

BOOK REVIEW

The New Solar System, Fourth edition, Editors J. Kelly Beatty, C. Collins Petersen & A. Chaikin, Sky Publ. Co. and Cambridge University Press, \$39.95, ISBN 0 521 64183 7 (paperback), \$59.95, ISBN 0 521 64183 7 (hardback).

This is the fourth edition of a beautiful book, which should be read and enjoyed not only by planetary scientists, but by their fellow scientists of other disciplines, as well as by teachers, students, amateur astronomers, science fiction readers and anyone with some interest in one of the few endeavours for which the XX century will be remembered in a positive way by our descendants – the exploration of our solar system. The book, coming 18 years after the first edition and 9 years after the third, is nearly twice the length of the former, but has kept its distinctive structure and character: the text is always clear despite its rigor and conciseness, and consists of 28 individual chapters by different authors, all supplemented by beautiful illustrations and an useful appendix of suggested further readings.

Fully covered are the discoveries of the space missions of the current decade, such as Magellan and Galileo, as well as the recent major discoveries of ground-based astronomers, such as the extrasolar planetary systems and the Edgeworth-Kuiper belt (don't forget Edgeworth, please). Another welcome choice of the Editors is the presence of several chapters with a comparative planetology flavor: I have enjoyed in particular those of Eugene and Carolyn Shoemaker on collisions, of J. W. Head III on the terrestrial planets and of W. K. Hartmann on the 'small worlds'. There are also chapters dealing with subjects at the borderline of mainstream planetary science (i.e., the Sun, the Earth as a planet, the meteorites, exobiology), which provide useful links with neighboring scientific fields of astronomy, geophysics, geochemistry and biology, and show that contemporary planetary science has been growing under the spell of 'consilience', to use the catchword recently introduced by E. O. Wilson. And the growth has indeed been considerable, given that worldwide the planetary scientific community is now including more than 1,500 individual researchers, about half of which work outside the United States.

Every serious review should include a bit of criticism, so here is mine: given the fully internationalised nature of the discipline, as witnessed by the distribution



of its practitioners, the location of many important conferences and the authorship of the papers appearing in all the peer-refereed journals, why only American contributors have been selected for this book? I'll leave this question to the Editors' consideration, looking forward to a fifth edition early in the next decade.

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