

CONTENTS

I. Molecular Clouds, Star Formation and HII Regions

○ Chemistry of Molecular Clouds Dalgarno, A.	3
• CO Distributions Towards the Southern Dark Cloud of DC 303.6+0.9 Wang, J.-S., Otrupcek, R.E.	13
• Extensive Molecular Line Survey for Dark Clouds Kaifu, N.	18
• Molecular Hydrogen Emission from Photodissociation Regions Hasegawa, T.	24
• Cosmic Ray Induced Photodestruction of Interstellar Molecules Gredel, R., Lepp, S., Dalgarno, A., Herbst, E.	32
• The Nature of Shocks in Molecular Clouds Brand, P. W. J. L.	38
○ Fragmentation and the Initial Mass Function Larson, R. B.	44
○ Star Formation Palla, F.	56
○ Turbulence in Interstellar Clouds Falgarone, E.	68
○ Turbulent and Ordered Motions in HII Regions Courtès, G.	80
• Expansion of HII Regions in Density Gradients Franco, J., Tenorio-Tagle, G., Bodenheimer, P.	96
• Variable HII Regions Hughes, V. A.	104

○ = Invited Review, • = Oral Contribution, ◦ = Poster Contribution

• The Sharpless 187 Gas Complex: A Study of the Molecular, Atomic, Ionized and Dust Components Joncas, G., Durand, D., Kömpe, C., Roger, R. S.	111
• Turbulent Mixing in Wind-Blown HII Regions Breitschwerdt, D., Kahn, F. D.	117
• Accretion Flows in High-Mass Star Formation Keto, E.	122
◦ An Optical Study of the Star Formation Region NGC7129 Gomez de Castro, A. I., Eiroa, C.	128
◦ Star Formation in the NGC2071 Molecular Cloud Evans, N. J.	128
◦ A Theory on the Slope of the IMF Zinnecker, H.	129
◦ S266: A Distant HII Region in the Galaxy Manchado, A., Esteban, C., Vilchez, J. M.	129
◦ Silicon Bearing Molecules in Molecular Clouds Martín-Pintado, J., Gómez-González, J., Bachiller, R., Planesas, P., Bujarrabal, V.	130
◦ Dense Clumps in NGC 2024 - Protostellar Condensations? Schulz, A., Zylka, R., Güsten, R.	131
◦ Radio Maps of the Regions RCW 57 and W49 Sabalisck, N. S., Abrahan, Z., Tateyama, C. E.	131
◦ Ionization of the Galactic Center Arched Filaments Rubin, R., Morris, M., Erickson, E. F., Colgan, S., Simpson, J.	132
◦ The Chamaeleon Dark Cloud Complex: Preliminary Analysis of the Colour Excesses $E(b-y)$ Towards the Selected area 203 Franco, G. A. P.	133

II. Mechanical Energy Sources

○ Interstellar Wind-Blown Bubbles Dyson, J. E.	137
• Stellar Winds in A-type Supergiants Talavera, A., Gomez de Castro, A. I.	146
○ Supernova Remnants Falle, S. A. E. G.	152

○ Dust Condensation in the Ejecta of SN 1987A Lucy, L. B., Danziger, I. J., Gouiffes, C., Bouchet, P.	164
• Observations of the Progenitor Wind of SN 1987A Wampler, E. J., Richichi, A., Baade, D.	180
• The Dynamical Evolution of a Clumpy Medium Yorke, H. W., Kunze, R., Spurzem, R.	186
◦ Infrared Environment of the Be Star 6 Cepheid: Interaction of Stellar and Interstellar Winds Kun, M.	192
◦ Carbon Monoxide Emission from Young Planetary Nebulae Bachiller, R., Bujarrabal, V., Martín-Pintado, J., Planesas, P., Gómez- González, J.	193
◦ Interaction Between a Stellar Wind and the Ionized Gas in N120 (LMC) Laval, A., Rosado, M., Boulesteix, J., Georgelin, Y. P., Marcelin, M., Greve, A., Larsen, J., Viale, A.	194

III. Discs, Outflows, Jets and HH Objects

○ Disks and Outflows Rodríguez, L. F.	197
• The Structure of Dense Cloud Cores Wootten, A.	210
• Molecular Disks Around Young Stars Sargent, A. I., Beckwith, S. V. W.	215
• On the Nature of the Beta Pictoris Circumstellar Nebula Paresce, F., Artymowicz, P.	221
• Near-Infrared Images of the Serpens Molecular Cloud Core Eiroa, C., Casali, M.	227
○ Molecular Outflows Snell, R. L.	231
• Submillimetre Mapping and Photometry of Bipolar Flows - Evidence for Compact Disks Sandell, G.	244
• AFGL 2591 and Monoceros R2: Cavities in the Molecular Cloud Torrelles, J.M., Ho, P. T. P., Rodríguez, L. F., Cantó, J.	250

• Aperture Synthesis Observations of CS, NH ₃ and Continuum in the Bipolar Flow Source in NGC2071-IRS Kawabe, R., Kitamura, Y., Ishiguro, M., Hasegawa, T., Chicada, Y., Okumura, S. K.	254
• A Swept-Up Molecular Bubble in L1551 Hayashi, S. S., Hayashi, M., Kaifu, N.	260
○ On the Formation and Propagation of Interstellar Jets Tenorio-Tagle, G.	264
• The Collimation of Nonadiabatic Winds from Young Stars Raga, A. C., Cantó, J.	276
○ Herbig-Haro Objects Böhm, K.-H.	282
• A CO Search for Molecular Gas in High Mass Post-Main-Sequence Nebulae Phillips, J. P., Mampaso, A., Ukita, N., Williams, P. G.	295
◦ A Remarkable Bipolar Flow in the Center of the Rho Ophiuchi Cloud André, Ph., Martín-Pintado, J., Despois, D., Montmerle, T.	300
◦ Massive Dust Disks Surrounding Herbig Ae/Be Stars Sandell, G.	301
◦ New Young Objects from the IRAS Point Source Catalogue Manchado, A., García Lario, P., Sahu, K. C., Pottasch, S.R.	301
◦ IUE Observations of Herbig-Haro Objects 7, 11 and 29 Cameron, M., Liseau, R.	302
◦ H ₂ 2.12μm Spectroscopy and Imaging of HH Objects Zinnecker, H., Mundt, R., Moneti, A., Geballe, T. R., Zealey, W. J.	302
◦ New OVRO Results Show Disks Are Not Necessary for Focussing Bipolar Outflows Barsony, M.	303
◦ The Spectrum of a Partially Ionized Jet Binette, L., Raga, A., Cantó, J.	304
◦ Sodium Ionization in T-Tauri Stars Natta, A., Giovanardi, C.	304

◦Inverting the Position - Velocity Diagrams of Molecular Discs Richer, J. S., Padman, R.	305
◦Identification of Outflow Exciting Sources Through Ammonia Observations Anglada, G., Rodriguez, L. F., Torrelles, J. M., Estalella, R., Ho, P.T.P., Cantó, J., López, R., Verdes-Montenegro, L.	305
◦The Molecular Envelope of Mira Planesas, P., Bachiller, R., Martin-Pintado, J., Bujarrabal, V.	306
◦Narrowband Photometry of Photometrically Peculiar Objects Mendoza, E. E. V.	306

IV. The Orion Nebula

• The Structure of Molecular Clouds from Large Scale Surveys of CO and CS Bally, J.	309
• The Radio Continuum Morphology of the Orion Nebula Felli, M., Churchwell, E., Wood, D. O. S.	315
• Highly Exited Molecular Hydrogen in Orion Hippelein, H. H., Münch, G.	323
• Aperture Synthesis Observations of NH ₃ and CS in Orion-KL Murata, Y., Kawabe, R., Ishiguro, M., Hasegawa, T., Takano, T., Kasuga, T., Morita, K.-I., Hayashi, M.	327
• The Trapezium Radio Cluster of the Orion Nebula Garay, G.	333
◦ Turbulence in the Orion Nebula Castañeda, H. O., O'Dell, C. R.	339
◦ High-Resolution Molecular Line Observations of the Core and Outflow in Orion B Richer, J. S., Hills, R. E., Padman, R.	339

V. The Extragalactic ISM

○ Star Formation in Galactic Nuclei Terlevich, R.	343
• Ionized Gas and Stellar Content in a Sample of HII Galaxies Vilchez, J. M., Cepa, J., Esteban, C.	353
• The Shaping of the Optical Jet of the Galaxy NGC 4258 Martin, P., Roy, J.-R., Noreau, L., Lo, K.-Y.	359
• A Plasmon Driven Bowshock Model for the Narrow Line Region of NGC 5929 Taylor, D., Dyson, J. E., Axon, D. J., Pedlar, A.	364
◦ Age Effects in Giant Extragalactic HII Regions Masegosa, J., Moles, M.	369
◦ Evolution of Clumpy Gas in Galaxies Kunze, R., Yorke, H. W., Spurzem, R.	369

VI. Interstellar Matter at High Galactic Latitudes

○ H α -Emission in Directions Toward High-Velocity 21cm Clouds Münch, G., Pitz, E.	373
• High-Velocity Absorption Components Toward the LMC Vladilo, G., Molaro, P., Monai, S., Centurion, M.	383
• Distance and Chemical Composition of High-Velocity Clouds van Woerden, H., Schwarz, U. J., Wakker, B. P.	389
○ Inflow of Neutral Gas Toward the Galactic Disk Mirabel, I. F.	396
• Ultraviolet Observations of Halo Clouds Danly, L., Blades, C.	408
• Analysis of Low- and High-Resolution Observations of High-Velocity Clouds Wakker, B. P.	416
• Molecules at the Interface of an HVC and a High-z HI Filament Mebold, U., Herbstmeier, U., Kalberla, P. W. M., Souvatzis, I.	424

○ Observations of the Galactic Halo de Boer, K. S.	432
• A New High-Resolution Study of Halo Gas Albert, C. E., Blades, J. C., Morton, D. C., Proulx, M., Lockman, F. J.	442
• Galactic Winds Völk, H. J., Breitschwerdt, D., McKenzie, J. F.	448
• Cycling of Dust Grains Through the Galactic Halo Ferrara, A., Franco, J., Barsella, B., Ferrini, F.	454
◦The Intermediate Velocity Cloud IVC 86+38.5-45, Related to High-Velocity Clouds? Herbstmeier, U.	458
◦The NaI Interstellar Spectrum of HVC287.5+225+240 Molaro, P et.al.	459
◦Collisions Between High Latitude Clouds: Theory Meets Observations Lattanzio, J. C., Keto, E. R.	460
VII. The Structure of the Interstellar Medium	
○ Multi-Supernova Remnants Różyczka, M.	463
○ Galactic Fountains Kahn, F. D.	474
○ Clustered Supernovae vs. the Gaseous Disk and Halo: A Rematch Heiles, C.	484
• Gamma Rays from Violent Interstellar Events Bloemen, J. B. G. M.	494
○ Structure of the Diffuse Interstellar Medium Cox, D. P.	500
• The Mass Spectrum of Interstellar Clouds Dickey, J. M., Garwood, R. W.	511
• Deterministic Self-propagating Star Formation Palouš, J.	518

• The Violent Interstellar Medium in Messier 31 Brinks, E., Braun, R., Unger, S. W.	524
• Contributions of Supernovae to the Chemical and Dynamical Evolution of the ISM Trimble, V.	530
◦ 1/4 KeV Diffuse Background and the Local Interstellar Medium Snowden, S. L.	536
◦ Large-Scale Irregularities in the Interstellar Medium Hari Om Vats	537
◦ The Milky Way Disk Warp Florido, E., Battaner, E., Alfaro, E., Sánchez-Saavedra, M. L.	537

