is one of the cornerstones of modern physics and one of the most important discoveries of human scientific research. In 1917, two years after publishing his paper on the general theory of relativity, Albert Einstein published a booklet on it, meant for a wider audience. This 100th anniversary edition takes the original booklet and supplements it with commentaries by Hanoch Gutfreund and Jürgen Renn, historians of science, that elucidate both the context of the work and Einstein's way of thinking and writing. Of special interest is also the inclusion of some of Einstein's original handwritten pages of the booklet.

Universal Life: An Inside Look Behind the Race to Discover Life Beyond Earth

By Alan Boss

OXFORD UNIVERSITY PRESS: 2019. 224PP. £16.99.

The detection of exoplanets entered the scientific scene a couple of decades ago and has since enthralled scientists and the public alike with the promise of not only understanding the origin of our own Earth but potentially finding life beyond it. Alan Boss, a key player in NASA's exoplanet discovery program, recounts the history of how the space telescope Kepler came to be and all the politics and scientific intricacies of exoplanet hunting that are following its revolutionary discoveries, with an eye towards a future with the James Webb Space Telescope and the extremely large telescopes.

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