

Table of Contents

Preface	ix
Organizing committee	x
Conference photograph	xi
Editors' Note	xii
Conference participants	xiii

Part 1. SETTING THE STAGE

The accretion disk paradigm for young stars..... <i>C. Bertout</i>	1
T Tauri stars: from mystery to magnetospheric accretion	13
<i>G. Basri</i>	

Part 2. MAGNETIC FIELDS

What can X-rays tell us about accretion, mass loss and magnetic fields in young stars?..... <i>T. Montmerle</i>	23
Measurements of magnetic fields on T Tauri stars	31
<i>C. M. Johns-Krull</i>	
Magnetism, rotation, and accretion in Herbig Ae-Be stars..... <i>E. Alecian, G. A. Wade, C. Catala, C. Folsom, J. Grunhut, et al.</i>	43
Magnetic field at the inner disk edge	51
<i>M. Jardine, S. G. Gregory & J.-F. Donati</i>	
Submillimetre polarimetric observations of magnetic fields in star-forming regions	63
<i>R. L. Curran, A. Chrysostomou & B. C. Matthews</i>	

Part 3. MAGNETOSPHERIC ACCRETION AND INNER DISK TRUNCATION

Time variable funnel flows..... <i>S. H. P. Alencar</i>	71
Radiative-transfer modelling of funnel flows	83
<i>T. J. Harries</i>	
Measuring the physical conditions of accreting gas in T Tauri systems	95
<i>J. S. Bary & S. P. Matt</i>	
Observations of accretion shocks..... <i>D. R. Ardila</i>	103

On the origin of continuum and line emission in CTTSs	115
<i>S. A. Lamzin, M. M. Romanova & A. S. Kravtsova</i>	
Inner disk regions revealed by infrared interferometry	123
<i>F. Malbet</i>	
Gas at the inner disk edge	135
<i>J. S. Carr</i>	
Observational constraints on disk photoevaporation by the central star	147
<i>G. J. Herczeg</i>	
Accretion and outflow-related X-rays in T Tauri stars	155
<i>M. Güdel, K. Briggs, K. Arzner, M. Audard, J. Bouvier, et al.</i>	
Why are accreting T Tauri stars less luminous in X-rays than non-accretors?	163
<i>S. G. Gregory, K. Wood & M. Jardine</i>	

Part 4. MAGNETOSPHERIC EJECTION

Spectroscopic diagnostics of T Tauri inner winds	171
<i>S. Edwards</i>	
The generation of jets from young stars: an observational perspective	183
<i>T. P. Ray</i>	
The role of thermal pressure in jet launching	195
<i>N. Soker</i>	
The accretion-ejection connexion in T Tauri stars: jet models vs. observations . .	203
<i>S. Cabrit</i>	
The structure accompanying young star formation	215
<i>V. Demichev & L. I. Matveyenko</i>	
Last gasp of V1647 Ori: a brief post-outburst warm, molecular wind	223
<i>S. D. Brittain, T. Simon, T. W. Rettig, E. L. Gibb, D. Balsara, et al.</i>	

Part 5. STAR-DISK MAGNETOSPHERIC COUPLING

The rotational evolution of young low mass stars	231
<i>J. Bouvier</i>	
The rotation of very low mass stars and brown dwarfs	241
<i>J. Eislöffel & A. Scholz</i>	
Magnetization, accretion, and outflows in young stellar objects	249
<i>F. H. Shu, D. Galli, S. Lizano & M. J. Cai</i>	
MHD simulations of star-disk magnetospheres and the formation of outflows and jets	265
<i>C. Fendt</i>	

MHD simulations of disk-star interaction	277
<i>M. M. Romanova, M. Long, A. K. Kulkarni, R. Kurosawa, G. V. Ustyugova, et al.</i>	
MHD instabilities at the disk-magnetosphere boundary: 3D simulations	291
<i>A. K. Kulkarni & M. M. Romanova</i>	
The nature of stellar winds in the star-disk interaction	299
<i>S. Matt & R. E. Pudritz</i>	
Large-scale magnetic fields in disks: jets and reconnection X-winds	307
<i>J. Ferreira, N. Bessolaz, C. Zanni & C. Combet</i>	

Part 6. COMPANIONS, PLANETS, AND EFFECTS OF THE STELLAR MASS

The implications of close binary stars for star-disk interactions	315
<i>R. D. Mathieu</i>	
Disc-magnetosphere interactions in cataclysmic variable stars	325
<i>C. Hellier</i>	
The inner gaseous accretion disk around a Herbig Be star revealed by near- and mid-infrared spectro-interferometry	337
<i>S. Kraus, Th. Preibisch & K. Ohnaka</i>	
Star-disk interaction in brown dwarfs: implications for substellar formation	345
<i>S. Mohanty</i>	
Outflow activity in brown dwarfs	357
<i>E. T. Whelan, T. P. Ray, F. Bacciotti, S. Randich, S. Jayawardhana, et al.</i>	

Part 7. CONCLUSION

Summary and concluding remarks	365
<i>I. Appenzeller</i>	
Author index	371
Object index	373
Subject index	375