

TABLE OF CONTENTS

Dedication	v
Preface	xv
List of Participants	xvii
Invited Papers	1
Introductory Remarks	
J. Sahade	3
Origin of Binary Systems	
P. Bodenheimer	9
Disks in the Pre-Main Sequence Binary Environment	
R. D. Mathieu	21
Detached Main Sequence Binaries: A Laboratory for the Study of Stellar Structure	
A. Giménez	31
Interaction Beyond the Main Sequence: One Recipe?	
J.-P. De Greve	41
Zeta Aurigae Type Binaries	
K. G. Carpenter	51
W UMa Binaries	
O. Vilhu	61
The RS Canum Venaticorum Stars	
M. Rodonò	71
Cataclysmic Binaries: Optical and Geometrical Thickness of Disks and the Visibility of the Primary Component	
J. I. Smak	83
X-Ray Binaries and Related Systems	
V. Trimble	91
The Barium Stars	
V. V. Smith	103

Binary and Other Recycled Pulsars	
V. Trimble	115
Wolf-Rayet Stars	
A. M. Cherepashchuk	123
Symbiotic Binary Stars	
S. J. Kenyon	137
Binary Be Stars and Be Binaries	
D. Baade	147
Binary S and MS Stars	
H. R. Johnson	157
Aspects of Mass Loss and Angular Momentum Loss in Binaries Containing Cool Components	
P. P. Eggleton	167
How Does One Detect An Accretion Disk?	
R. H. Kaitchuck	175
Wind Accretion by Compact Objects: The "Flip-Flop" Instability	
M. Livio	185
Accretion Disk Instabilities	
A. R. King	195
X-Ray Novae and Related Systems	
J. C. Wheeler, S.-W. Kim, and S. Mineshige	205
Outburst Phenomena in X-Ray Binaries	
Y. Tanaka	215
Type IA Supernovae	
J. C. Wheeler	225
Y Cygni?	
A. H. Batten	235
Binary Star Research: Where We Are Now and Future Prospects	
E. F. Guinan	245
Unsolved Major Problems of Interacting Binaries	
- A Panel Discussion	
Panel Members: P. P. Eggleton, R. H. Koch, Y. Kondo, D. M. Popper, J. I. Smak, and F. B. Wood (Chairman)	255

Oral and Contributed Papers	265
Detached Binary Systems	267
Circularization and Synchronization Times in Detached Main-Sequence Eclipsing Binaries	
A. Claret and A. Giménez	269
A Study of Ultraviolet Spectra of Delta Sagittae	
A. Akalin and S. Engin	273
Recent Results on the Apsidal Motion Test in Eclipsing Binaries	
A. Giménez and A. Claret	277
Photometric Analysis in Detached Close Binaries with Eccentric Orbits. The Case of RX Her	
A. Giménez, J. M. García, and A. Bravo	281
First Results of Continuous IUE Observations of Algol	
R. González-Riestra, A. Giménez, and E. F. Guinan	285
Resonance Between Pulsation Modes Due to Tidal Perturbation	
Z. Kolláth and J. Nuspl	289
Algol and Related Systems	293
A New Catalogue of Semidetached Algol-Type Binaries with Well Determined Absolute Dimensions	
J. M. García and A. Giménez	295
Evolutionary Sequences for Binary Stars in the Mass Range 9 to 40 M_{\odot}	
C. de Loore and J.-P. De Greve	299
Photometric Analysis of Wide and Narrow Hα Band Observations of R Canis Majoris	
M. T. Edalati, T. Banks, and E. Budding	303
Irregular Period Variations of Eclipsing Binaries	
T. J. Herczeg	307
Eclipsing Binaries in Multiple Star Systems	
C. R. Chambliss	315
The Orbital Parameters and the IUE Spectrum of the Single-Lined Spectroscopic Binary HD 698	
J. Sahade, R. Barba, and Y. Kondo	319

Investigation of the Eclipsing Binary AN Tauri J. M. Kreiner, J. Krzesinski, G. Pajdosz, J. Tremko, and S. Zola	321
A Spectrographic Study of the Interacting Eclipsing Binary RY Scuti: An Episode in the Rapid Mass Loss Stage or a Protoplanetary Nebula? J. Sahade, R. M. West, M. Yu. Skulskij	325
Last Minute Results from CTIO Observations R. Barba and J. Sahade	327
H-Alpha and O I 7774 Spectroscopy of Algol-Type Binaries P. B. Etzel and E. C. Olson	331
Mass Transfer Characterization in Close Binary Stars J. M. García and A. Giménez	337
Mass Exchange Via Pulsational Dumping from and F Supergiant S. B. Parsons, R. C. Dempsey, and B. W. Bopp	341
HR 2142: A Semi-Detached Interacting Binary? J. Coté, O. R. Pols, and L. B. F. M. Waters	345
A Search for White Dwarf Companions of Be Stars A. J. M. Piters, E. J. A. Meurs, J. Coté, M. H. Van Kerkwijk, J. Van Paradijs, O. R. Pols, and L. B. F. M. Waters	347
Observations of CNO Processed Matter in Massive Interacting Binary Systems R. S. Polidan and R. A. Wade	351
Carbon Depletion in Case B Mass Transfer Algol-Type Binaries T. S. Yoon and K. Honeycutt	355
Colliding Stellar Winds in Close Binary Systems S. N. Shore and M. J. Corcoran	359
Wind Driven Mass Transfer in Interacting Binaries C. A. Tout and D. S. Hall	363
Contact Binary Systems	367
The Massive Binary SV Centauri A. P. Linnell	369
An Ultraviolet Study of the Near-Contact Binaries J. S. Shaw	373

The Spotted Contact Binary SS Arietis - Spectroscopy and Infrared Photometry P. P. Rainger, S. A. Bell, and R. W. Hilditch	379
Analysis of Period Changes of YY Eridani C.-H. Kim	383
Test of the Optimization Techniques for the Photometric Analysis of Contact Binaries E. Lapasset, M. Gomez, and R. Fariñas	387
Circulation in Contact Binary Systems D. Q. Zhou and K. C. Leung	391
Late-Type Binary Systems	393
The Cool Algols D. M. Popper	395
Atmospheric Eclipsing Binary Zeta Aurigae in the 1987-1988 Eclipse I.-S. Nha	399
FK Comae and the Evolution of Close Binaries D. P. Huenemoerder, L. W. Ramsey, D. L. Buzasi, and H. L. Nations	403
Orbital Elements of a Sample of S Stars: Testing the Barium - S Evolutionary Connection A. Jorissen and M. Mayor	407
HD 46407: The First Eclipsing-Binary Barium Star A. Jorissen, J. Manfroid, and C. Sterken	411
Aspects of the Angular Momentum Loss Problem for Cool Close Binary Systems E. Budding, O. B. Slee, and R. T. Stewart	415
Cataclysmic Variables, Symbiotic Stars, and Related Binaries	419
MWC 560: Its Spectroscopic and Photometric Development in 1990 D. A. H. Buckley	421
A Model for R Aqr from HST D. Burgarella, M. Vogel, and F. Paresce	425
The Outburst of Symbiotic Novae H. Nussbaumer	429

Bolometric Light Curves of Symbiotic Novae U. Mürset and H. Nussbaumer	435
Outbursts by Low-Mass White Dwarfs in Symbiotic Variables E. M. Sion and C. J. Ready	439
White Light Photometry of the Cataclysmic Variable BZ Camelopardalis G. Pajdosz and S. Zola	441
Note on LMC X-4 T. J. Herczeg	445
Behavior of Matter Near the Outer Region of the Accretion Disk in Her X-1 N. G. Bochkarev and E. A. Karitskaya	449
A 3-D Hydrodynamical Simulation of Wind Accretion H. M. J. Boffin	453
Irradiation-Driven Mass Transfer in Low-Mass X-Ray Binaries P. Podsiadlowski	457
Interacting Binary White Dwarf Stars J.-E. Solheim	461
On the Masses and on the Mass Transfer in the Interactive Binary SS 433 T. Zwitter, S. D'Odorico, T. Oosterloo, and M. Calvani	465
Binaries in Clusters, the Galactic Halo, and the Magellanic Clouds	469
Tidal Circularization Among the Close Binaries in M67 D. W. Latham, R. D. Mathieu, A. A. E. Milone, and R. J. Davis	471
Can Evolution in Close Binaries Account for the Blue Stragglers in M67? A. A. E. Milone, D. W. Latham, R. D. Mathieu, J. A. Morse, and R. J. Davis	473
The Blue Straggler F190: A Case for Mass Transfer A. A. E. Milone and D. W. Latham	475
Constraints on the Cessation of Eclipses in SS Lacertae and Their Implications for System Evolution E. F. Milone, C. R. Stagg, and S. J. Schiller	479

The Eclipsing Binaries in NGC 5466 and Implications for Close Binary Evolution	
E. F. Milone, C. R. Stagg, and J. Kallrath	483
The Contact Binary H235 in the Open Cluster NGC 752	
E. F. Milone, C. R. Stagg, B. J. A. Sugars, J. R. McVean, S. J. Schiller, and J. Kallrath	487
Tidal Circularization Among the Close Binaries in the Halo	
G. Torres, D. W. Latham, T. Mazeh, B. W. Carney, R. P. Stefanik, R. J. Davis, and J. B. Laird	491
Massive Close Binaries in the Magellanic Clouds	
V. S. Niemela and L. P. Bassio	497
Absolute Dimensions and Distance Modulus for HV 2226 in the SMC	
S. A. Bell, G. Hill, R. W. Hilditch, J. V. Clausen, A. P. Reynolds, and A. Giménez	501
Observations of Two Binary Systems with 04f Type Components	
V. S. Niemela, M. A. Cerruti, N. I. Morrell, and H. G. Luna	505
CCD Photometry of the Eclipsing Binary HV 2274 in the Large Magellanic Cloud	
R. D. Watson, S. R. D. West, W. Tobin, and A. C. Gilmore	509
Late Stages of Binary Evolution	515
Close Binary Nuclei of Planetary Nebulae	
H. E. Bond, R. Ciardullo, and M. G. Meakes	517
Supernovae in Massive Interacting Binaries	
P. C. Joss, J. J. L. Hsu, Ph. Podsiadlowski, and R. R. Ross	523
Reversing the Supernova Order in Massive Binaries	
O. R. Pols	527