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**BOOK REVIEW**

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**Annual Review of Astronomy and Astrophysics Vol. 23, 1985**, by Geoffrey Burbidge, David Layzer and John G. Phillips (Published by Annual Reviews Inc. 4139 El Camino way, Palo Alto, California 94306) pp. 448. Price USA \$44/- Elsewhere \$47/-

For more than two decades the closing months of a year have seen the publication of Annual Review of Astronomy and Astrophysics. Astronomers and astrophysicists all over the world keenly await the arrival of the book in their respective libraries. While it should be considered a distinction to be asked to contribute an article to the series, this, by itself, does not seem to be providing sufficient incentive to the astronomers to write, as is revealed in the editorial preface to the present volume. A surprisingly large number of the planned articles never make it to the press due to the failure of the authors to meet the deadline for submission. According to the Editor, the present volume contains only thirteen out of the total of twenty one articles that were originally planned.

A number of interesting reviews on stellar physics and related topics have appeared in the current volume. Stellar phenomena spanning almost the entire evolutionary sequence have received attention in these articles. The life of a star begins inside dense molecular clouds and observational work, over the last decade or so, suggests that stellar births are rather violent. Lada, who has played a key role in unravelling the mysteries of star formation, describes these early events associated with young stellar objects. Dulk writes on Radio Emission from the Sun and Stars, Baliunas and Vaughan on Stellar Activity Cycles while Rosner, Golub and Vaiana write on Stellar X-ray Emission. The terminal phases in the life of the majority of stars are characterised by mass ejection in the form of planetary nebulae. Kaler discusses Planetary Nebulae and their Central Stars. However, the most spectacular stellar event is the supernova explosion and, of

all of those that have been seen, the most famous is the Supernova of 1054 AD, whose remnant is the Crab Nebula. Davidson and Fesen describe the Recent Developments concerning the Crab Nebula.

Much of the recent development on the observational side has been a result of measurements with high angular resolution and a variety of special techniques are being used for the purpose. McAlister reviews the progress made in applying high angular resolution in the visible and infrared regions to the fundamental determination of stellar properties. Another article, of particular interest to the Observers, is by Coulman on Astronomical "Seeing".

There are two articles of interest on aspects of nucleosynthesis and chemical evolution – the first by the Spites on the Composition of Field Halo Stars and the Chemical Evolution of the Halo, and the second by Boesgaard and Steigman on Big Bang Nucleosynthesis which compares the theoretical expectations with observational findings. Besides these, there is an article by Moore and Rabin on Sunspots, and the solitary article on galaxies, by Anthanassoula and Bosma, which describes Shells and Rings.

The Prefatory Chapter, called Astronomer by Accident, has been written by Tom Cowling. This contains a fair amount of autobiographical material and also provides fascinating insights into the development of astrophysics in Britain in the thirties when Cowling was a student. A Subject Index followed by Cumulative Indexes of the contributing authors and chapter titles for the volumes 13 to 23 completes the present volume. I hope the pleasure of reading through the various reviews will be shared by colleagues and other fellow astronomers.

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