

PREFACE	<i>C. Allen, A. Ruelas, & R. Teixeira</i>	vii
GROUP PHOTOGRAPH		viii
LIST OF PARTICIPANTS		x
ASTROMETRY, RADIOASTROMETRY, TECHNIQUES		
THE OPPORTUNITIES AND CHALLENGES FOR ASTROMETRY IN THE 21ST CENTURY	<i>W. van Altena</i>	1
PHOTOGRAPHIC ASTRONOMY, A VALUABLE BUT NEGLECTED FIRST EPOCH MATERIAL	<i>C. Abad</i>	6
DIFFRACTO-ASTROMETRY WITH HUBBLE SPACE TELESCOPE AND ADAPTIVE OPTICS IMAGES	<i>L. J. Sánchez, A. Ruelas-Mayorga, C. Allen, & A. Poveda</i>	10
VERY LONG BASELINE ARRAY ASTROMETRY OF LOW-MASS YOUNG STELLAR OBJECTS	<i>L. Loinard, R. M. Torres, A. J. Mioduszewski, & L. F. Rodríguez</i>	14
AN INTRODUCTION TO ASTROMETRY AND CELESTIAL MECHANICS: A PROPOSED SYLLABUS	<i>W. van Altena & M. Stavinschi</i>	22
CDC-SF: PROPER MOTION CATALOGUE FROM <i>CARTE DU CIEL</i> PLATES, SAN FERNANDO ZONE	<i>B. Vicente</i>	25
PARALLAX PROGRAMS AT SUB-MAS ACCURACY LEVEL	<i>C. Ducourant, R. Teixeira, A. Krone-Martins, J. F. Le Campion, & G. Chauvin</i>	29

CONTENTS

CELESTIAL MECHANICS

- THE ANOMALOUS ACCELERATION OF THE PIONEER SPACECRAFTS
J. A. de Diego 35
- OBSERVED CHANNELS IN SATURN'S F RING BY THE CASSINI SPACECRAFT AND THEIR RELATIONSHIP TO PROMETHEUS
C. E. Chávez, C. D. Murray, K. Beurle, N. Cooper, & M. W. Evans 43
- ASTROMETRIC REDUCTION OF GEOSTATIONARY SATELLITES OPTICAL OBSERVATIONS FOR ORBIT DETERMINATION (PASAGE)
F. J. Montojo, T. López Moratalla, C. Abad, & J. L. Muiños 45
- THE EXO-PLANETARY SYSTEM OF 55 CANCRI AND THE TITIUS-BODE LAW
A. Poveda & P. Lara 49

GALACTIC STRUCTURE

- MICRO-ARCSEC ASTROMETRY OF THE MILKY WAY AND BEYOND
M. J. Reid 53
- ASTROMETRIC STUDY OF THE STELLAR AND SUBSTELLAR POPULATIONS OF THE ORION STAR FORMING REGION
J. Downes, C. Abad, & C. Briceño 60
- STELLAR KINEMATICS IN THE LOCAL DISK
R. Teixeira, R. E. De Souza, & S. Dos Anjos 64
- HAMC2 ASTROMETRY AND PHOTOMETRY CALIBRATION AND COMPARISON OF ITS DATA WITH THOSE OF OTHER MODERN CCD CATALOGUES
J. L. Muiños, M. Vallejo, F. Belizón, F. J. Montojo, C. C. Mallamaci, J. A. Pérez, L. F. Marmolejo, J. L. Navarro, & J. Sedeño 68

STELLAR DYNAMICS

- NEW OBSERVATIONS OF THE LARGE PROPER MOTIONS OF RADIO SOURCES IN THE ORION BN/KL REGION
L. F. Rodríguez, L. Gómez, L. Loinard, S. Lizano, C. Allen, A. Poveda, & K. M. Menten 75
- RUNAWAY STARS AS TRACERS OF STAR FORMATION AND EARLY DYNAMICAL EVOLUTION
A. Poveda, C. Allen, & L. F. Rodríguez 79
- DYNAMICAL FRICTION FORCE EXERTED ON SPHERICAL BODIES
O. Esquivel & B. Fuchs 83
- ENVIRONMENT AND MASS DEPENDENCIES OF GALACTIC λ SPIN PARAMETER: COSMOLOGICAL SIMULATIONS AND SDSS GALAXIES COMPARED
B. Cervantes-Sodi, X. Hernández, Ch. Park, & J. Kim 87

BINARY AND MULTIPLE SYSTEMS

- CIRCUMSTELLAR AND CIRCUMBINARY DISKS IN ECCENTRIC STELLAR BINARIES
L. A. Aguilar, B. S. Pichardo, & L. S. Sparke 91
- MILLI-ARCSECOND BINARIES
R. M. Torres, L. Loinard, A. J. Mioduszewski, & L. F. Rodríguez 98
- THE ESCAPING SPECTROSCOPIC BINARY θ^1 ORI E
R. Costero, C. Allen, J. Echevarría, L. Georgiev, A. Poveda, & M. G. Richer 102

CONTENTS

STELLAR ASSOCIATIONS AND CLUSTERS

- SIX NEW GALACTIC ORBITS OF GLOBULAR CLUSTERS IN A MILKY-WAY-LIKE GALAXY *C. Allen, B. Pichardo, & E. Moreno* 107

- ASTERISMS IDENTIFICATION USING ASTROMETRIC DATA
R. B. Orellana & M. S. De Biasi 111

POSTERS

- MASSIVE STAR FORMATION IN TWO SPIRAL GALAXIES: NGC 3938 AND NGC 3184; MULTIWAVELENGTH ANALYSIS
A. Caldú-Primo & I. Cruz-González 115

- CENTRAL DARK AND BARYONIC MASS DISTRIBUTION IN THE ISOLATED BARRED GALAXY NGC 3367
M. Cano, H. Hernández, & O. Valenzuela 117

- MIGRATION OF A JUPITER IN A PROTOPLANETARY DISK
C. H. Mena & L. Benet 119

- DYNAMICS OF PLANETARY SYSTEMS IN DIFFERENT GALACTIC ENVIRONMENTS
J. J. Jiménez-Torres & B. Pichardo 121

- NEW COMMON PROPER MOTION STARS IN THE LSPM-NORTH CATALOGUE
C. E. López 123

- A REVISION OF THE TRAPEZIUM SYSTEMS CATALOGUE
C. E. López & M. L. Varela Mugas 125

- THE INNER GALACTIC STRUCTURE TRACED BY MOLECULAR CLOUDS ASSOCIATED WITH ULTRA-COMPACT HII REGIONS
A. Luna, M. L. Ortega, & E. de la Fuente 127

- MOVING CLUSTERS IN THE GALACTIC HALO: ASSESSING THE PHYSICAL REALITY OF THESE GROUPS
M. A. Monroy & C. Allen 129

- TIDAL SHOCKS IN GLOBULAR CLUSTERS WITH A BARRED GALACTIC POTENTIAL
E. Moreno, C. Allen, & B. Pichardo 131

- GICLAS 112-29 (=NLTT 18149), A VERY WIDE COMPANION TO GJ 282 AB WITH COMMON PROPER MOTION, COMMON PARALLAX, COMMON RADIAL VELOCITY AND COMMON AGE
A. Poveda, A. Hernández-Alcantara, R. Costero, & J. Echevarría 133

- CLASSIFYING THE STELLAR ENVIRONMENT AROUND V838 MONOCEROTIS
V. A. Rosero-Rueda, H. E. Bond, K. M. Exter, G. H. Schaefer, & A. Plata 135

- CCD PHOTOMETRY OF M92
A. Ruelas-Mayorga & L. J. Sánchez 137

- AUTHOR INDEX 139