

ING La Palma Technical Note no. 77

ING bibliography 1989

K P Tritton (RGO)

June 1990

ING bibliography 1989

This bibliography contains publications in refereed journals appearing in 1989 that contain data generated by the Isaac Newton Group of Telescopes at the Observatorio del Roque de los Muchachos. It is a continuation of the bibliographies for 1984-1988 which appeared as Technical Notes 62 and 66. Note however that in contrast to the earlier compilations, this contains publications appearing in **refereed journals** only. Time did not permit a wider search, although much additional valuable material has appeared elsewhere, notably in IAU Circulars, the Information Bulletin of Variable Stars and various conference proceedings.

The list contains 81 publications. 14 publications contain results from the WHT, 56 contain results from the INT and 14 contain results from the JKT. I would be grateful to be informed of any errors or omissions in this list, and to receive relevant reprints for future compilations.

I acknowledge with thanks the assistance of Bill Martin in carrying out the search for the publications.

K P Tritton

- P J Andrews & I P Williams (1989). "Dust extinction on La Palma". *Observatory* 1093, 15
- David J Axon, S W Unger, A Pedlar, E J A Meurs, D M Whittle & M J Ward (1989). "The jets of 3C120". *Nature* 341, 631
- L Bassani, M J Coe, M A Malkan, N Mandolesi, B Partridge & L Spinoglio (1989), "A new narrow-line Seyfert 1 galaxy: IRAS 1652 + 395". *Astrophys J* 344, 726
- J E Beckman, C Abia & R Rebolo (1989). "⁹Be abundances in dwarfs of intermediate metal deficiency: implications for galactic evolution". *Astrophys & Space Science* 157, 4
- J Beckman & J Cepa (1989). "Evidence for leading spiral arm formation in NGC 7479". *Astrophys & Space Science* 156, 199
- R Bottema (1989). "The stellar velocity dispersion of the spiral galaxies NGC 6503 and NGC 6340", *Astron Astrophys* 221, 236
- Paul J F Brown, Philip L Dufton, Francis P Keenan, Alec Boksenberg, David L King & Max Pettini (1989). "PG0832+676: an apparently normal B1 V star 18 kiloparsecs above the galactic plane". *Astrophys J* 339, 397
- A G de Bruyn (1989). "0309+411, an Mpc-sized core-dominated radio galaxy/quasar". *Astron Astrophys* 226, L13
- P B Byrne, P Panagi, J G Doyle, C A Englebrecht, R McMahan, F Marang and G Wegner (1989). "Rotational modulation and flares on RS Canum Venaticorum and BY Draconis stars". *Astron Astrophys* 214, 227
- P J Callanan, P A Charles, B J M Hassal, G Machin, K O Mason, T Naylor, A P Smale & J van Paradijs (1989). "A search for the optical counterpart of the binary millisecond pulsar PSR 1855 + 09". *MNRAS* 240, 25p
- P J Callanan, P A Charles & J van Paradijs (1989). "The optical light curve of PSR1957 + 20". *MNRAS* 240, 31p
- J Cepa and J E Beckman (1989), "Spatial and luminosity distributions of the ionized hydrogen in NGC 3992". *Astron Astrophys Suppl* 79, 41
- E S Conlon, P J F Brown, P L Dufton & F P Keenan (1989). "Peculiar and normal early-type stars in the galactic halo". *Astron Astrophys* 224, 65
- C S Crawford & A C Fabian (1989). "Spectroscopy of extended emission-line gas around quasars at $0.5 < z < 1$ ". *MNRAS* 239, 219
- Mark Cropper, K O Mason, J R Allington-Smith, G Branduardi-Raymont, P A Charles, J P D Mittaz, K Mukai, P G Murdin & A P Smale (1989). "The magnetic field in four AM Her systems: measurements from cyclotron humps", *MNRAS* 236, 29p
- J I Davies, S Phillipps & M J Disney (1989). "Low surface brightness galaxies in the cluster A1367". *MNRAS* 239, 703
- Angeles I D; az, Elena Terlevich & Roberto Terlevich (1989). "Near-IR features in late type stars: their relation with stellar atmosphere parameters". *MNRAS* 239, 325
- C Esteban, J M Vilchez, A Manchado & M G Edmunds (1989). "Chemical abundances of the WR-ring nebulae NGC 2359 and RCW 78". *Astrophys & Space Science* 157, 3

- J A Fernley, I Skillen & R F Jameson (1989). "Cepheid radii and effective temperatures", MNRAS 237, 947
- T M Gledhill & S M Scarrott (1989). "Evidence for circumstellar discs around nebulous stars in the Taurus dark clouds", MNRAS 236, 139
- J I Gonzalez-Serrano & I P, rez-Fournon (1989). "A stellar disk perpendicular to the radio jet in B2 0034+25". Astrophys J 338, L29
- J I Gonzalez-Serrano & I P, rez-Fournon (1989), "Morphological properties of radio elliptical galaxies". Astrophys & Space Science 156, 121
- A Greve, C D McKeith, E W Barnett and M G"tz (1989). "Extinction towards the Orion nebula derived from $P\gamma/H\delta$ and $[SII] 1.04 \mu\text{m}/4071 \bullet$ line ratios", Astron Astrophys 215, 113
- E van Groningen and N van Weeren (1989), "A search for electron-scattered wings in $H\alpha$ in Seyfert-I galaxies". Astron Astrophys 211, 318
- L Hansen, H E Jorgensen, H U Norgaard-Nielsen, R S Ellis & W J Couch (1989). "A supernova at $z = 0.28$ and the rate of distant supernovae". Astron Astrophys 211, L9
- M J Irwin, R L Webster, P C Hewett, R T Corrigan & R I Jedrzejewski (1989), "Photometric variations in the Q2237 + 0305 system: first detection of a microlensing event". Astron J 98, 1989
- N Jackson & I W A Browne (1989). "Systematic asymmetries in $H\beta$ lines of radio-loud quasars". MNRAS 236, 97
- N Jackson, I W A Browne, D W Murphy & D J Saikia (1989). "Anisotropic optical and X-ray emission in quasars". Nature 338, 485
- R F Jameson & I Skillen (1989). "A search for low-mass stars and brown dwarfs in the Pleiades". MNRAS 239, 247
- D H P Jones, A T Sinclair & I P Williams (1989). "Secular acceleration of Phobos confirmed from positions obtained on La Palma". MNRAS 237, 15p
- William C Keel (1989). "The active nucleus of M81 and its history". Astron J 98, 195
- Robert C Kennicutt Jr, William C Keel & Cynthia A Blaha (1989). "A comparison of the physical conditions in nuclear, hotspot, and disk H II regions". Astron J 97, 1022
- M R Kidger (1989), "CCD monitoring of the X-ray variable quasar OX 169". Astrophys J 336, L9
- M R Kidger (1989). "The optical variability of 3C 345". Astron Astrophys 226, 9
- E Laurikainen & M Moles (1989). "Star formation in a sample of interacting galaxies". Astrophys J 345, 176
- A Lawrence, M Rowan-Robinson, K Leech, D H P Jones & J V Wall (1989). "High-luminosity IRAS galaxies - I: The proportion of IRAS galaxies in interacting systems". MNRAS 240, 329

- K J Leech, M V Penston, R Terlevich, A Lawrence, M Rowan-Robinson & J Crawford (1989). "High-luminosity IRAS galaxies - II: Optical spectroscopy modelling of starburst regions and comparison with structure", *MNRAS* 240, 349
- D J Lennon & P L Dufton (1989). "Observations of the He I 10830 • line in main-sequence O9-B6 stars and comparison with non-LTE predictions", *Astron Astrophys* 225, 439
- A Mampaso, J P Phillips, J M Vilchez, P Pismis and A Riera (1989). "Optical and infrared observations of the HII region S201", *Astron Astrophys* 220, 235
- A Manchado & S R Pottasch (1989). "Chemical abundances and masses of the haloes around the planetary nebulae NGC 6543 and NGC 6826". *Astron Astrophys* 222, 219
- A Manchado, S R Pottasch & A Mampaso (1989). "Abundance gradient for 13 planetary nebulae in the Galaxy", *Astrophys & Space Science* 157, 23
- M Manteiga, A J Pickles & C Martinez Roger (1989). "Blue stragglers and the binary hypothesis", *Astron Astrophys* 210, 66
- Minia Manteiga, Carlos Martinez Roger & Andrew J Pickles (1989), "The contribution to population in ellipticals of blue stragglers: a test of their origin". *Astrophys & Space Science* 156, 169
- J S Martin, M T Friend, Robert Cannon Smith & D H P Jones (1989). "Spectroscopy of the red star in IP Peg". *MNRAS* 240, 519
- J Meaburn, P M Allan, C A Clayton, A P Marston, M J Whitehead & A Pedlar (1989). "A jet-like optical continuum filament in the active galaxy NGC 1275 (Perseus A)". *Astron Astrophys* 208, 17
- J Meaburn, M J Whitehead & A Pedlar (1989). "The morphology and kinematics of the extensive ionized gas in the intermediate Seyfert galaxy Markarian 6", *MNRAS* 241, 1p
- E Mediavilla, M G Pastoriza & E Battaner (1989), "CCD photometry of Seyfert galaxies", *Astrophys and Space Science* 157, 145
- D Middlemass, R E S Clegg & J R Walsh (1989), "The giant haloes of NGC 6543 and 6826". *MNRAS* 239, 1
- D Middlemass, R E S Clegg & J R Walsh (1989), "On the spectroscopic detection of faint haloes and reflection nebulae around planetary nebulae". *MNRAS* 239, 5p
- J P Moran, R J Davis , M F Bode, A R Taylor, R E Spencer, A N Argue, M J Irwin, & J D Shanklin (1989). "MERLIN observations of the Wolf-Rayet star AS431 (WR147) - a double radio source", *Nature* 340, 449
- C Muñoz-Tuñón, J Cepa & J E Beckman (1989). "TAURUS observations of the velocity field in the inner zone of NGC 6946". *Astrophys and Space Science* 157, 157
- C Muñoz-Tuñón, J M Vilchez, H O Castañeda & J E Beckman (1989), "Gradients of excitation in the nuclei of starburst galaxies". *Astrophys and Space Science* 157, 165
- T Naylor, J Allington-Smith, P J Callanan, P A Charles, B J M Hassall, G Machin, K O Mason, A P Smale & J van Paradijs (1989). "WHT observations of cataclysmic variables in globular clusters - I: V101 in M5 during quiescence and outburst" . *MNRAS* , 25p

- T Naylor & P A Charles (1989). "The constancy of the gamma velocity of AC211 (= 4U2127 + 11 in M15)", MNRAS 236, 1p
- Hans U Norgaard-Nielsen, Leif Hansen, Henning E Jorgensen, Alfonso Aragón Salamanca, Richard S Ellis & Warrick J Couch (1989). "The discovery of a type Ia supernova at a redshift of 0.31", Nature 339, 523
- Julian P Osborne & Koji Mukai (1989). "New orbital and spin ephemerides of the intermediate polar FO Aqr (H2215 - 086)". MNRAS 238, 1233
- A Pedlar, J Meaburn, D J Axon, S W Unger, D M Whittle, E J A Meurs, N Guerrina & M J Ward (1989), "Collimated radio and optical emission associated with the Seyfert galaxy Markarian 78". MNRAS 238, 863
- Enrique P, rez, Rosa Gonzalez-Delgado, Clive Tadhunter & Zlatan Tsvetanov (1989). "The complex narrow-line region in NGC 4151". MNRAS 241, 31p
- Enrique P, rez, M V Penston & M Moles (1989). "Spectrophotometric monitoring of high luminosity active galactic nuclei - I: The methods and data". MNRAS 239, 55
- Enrique P, rez, M V Penston & M Moles (1989). "Spectrophotometric monitoring of high luminosity active galactic nuclei - II: First results". MNRAS 239, 75
- R Rebolo & C Abia (1989), "Oxygen abundances in old disc and halo stars of the Galaxy". Astrophys and Space Science 157, 55
- A Riera, A Mampaso, J P Phillips & J M Vilchez (1989). "Optical spectroscopy and near-infrared mapping of S 106". Astron Astrophys 210, 351
- J M Rodríguez Espinosa & R M Stanga (1989). "Extended ionized emission from Seyfert galaxies". Astrophys and Space Science 157, 173
- S R Rosen, G Branduardi-Raymont, K O Mason & P G Murdin (1989). "The 2.8-hour flux modulation of the cataclysmic variable PG1711 + 336". MNRAS 237, 1037
- S M Scarrott & C D Rolph (1989). "Further studies of the optical polarization in the jet of 3C 273". MNRAS 238, 349
- S M Scarrott, C D Rolph & M D Mannion (1989). "The discovery of a small bipolar IR nebula near NGC 2023", MNRAS 237, 1027
- S M Scarrott & R F Warren-Smith (1989). "The nature of the optical nebulosity near GL989", MNRAS 237, 995
- A T Sinclair (1989). "The orbits of the satellites of Mars determined from Earth-based and spacecraft observations", Astron Astrophys 220, 321
- Evan D Skillman, R C Kennicutt & P W Hodge (1989). "Oxygen abundances in nearby dwarf irregular galaxies", Astrophys J 347, 875
- Graeme H Smith & Alan J Penny (1989), "CN and CH inhomogeneities among red horizontal branch stars in M71", Astron J 97, 1397
- W B Somerville & J G Bellis (1989). "An astronomical search for the molecule C₆₀", MNRAS 240, 41p

- Jesper Sommer-Larsen, Per Rex Christensen & Dave Carter (1989), "Blue horizontal branch field stars in the galactic halo - II", MNRAS 238, 225
- C N Tadhunter, R A E Fosbury & P J Quinn (1989). "The kinematics of the ionized gas around powerful radio galaxies", MNRAS 240, 225
- Elena Terlevich, Angeles I Díaz and Roberto Terlevich (1989). "Stellar atmospheric parameters and the IR Ca II triplet", Astrophys & Space Science 157, 15
- M B Vila , R D Davies, A Pedlar, D J Axon, E Hummel & J M van der Hulst (1989), "Multifrequency study of the nuclei of Sbc galaxies", Astrophys and Space Science 157, 277
- J M Vilchez, C Esteban, H Castañeda & M G Edmunds (1989). "Evidence for high velocity gas in giant HII regions", Astrophys & Space Science 156, 237
- J M Vilchez, A Mampaso, A Riera and J P Phillips (1989). "The nature of the cometary nebula 1548 C27", Astron Astrophys 213, 303
- M J Whitehead, J Meaburn & C A Clayton (1989). "Optical observations of the morphology and kinematics of the compact core of the peculiar supernova remnant CTB 80", MNRAS 237, 1109
- I P Williams, S F Green, P J Andrews, S W H Cowley, M J Hendrie, D W Hughes, A D Johnstone, J A M McDonnell, J D Shanklin, M K Wallis & J C Zarnecki (1989). "The UK contribution to observations of comet Halley", QJRAS 30, 3
- Janet H Wood, T R Marsh, E L Robinson, R F Stiening, Keith Horne, R J Stover, R Schoembs, S L Allen, Howard E Bond, D H P Jones, Albert D Grauer & Robin Ciardullo (1989). "The ephemeris and variations of the accretion disc radius in IP Pegasi". MNRAS 239, 809
- M G Yates & R P Garden (1989). "Near-simultaneous optical and infrared spectrophotometry of active galaxies", MNRAS 241, 167

Instrumental

The following is a list of papers which, although containing no observational results, describe the design or operation of the ING telescopes and instruments. No attempt at completeness has been made in this list.

- J R Allington-Smith, J M Breare, B E Carrasco, R S Ellis, I R Parry, J Webster, D W Gellatly, F J Gribbin, M Ingle, P R Jorden, C M Lowne, J R Powell, D J Thorne, C Taylor, I G van Breda, N R Waltham, S P Worswick & C G Wynne (1989). "A faint object spectrograph for the William Herschel Telescope", MNRAS 238, 603
- James Dick, Charles Jenkins & Jacek Ziabicki (1989). "Design fundamentals of algorithms for photon-counting systems", PASP 101, 684

C N Dunlop, Y A Hamam & J V Major (1989). "The use of a Polaris seeing monitor to measure atmospheric seeing at La Palma", MNRAS 236, 875

J L A Fordham, D A Bone, P D Read, T J Norton, P A Charles, D Carter, R D Cannon & A J Pickles (1989), "Astronomical performance of a micro-channel plate intensified photon counting detector", MNRAS 237, 513

C R Jenkins (1989). "Are atmospheric dispersion compensators any use?", Observatory 109, 49