TABLE OF CONTENTS

ARTICLES

ABHYANKAR, K. D. / Mass Loss in Semi-Detached Binaries	355
ABHYANKAR, K. D., see Radhakrishnan, K. R. et al.	
ADMIRANTO, A. G., see Hidayat, B. et al.	
ALLEN, D. A. / Symbiotic Stars	101
BATH, G. T. / Cataclysmic Variable Stars	127
BECKER, H. J. / The Contact Binary AE Phoenicis - An Analysis from Decon-	
voluted Spectra	157
BRUCH, A., see Wargau, W. et al.	
BUCKLEY, D. A. H. / Observations and Models of Some Neglected Southern	
Eclipsing Binaries	191
BUDDING, E. / The q -Log P Distribution of Classical Algols	299
CHAMBLISS, C. R. / VV Orionis: A Well-Behaved Early-Type Eclipsing Binary	
System	163
CIATTI, F., see Frasca, S. et al.	
DARIUS, J. / Spectroscopic Segregation in Binary Systems	273
DAWANAS, D. N. and R. HIRATA / Radial Velocity and Profile Variations of	
the Ultraviolet Circumstellar Lines in ζ Tauri	139
DE GREVE, J. P. and W. PACKET / Semi-Detached Binaries: The Origin and	
Present Status of TU Mon, SX Cas, and DM Per	313
DE LOORE, C. / Observations of Binaries and Evolutionary Implications	199
DE LOORE, C. and W. SUTANTYO / Late Stages of the Evolution of Close	
Binaries	335
DOMMANGET, J. / The Importance of Wide-System Studies for Stellar Evolution	
and Galactic Dynamics	23
DRECHSEL, H., W. WARGAU, and J. RAHE / UV Observations of Three Classical	
Novae during Early Stages of Decline	85
DRECHSEL, H., see Wargau, W. et al.	
DUERBECK, H. W. / A Catalogue and Finding List of Galactic Novae	93
DUERBECK, H. W. / Constraints for Cataclysmic Binary Evolution as Derived	
from Space Distributions	363
ERIGUCHI, Y., see Hachisu, I.	
FRASCA, S., F. CIATTI, and A. MAMMANO / Periods Ranging from 5 to 1500	
Days in the Anticorrelated Moving Lines of SS 433	329
HACHISU, I. and Y. ERIGUCHI / Fission Sequence and Equilibrium Models of	
Rigidity Rotating Polytropes	71
HAYAKAWA, S. and M. SAITO / Astronomy in Japan	393
HERCZEG, T. / Duplicity on the Main Sequence	29
HIDAYAT, B., A. G. ADMIRANTO, and K. A. VAN DER HUCHT / Wolf-Rayet	
Binaries: Evolutionary Causes for their Distribution in the Galaxy	175
HIDAYAT, B., Z. KOPAL, and J. RAHE / Introduction	1

HIDAYAT, B., see Swarup, G. et al.	
HIRATA, R., see Dawanas, D. N.	205
KATO, M. / Steady Mass Loss Associated with Nova Outbursts	295
KAWABATA, S., see Saitō, M. et al.	
KONDO, Y., G. E. McCLUSKEY, and S. B. PARSONS / Variable, Optically Thick, Hot Plasma Observed in Interacting Binaries	201
KOPAL, Z. / Evolution of Binary Systems and Their Generic Relations. Vainu	281
Bappu Memorial Lecture	3
KOPAL, Z., see Hidayat, B. et al.	5
LEUNG, K. C. / A Review of Early-Type Close Binary Systems	237
LEUNG, K. C., D. S. ZHAI, R. X. ZHANG, Q. Y. LIU, J. T. ZHANG, and Y. L.	237
YANG / Analysis of 11 Late-Type Close Binary Systems	411
LIU, Q. Y., see Leung, K. C. et al.	411
MAMMANO, A., see Frasca, S. et al.	
McCLUSKEY, G. E., see Kondo, Y. et al.	
OTT, HA. / Fission Candidates Among Detached Close Binaries	75
PACKET, W., see de Greve, J. P.	10
PARSONS, S. B., see Kondo, Y. et al.	
RADHAKRISHNAN, K. R., M. B. K. SARMA, and K. D. ABHYANKAR / Photo-	
metric and Spectroscopic Study of R CMa	229
RAHE, J., see Drechsel, H. et al.	
RAHE, J., see Hidayat, B. et al.	
RAHE, J., see Wargau, W. et al.	
RAJAMOHAN, R. / The Ha Line Profile in Early Type-Binary Systems HD 47129	
and γ Velorum	153
RAO, P. V. and M. B. K. SARMA / Photometry of the RS CVn Type Eclipsing	
Binary UV Piscium	239
RAVEENDRAN, A. V. / The Light Variability of BD+25°2511	171
RUFFINI, R. and D. J. SONG / Nutational Effects in SS 433	319
SAIJO, K., see Saito, M. et al.	
SAITO, M., S. KAWABATA, K. SAIJO, and H. SATO / A Spectroscopic Study	
of Epsilon Aurigae	269
SAITŌ, M., see Hayakawa, S.	
SARMA, M. B. K., see Radhakrishnan, K. R. et al.	
SARMA, M. B. K., see Rao, P. V.	
SATO, H., see Saitō, M. et al.	
SCHOBER, H. J. / A Comparison between Binary Star Light Curves and Those of	207
Possible Binary Asteroids	387
SCHOEMBS, R., see Wargau, W. et al. SEITTER, W. C. / The Old Nova BT Monocerotis	05
SONG, D. J., see Ruffini, R.	95
SUKUMAR, S., see Swarup, G. et al.	
SUTANTYO, W., <i>see</i> de Loore, C.	
SWARUP, G., B. HIDAYAT, and S. SUKUMAR / Giant Equatorial Radio Tele-	
scope	403
	403

TABLE OF CONTENTS

VAN DER HUCHT, K. A. / A Plan for a New Generation 2 m-Class Telescope			
in Indonesia	409		
VAN DER HUCHT, K. A., see Hidayat, B. et al.			
VILHU, O. / Magnetic Braking in Cataclysmic and Low-Mass X-Ray Binaries	287		
WARGAU, W., A. BRUCH, H. DRECHSEL, J. RAHE, and R. SCHOEMBS /			
Spectroscopy and Optical/IR Photometry of the Cataclysmic Variable			
CPD-48°1577	145		
WARGAU, W., see Drechsel, H. et al.			
YANG, Y. L., see Leung, K. C. et al.			
ZHAI, D. S., see Leung, K. C. et al. ZHANG, J. T., see Leung, K. C. et al. ZHANG, R. X., see Leung, K. C. et al.			
		ZINNECKER, H. / Binary Statistics and Star Formation	41
		ANNOUNCEMENT	412

NEW REIDEL TITLES

Galactic Astrophysics and Gamma-Ray Astronomy

Proceedings of a Meeting organized in the Context of the XVIII IAU General Assembly, held in Patras, Greece, August 19, 1982

Edited by G. E. MORFILL and R. BUCCHERI

1983, v + 335 pp. Cloth Dfl. 150,-/US \$ 60.00 ISBN 90-277-1645-5 *Reprinted from the journal,* SPACE SCIENCE REVIEWS, *Vol. 36, Nos. 1, 2, and 3*

The aim of the Meeting was to determine the role of galactic gamma-ray astronomy within the general concept of galactic astrophysics. The timing, at the end of the COS-B mission, was regarded as ideal because it gives interested astrophysicists the opportunity for interdisciplinary studies using the existing gamma-ray data base (e.g. comparison with infrared, radio, X-ray, etc. astronomies), as well as offering the possibility of theoretical studies. The next generation of gamma-ray detectors will probably not be in operation for another five to 10 years, and it is therefore hoped that the proceedings in this book can be used (in the intermediate period) as a basis for further studies, as a stimulation for more theoretical work and as an important contribution for defining the aims and operation of future gamma-ray missions. The interrelationship with other branches of astronomy, the astrophysical implications, and the study of relevant physical processes using available measurements in the near-Earth environment are among the important results discussed.



D. Reidel Publishing Company

P.O. Box 17, 3300 AA Dordrecht, the Netherlands 190 Old Derby St., Hingham, MA 02043, U.S.A.

NEW REIDEL TITLES

Astrophysical Jets

Proceedings of an International Workshop held in Torino, Italy, October 7–9, 1982

Edited by ATTILIO FERRARI University of Torino, Italy

A. G. PACHOLCZYK University of Arizona, Tucson, U.S.A.

1983, xvi + 327 pp. Cloth Dfl. 110,- / US \$ 48.00 ISBN 90-277-1627-7 ASTROPHYSICS AND SPACE SCIENCE LIBRARY 103

Recent high-resolution observations at various frequencies (radio, optical, X-ray) have revealed that, in many cases, active astrophysical objects, from stellar size sources to galactic nuclei, can eject supersonic (eventual relativistic) flows. In particular, these flows involve a substantial fraction of the global energetics of their sources. The study of the physical processes producing 'jets', and supporting them in their rich morphological forms over extended regions for long lifetimes, is still at an early stage and many proposals and experimental tests are being actively discussed in an attempt at reaching a complete understanding of the phenomenon. The Torino Workshop on Astrophysical Jets was organized to provide a specific opportunity for these discussions, involving observers and theoreticaians. The Workshop was well attended by about 90 scientists gathered from Europe and the United States. The important contributions collected in the Proceedings give an updated picture of the main topics of interest in the field as well as a state-of-the-art survey of the astrophysics of jets to the end of 1982.



D. Reidel Publishing Company

P.O. Box 17, 3300 AA Dordrecht, the Netherlands 190 Old Derby St., Hingham, MA 02043, U.S.A.

NEW REIDEL TITLES

Energetic Ion Composition in the Earth's Magnetosphere

Edited by R. G. JOHNSON Space Science Laboratory, Lockheed, Palo Alto Research Laboratory, U.S.A. 1983, vii + 438 pp. Cloth Dfl. 215,- / US \$ 93.50 ADVANCES IN EARTH AND PLANETARY SCIENCES Available in Japan from Terra Scientific Publishing Company

A comprehensive topical review and current status report on experimental and theoretical research that relates to our understanding of the energetic ion composition in Earth's magnetosphere is provided by this volume. Included papers, presented at the Symposium on The Role of Ion Composition in Understanding Magnetospheric Processes (Edinburgh, Scotland, 1981), present new results as well as a review of published results, with extensive reference lists.

Activity in Red-Dwarf Stars

Proceedings of the 71st Colloquium of the International Astronomical Union, held in Catania, Italy, August 10–13, 1982

Edited by PATRICK B. BYRNE, Armagh Observatory, Northern Ireland and MARCELLO RODONÓ, Astrophysical Observatory and University of Catania, Italy 1983, xxvi + 669 pp. Cloth Dfl. 195,- / US \$ 85.00 ASTROPHYSICS AND SPACE SCIENCE LIBRARY 102

The study of the 'Solar and Stellar Activity Connection' has progressed rapidly during the last decade. The progress has been stimulated by the opening of new parts of the electromagnetic spectrum, especially by satellite-borne instrumentation. The flood of new observational perspectives has forced stellar and solar astronomers to liaise with each other more closely, and with the physics community in general. This book then, is extremely timely in that it gives an account of the first IAU-sponsored meeting in the field which brought together experts from a wide range of specialities.



D. Reidel Publishing Company

P.O. Box 17, 3300 AA Dordrecht, the Netherlands 190 Old Derby St., Hingham, MA 02043, U.S.A.

