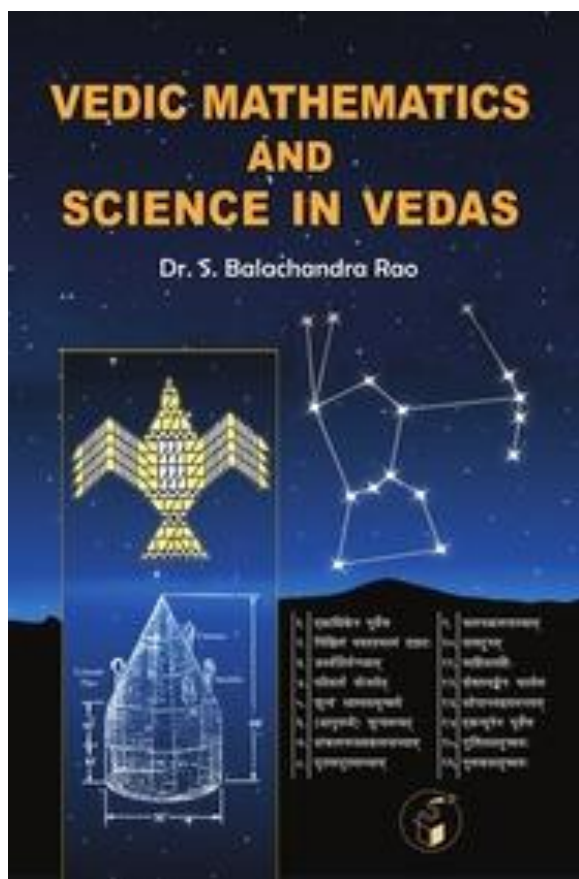


BOOK REVIEWS

Vedic Mathematics and Science in Vedas, by S. Balachandra Rao (Bengaluru, Navakarnataka Publications Pvt Ltd., 2019). Pp. [iv] + 172, ISBN 978-93-89308-01-3 (paperback), 140 × 212 mm, 200 rupees (available online from Flipkart.com and www.navakarnatakaonline.com).

Vedic science is much maligned in India today. A lot of real and imaginary ideas are associated with the Vedas and a lot of false claims are being made in the name of Vedic science. The claims can go so far as to include the invention of flying machines and interplanetary travel.

There is therefore a need for a good, reliable, book that accurately discusses Vedic science in proper context, and Balachandra Rao's *Vedic Mathematics and Science in Vedas* fulfils this crucial need.



Normally the Vedas refer to the four earliest books of Vedic literature dated to around 1200 to 1800 BCE. They are the original treatise that forms the foundational principles of Hinduism. The two earliest Vedas, the *Rig Veda* and the *Yajur Veda*, both have an addendum called the *Vedanga Jyotisha*, which loosely translates as "... a branch of the Veda dealing with stars". These books are the earliest references to the struggle of the Vedic people to reconcile solar and lunar calendars and talk about the need to

reconcile the two by adding an intercalary month. They mention a few stars and also Bruhaspati—the Indian name for Jupiter.

However, those who trumpet the greatness of Vedic science include everything that is claimed to have been written in Sanskrit, freely mixing later ideas and even non-existent ideas, forgeries and pure imagination, to create an illusion of great knowledge of modern science in ancient times, even though it is easy to show that this is impossible.

Balachandra Rao has assembled all of these claims and taken them up one by one, explaining what knowledge exists and what is fictional, and taking care to define and explain the ideas systematically. He has also included the false claims of Vedic mathematics. Professor Balachandra Rao deserves to be complimented for creating this compilation, and making it available at reasonable cost to all interested readers.

The book therefore serves the purpose it is supposed to, for any honest student of the subject. It also shows that rather than individual scientists like Balachandra Rao fighting the battle for rationality on their own, the time may have come to create a formal body in India that can authoritatively evaluate the various claims of ancient Indian science.

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Gerard P. Kuiper and the Rise of Modern Planetary Science, by Derek W.G. Sears (Tucson, University of Arizona, 2019). Pp. xiii + 350. ISBN 978-0-8165-3900-0 (hardback), 155 × 235 mm, US \$45.

This book is a key reference for anyone interested in the origins of modern planetary science. Derek Sears (a Senior Research Scientist at NASA), citing exhaustive interactions with archives of the personal papers of Kuiper (and other scientists of that era), as well as with Kuiper family members, traces the life of Kuiper (1905–1973) from his beginnings as a classical astronomer interested in the origin of binary stars through his key role in the establishment of modern planetary science. A first step was Kuiper's conversion of the binary star work to an important theoretical scenario of the origin of the Solar System in the 1950s. By that time he was at Yerkes Observatory, operated by the University of Chicago, but his move toward planetary work, plus criticisms that he tended not adequately to cite earlier work, led to discord in the Chicago Astronomy Department.