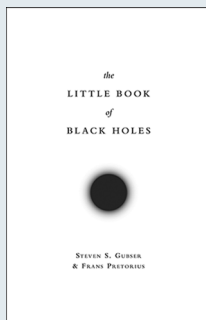


### Before Time Began: The Big Bang & the Emerging Universe

By Helmut Satz

OXFORD UNIVERSITY PRESS: 2017. 192PP. £19.99

Helmut Satz starts his book on the Big Bang and the Universe that emerged from it with a quote from Augustine's Confessions: "What did God do before he made heaven and earth?" As any cosmologists will attest, asking what was 'before' the Big Bang is a rather nonsensical question. Satz attempts to explain how our Universe was created by covering the basic principles of theoretical physics, particle physics and cosmology, all packed into a neat little book that is aimed at the interested general public or non-physics-major undergraduate students.

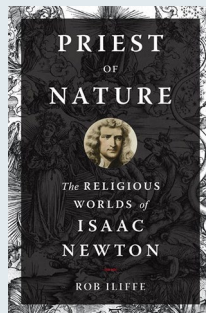


### The Little Book of Black Holes

By Steven S. Gubser & Frans Pretorius

PRINCETON UNIVERSITY PRESS: 2017. 200PP. £14.95

Black holes have always fascinated astronomers, theoretical physicists and the public alike. Until recently, their existence was inferred based on circumstantial evidence and a robust theoretical background. Gubser and Pretorius take the occasion of the recent direct detection of black holes through gravitational waves to give a brief but densely packed primer on the theoretical grounding of black holes, how we observe them and their significance.

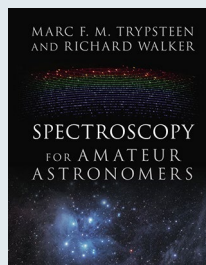


### Priest of Nature: The Religious Worlds of Isaac Newton

By Rob Iliffe

OXFORD UNIVERSITY PRESS: 2017. 536PP. £22.99

Everyone knows about Isaac Newton and the apple. Almost everyone knows Newton's significant contributions in our understanding of gravity as well as his important insights into a variety of scientific fields including optics and mathematics. Less well known is Newton's interest in theology and the divine. Iliffe presents here a vibrant biography of Isaac Newton through the lens of his extensive theological work and the 'heretical' views he held on religion. Newton's Christianity was a simple faith that celebrated diversity in religious thinking and practice — not unlike science itself.



### Spectroscopy for Amateur Astronomers

By Marc F. M. Trypsteen & Richard Walker

CAMBRIDGE UNIVERSITY PRESS: 2017. 162PP. £34.99

Trypsteen and Walker cover the basics of astronomical spectroscopy, starting from the theoretical background of what a spectrum is and the mechanical and quantum mechanical aspects of spectrographs and then move on to the practicalities of recording, processing and calibrating spectra. Then analysis techniques are discussed in the context of specific science cases or astrophysical properties of interest (for example, temperature, kinematics and so on). This book makes an invaluable resource for amateur astronomers as well as astronomers in training.



### Moonshots: 50 Years of NASA Space Exploration Seen through Hasselblad Cameras

By Piers Bizony

VOYAGEUR PRESS: 2017. 240PP. £60

Moonshots takes the reader on a literal cosmic ride from Earth to the Moon. Following the Apollo missions, the book presents NASA archival photographic evidence, interspersed with some text for context, of the journey to our satellite: from John F. Kennedy's pledge to put a man on the Moon to Apollo 11 and the first 'small step' on the lunar surface, to the repeat visits by the next Apollo missions up until Apollo 17. The last part of this coffee-table book focuses on the era of the space shuttle and life in orbit — first in the Skylab and then in its successor the International Space Station.

Published online: 2 November 2017

DOI: 10.1038/s41550-017-0316-9