

The Sun: Leon Golub and Jay M Pasachoff. KOSMOS. Reaktion Books in association with the Science Museum London, 2017. ISBN 978-1-78023-757-2. Hb 216 pp 100 colour ill. £25.

This book predates the other two in the KOSMOS series having been first published in association with the Science Museum, London, in 2017. It fits perfectly with the other two books in the KOSMOS series, being a mix of historical information together with current research to describe current understanding of what the Sun is and how that information has been gleaned over the last four centuries. The introductory chapters describe what has elsewhere been called the enigma of sunspots; why do they occur and what drives their eleven year periodicity since the sunspot cycle was first observed and defined in the mid-19<sup>th</sup> century. And what are these spots? A significant step to understand them was taken by the American scientist George Ellery Hale, at the end of that century, one of the first astronomers to combine astronomical observation with laboratory physics.

Solar astrophysics now allows a comprehensive study of the Sun, in particular since the deployment of space-born observatories that now provide continuous monitoring if its surface at a wide range of wavelengths. The book is lavishly illustrated with numerous drawings, diagrams and photographs of our nearest star. Whilst solar physics are beyond any but the more specialised amateur observer using H-alpha or Calcium-K filtered instruments, a chapter on how the amateur can observe the Sun safely in white light and how to observe total solar eclipses, perhaps the most emotive of all astronomical phenomena brings the subject within the reach of all those interested in its study.