

PREFACE	<i>W. J. Henney, W. Steffen, A. C. Raga & L. Binette</i>	vii
LIST OF PARTICIPANTS		viii
JETS IN YOUNG STARS		
RECENT DEVELOPMENTS IN THE STUDY OF HERBIG-HARO OBJECTS	<i>J. Bally & B. Reipurth</i>	1
DIAGNOSTIC DETERMINATION OF IONIZATION AND DENSITY IN STELLAR JETS FROM LINE RATIOS	<i>F. Bacciotti</i>	8
HIGH RESOLUTION H ₂ OBSERVATIONS OF HERBIG-HARO FLOWS	<i>A. Chrysostomou, C. Davis, & M. Smith</i>	16
ATOMIC T TAURI DISK WINDS HEATED BY AMBIPOLAR DIFFUSION	<i>P. Garcia, S. Cabrit, J. Ferreira, F. Casse, & L. Binette</i>	21
THE EFFECTS OF MAGNETIC FIELDS ON RADIATIVE COOLING JETS	<i>E. M. de Gouveia Dal Pino & A. H. Cerqueira</i>	29
H ₂ OBSERVATIONS OF OUTFLOWS FROM YOUNG STARS	<i>C. J. Davis</i>	36
PROBING THE ORIGIN OF MASS LOSS IN T TAURI STARS	<i>C. Dougados, S. Cabrit, & C. Lavalley-Fouquet</i>	43
HUNGRY WINDS AND JETS	<i>J. E. Dyson, T. W. Hartquist, M. P. Redman, & R. J. R. Williams</i>	49
MAGNETIZED ASTROPHYSICAL OUTFLOWS: CRADLE TO GRAVE, SOURCE TO EFFECT	<i>A. Frank, T. A. Gardiner, & T. Lery</i>	54
AN IONIZED MICROJET FROM THE ORION NEBULA PROPLYD LV 2	<i>W. J. Henney, J. Meaburn, & S. T. Garrington</i>	59

CONTENTS

A NEW YSO OUTFLOW MODEL, JET SIMULATIONS, AND THEIR EMISSION	<i>T. Lery</i>	66
SPECTROSCOPY OF STELLAR JETS, OUTFLOWS, AND YOUNG STELLAR OBJECTS WITH THE <i>INFRARED SPACE OBSERVATORY</i>	<i>A. Noriega-Crespo</i>	71
MODELING THE RADIAL VELOCITIES AND PROPER MOTIONS OF HERBIG-HARO OBJECTS	<i>A. C. Raga, P. F. Velázquez, J. Cantó, & E. Masciadri</i>	79
EXPLORING THE CENTRAL ENGINES OF YOUNG STARS	<i>T. P. Ray & R. Mundt</i>	83
FABRY-PEROT KINEMATICS OF HH 202–204 IN THE ORION NEBULA: ARE THEY PART OF A BIG BIPOLAR OUTFLOW?	<i>M. Rosado, E. de la Fuente, L. Arias, & E. Le Coarer</i>	90
KINEMATICS OF YSO MOLECULAR HYDROGEN OUTFLOWS	<i>L. Salas & I. Cruz-González</i>	94
MHD JETS IN INHOMOGENEOUS MEDIA	<i>S. O’Sullivan & T. Lery</i>	98
TRACING SHOCK EVOLUTION IN YSO JETS	<i>J. A. Tedds, M. D. Smith, A. J. L. Fernandes, & C. J. Davis</i>	103
INTERFEROMETRIC MASER OBSERVATIONS FROM OUTFLOWS/DISKS IN STAR-FORMING REGIONS	<i>J. M. Torrelles, N. A. Patel, J. F. Gómez, & G. Anglada</i>	108
THE CHEMISTRY OF STELLAR JETS	<i>D. A. Williams, A. J. Lim, & S. Viti</i>	114
JETS IN PLANETARY NEBULAE		
ENIGMATIC LOW-VELOCITY JET-LIKE FEATURES IN PLANETARY NEBULAE	<i>D. R. Gonçalves, R. L. M. Corradi, & A. Mampaso</i>	119
STAGNATION KNOTS IN PRECESSING JETS	<i>A. J. Lim</i>	123
NEW OBSERVATIONS OF THE HIGH-VELOCITY OUTFLOWS OF THE PROTO-PLANETARY NEBULA HEN 3-1475	<i>A. Riera, P. García-Lario, A. Manchado, M. Bobrowsky, & R. Estalella</i>	127
BIPOLAR AND MULTIPOLAR JETS IN PROTOPLANETARY AND PLANETARY NEBULAE	<i>R. Sahai</i>	133
EMISSION LINES FROM JETS IN PLANETARY NEBULAE	<i>J. A. López</i>	139
THE KINEMATIC SIGNATURE OF A BINARY CENTRAL STAR IN THE COLLIMATED EJECTIONS OF PLANETARY NEBULAE	<i>L. F. Miranda</i>	145
FLIERS AS STAGNATION KNOTS IN PLANETARY NEBULAE	<i>W. Steffen, J.A. López, & A. J. Lim</i>	150
EXTRAGALACTIC JETS		
THE EMISSION LINE REGIONS OF REDSHIFT ONE RADIO GALAXIES	<i>P. N. Best, K. J. Inskip, H. J. A. Röttgering, & M. S. Longair</i>	155
THE <i>HST</i> VIEW OF THE NARROW LINE REGION OF SEYFERT GALAXIES	<i>A. Capetti</i>	163
BUBBLES, BOW-SHOCKS, AND BULLETS OVER BROAD-LINES: THREE IONIZED OUTFLOWS RESOLVED WITH <i>HST</i>	<i>G. Cecil, P. Ferruit, & S. Veilleux</i>	170

CONTENTS

SPECTRAL SIGNATURES OF JET-DRIVEN SHOCKS IN ACTIVE GALACTIC NUCLEI	<i>M. A. Dopita</i> 177
EVIDENCE OF JET-AMBIENT GAS INTERACTIONS IN THE EMISSION-LINE REGION OF SEYFERT GALAXIES	<i>P. Ferruit</i> 183
OBSERVATIONS OF RADIO GALAXY MRC 1138-262: MERGING GALAXIES EMBEDDED IN A GIANT $LY\alpha$ HALO	<i>J. D. Kurk, H. J. A. Röttgering, G. K. Miley, & L. Pentericci</i> 191
JET-CLOUD INTERACTIONS IN COMPACT RADIO SOURCES	<i>C. P. O’Dea, W. H. De Vries, A. M. Koekemoer, S. A. Baum, & J. Mack</i> 196
DEEP VLT SPECTROSCOPY OF HIGH REDSHIFT RADIO GALAXY MRC 2104–242: EVIDENCE FOR A METALLICITY GRADIENT	<i>R. Overzier, H. Röttgering, J. Kurk, & C. De Breuck</i> 203
EVIDENCE FOR JET-CLOUD INTERACTIONS IN HIGH-REDSHIFT RADIO GALAXIES	<i>C. Solórzano-Iñarraea, C. N. Tadhunter, & D. J. Axon</i> 208
THE IONIZATION OF THE EMISSION LINE GAS IN NEARBY POWERFUL RADIO GALAXIES	<i>C. N. Tadhunter</i> 213
NEW RESULTS FROM A SURVEY OF GALACTIC OUTFLOWS IN NEARBY ACTIVE GALACTIC NUCLEI	<i>S. Veilleux, G. Cecil, J. Bland-Hawthorn, & P. L. Shopbell</i> 222
JET-GAS INTERACTIONS IN THE SEYFERT GALAXY MARKARIAN 78	<i>M. Whittle, A. S. Wilson, C. H. Nelson, D. Rosario, & J. D. Silverman</i> 230
AUTHOR INDEX	237

Emission Lines from Jet Flows (Isla Mujeres, Q.R., México, November 13-17, 2000)
Editors: W. J. Henney, W. Steffen, A. C. Raga, & L. Binette