

**ING La Palma Technical Note no. 94**

**ING Bibliography 1993**

**W L Martin (RGO)**

**March 1994**

## Bibliography

Below is the list of research papers published in 1993 that resulted from observations made at the Isaac Newton Group of Telescopes. Only papers appearing in refereed journals have been included, although many useful data have also appeared elsewhere, notably in workshop and conference proceedings.

The list totals 117 publications. 55 publications contain results from the WHT, 70 contain results from the INT and 30 contain results from the JKT.

### WHT

Jeremy R Allington-Smith, Richard S Ellis, Esther L Zirbel and Augustus Oemler, Jr (1993), "The evolution of galaxies in radio-selected groups", *Astrophys J* 404, 521

Alfonso Aragón-Salamanca, Richard S Ellis, Warrick S Couch and David Carter (1993), "Evidence for systematic -evolution in the properties of galaxies in distant clusters", *MNRAS* 262, 764

S Arribas and E Mediavilla (1993), "The circumnuclear region of NGC 5728", *Astrophys J* 410, 552

Marc Balcells and David Carter (1993), "High-resolution rotation curves of NGC 7626: dynamics of a young kinematically peculiar core", *Astron Astrophys* 279, 376

C R Benn, M Rowan-Robinson, R G McMahon, T J Broadhurst and A Lawrence (1993), "Spectroscopy of faint radio sources: the nature of the sub-mJy radio source population", *MNRAS* 263, 98

J-F Le Borgne and R V Sánchez-Gómez (1993), "An optical identification of radio sources in the field of the cluster of galaxies Abell 2218", *Astron Astrophys* 271, 425

I W A Browne, A R Patnaik, D Walsh and P N Wilkinson (1993), "The redshift of the lensing galaxy in the gravitationally lensed system B0218+35.7", *MNRAS* 263, L32

D Carter and C R Jenkins (1993), "High-resolution kinematic observations of rapidly rotating spheroidal components of galaxies", *MNRAS* 263, 1049

J Casares, P A Charles, T Naylor and E P Pavlenko (1993), "Optical studies of V404 Cyg, the X-ray transient GS 2023+338 - III: The secondary star and accretion disc", *MNRAS* 265, 834

D L Clements, Paul P van der Werf, A Krabbe, M Blietz, R Genzel and M J Ward (1993), "Extended H $\alpha$  emission from IRAS F10214+4724: starburst or active galactic nucleus?", *MNRAS* 262, L23

M J Coe, C Everall, J Fabregat, M J Gorrod, A J Norton, V Reglero, P Roche and S J Unger (1993), "Infrared and optical studies of Be star/X-ray binaries", *Astron Astrophys Suppl* 97, 245

- E S Conlon, P L Dufton, R J H McCausland and F P Keenan (1993), "LSIV - 12°111: A candidate halo proto-planetary nebula", *Astrophys J*, 408, 593
- D Corcoran, T P Ray and R Mundt (1993), "Optical evidence for a poorly collimated wind from Cepheus A", *Astron Astrophys* 279, 206
- Mark Cropper and D T Wickramasinghe (1993), "Cyclotron humps in AM Her systems - V: Two poles in DP Leo", *MNRAS* 260, 696
- M Dietrich et al (1993), "Steps towards determination of the size and structure of the broad-line region in active galactic nuclei - IV: Intensity variations of the optical emission lines of NGC 5548", *Astrophys J*, 408, 416
- R J Garcı́a López, R Rebolo, J E Beckman and C D McKeith (1993), "A study of activity in F-type main-sequence stars using the D<sub>3</sub> line of He I", *Astron Astrophys* 273, 482
- A Eckart, M Cameron, R Genzel, N Nakai and S Wagner (1993), "The starburst in the Wolf-Rayet nucleus of the liner NGC 6764", *Astrophys Space Science*, 205, 29
- Duncan A Forbes, Martin J Ward, V Rotaciuc, M Blietz, R Genzel, S Drapatz, Paul P van der Werf and A Krabbe (1993), "High-resolution imaging of [Fe II] 1.64 microns, Brackett- $\gamma$  and H<sub>2</sub> 1-0 S(1) emission in the starburst galaxy NGC 253", *Astrophys J* 406, L11
- G Gómez and R López (1993), "Late-time spectral evolution of the Type II supernova 1990E in NGC 1035", *MNRAS* 263, 767
- Rosa Maria Gonzalez-Delgado and Enrique Pérez (1993), "Star formation and AGN", *Astrophys Space Science*, 205, 127
- J I Gonzalez-Serrano, R Carballo and I Pérez-Foumón (1993), "The optical properties of low luminosity radio galaxies with radio jets", *Astron J* 105, 1710
- N C Hambly, E S Conlon, P L Dufton, F P Keenan, J E Little and L Miller (1993), "Model atmosphere and kinematical analysis of early-type high galactic latitude stellar candidates from the UKST UBVR survey", *Astrophys J* 417, 706
- Ian D Howarth and Andy H N Reid (1993), "UES and IUE observations of the 09.5V star HD 93521: non-radial pulsations, wind and distance", *Astron Astrophys* 279, 148
- Mike Irwin and Anna N Zytkov (1993), "A variable star in the vicinity of the soft  $\gamma$ -ray repeater 1806-20", *MNRAS* 263, L1
- N Jackson and C N Tadhunter (1993), "The polarized spectrum of Cygnus A", *Astron Astrophys* 272, 105
- C M Jomaron, G Branduardi-Raymont, G E Bromage, B J M Hassall, S T Hodgkin, K O Mason, T Naylor and M G Watson (1993), "RE1016-05: a white dwarf binary discovered with the ROSAT Wide Field Camera", *MNRAS* 264, 219
- Mark R Kidger, José Antonio de Diego, Leo Takalo, Aimo Sillanpää, and Masaini Okyudo (1993), "Optical photometry and polarimetry and infrared photometry of 3C 345 in outburst", *Astrophys J* 407, L 1
- Johan H Knapen, Nina Arnth-Jensen, Jordi Cepa and John E Beckman (1993), "Statistics and properties of H II regions in NGC 6814", *Astron J* 106, 56

- Johan H Knapen, Jordi Cepa, John E Beckman, M Soledad del Rio and Alan Pedlar (1993), "Star formation in the spiral arms of NGC 4321 - II: H I distribution and kinematics", *Astrophys J* 416, 563
- W Kollatschny and M Dietrich (1993), "Emission line variability in NGC 4593 and NGC 5548", *Astrophys Space Science*, 205, 179
- J K Kotilainen, M J Ward and G M Williger (1993), "CCD imaging of Seyfert galaxies: deconvolution of the nuclear and stellar components", *MNRAS* 263, 655
- A Krabbe, V Rotaciuc, J W V Storey, M Cameron, M Blietz, S Drapatz, R Hofmann, G S.,mann and R Genzel (1993), "FAST: a near-infrared imaging Fabry-Perot spectrometer", *PASP* 105, 1472
- Mark Lacy, Gary J Hill, Mary-Elizabeth Kaiser and Steve Rawlings (1993), "A complete sample of sources in the North Ecliptic Cap, selected at 38 Mhz - II: CCD observations and their implications", *MNRAS* 263, 707
- Mark Lacy, Steve Rawlings, Richard Saunders and P J Warner (1993), "8C 0821+695: a giant radio galaxy at  $z = 0.538$ ", *MNRAS* 264, 721
- C-I Lagerkvist, A Fitzsimmons, P Magnusson and I P Williams (1993), "Investigations of D-type asteroids", *MNRAS* 260, 679
- A Lawrence et al (1993), "Optical, infrared, radio and polarization imaging of the high-redshift galaxy IRAS F10214+4724", *MNRAS* 260, 28
- James R Lewis and D V Bowen (1993), "TAURUS and CCD observations of Arp 90", *MNRAS* 264, 818
- D Lutz, A Kmbbe and R Genzel (1993), "Excitation of the [Fe III] bubble surrounding the galactic center "mini-cavity"", *Astrophys J* 418, 244
- R J H McCausland, E S Conlon, P L Dufton, A Fitzsimmons, M J Irwin and F P Keenan (1993), "A search for young stars in the halo of M31", *Astrophys J* 411, 650
- C D McKeith, J Castles, A Greve and D Downes (1993), "Rotation of stars and gas in M82", *Astron Astrophys* 272, 98
- Antonio Magazzù, Eduardo L Martín and Rafael Rebolo (1993), "A spectroscopic test for substellar objects", *Astrophys J* 404, L17
- Eduardo Martín (1993), "The peculiar nature of BD +24°676", *PASP* 105, 277
- J Meaburn, R M Massey, A C Raga and C A Clayton (1993), "High-speed, highly ionized jets, knots and loops in the Trapezium cluster of the Orion nebula (M42, NGC 1976)", *MNRAS* 260, 625
- E Mediavilla and S Arribas (1993), "Evidence for an offset active nucleus in the Seyfert galaxy NGC 3227", *Nature* 365, 420
- D L Pollacco and S A Bell (1993), "New light on UU Sagittae", *MNRAS* 262, 377
- S R Rosen, J P D Mittaz and P J Hakala (1993), "REO751+14, the first "intermediate"polar?", *MNRAS* 264, 171

- M Rowan-Robinson et al (1993), "The ultraviolet-to-radio continuum of the ultraluminous galaxy IRAS F10214+4724", *MNRAS* 261, 513
- Pilar Ruiz-Lapuente, David J Jeffery, Peter M Challis, Alexei V Filippenko, Robert P Kirshner, Luis C Ho, Brian P Schmidt, Francisco Sánchez and Ramon Canal (1993), "A possible low-mass Type Ia supernova", *Nature*, 365, 728
- T Shahbaz, T Naylor and P A Charles (1993), "An ellipsoidal study of Centaurus X-4", *MNRAS* 265, 655
- D Sprayberry, C D Impey, M J Irwin, R G McMahon and G D Bothun (1993), "Discovery of a third giant low surface brightness disk galaxy", *Astrophys J* 417, 114
- B Vila-Vilaró, A Robinson and S Wagner (1993), "The ENLR of NGC 4151: spatial variations of the line ratios ", *Astrophys Space Science* 205, 189
- G Vladilo, M Centurión, K S de Boer, D L King, K Lipman, J Stegert, S W Unger and N A Walton (1993), "Interstellar and intergalactic gas in the direction of SN 1993J in M81", *Astron Astrophys* 280, L11
- I Wanders et al (1993), "Spectroscopic monitoring of active galactic nuclei - HH: The Seyfert-1 galaxy NGC 3516", *Astron Astrophys* 269, 39
- Paul P van der Werf, R Genzel, A Krabbe, M Blietz, D Lutz, S Drapatz, Martin J Ward and Duncan A Forbes (1993), "Near-infrared line imaging of NGC 6240: collision shock and nuclear starburst", *Astrophys J* 405, 522
- Dennis Zaritsky, Rodney Smith, Carlos Frenk and Simon D M White (1993), "Satellites of spiral galaxies", *Astrophys J* 405, 464

## INT

- C Abia, H M J Boffin, J Isern and R Rebolo (1993), "Lithium abundances in a flux-limited sample of galactic carbon stars", *Astron Astrophys* 272, 455
- H M J Boffin, C Abia, J Isern and R Rebolo (1993), "A catalogue of Li abundances and equivalent widths in a sample of galactic C-stars", *Astron Astrophys Suppl* 102, 361
- Blaise Canzian, R J Allen and R P J Tilanus (1993), "Spiral structure of the giant galaxy UGC 2885: H $\alpha$  kinematics", *Astrophys J* 406, 457
- M J Coe, C Overall, A J Norton, P Roche, S J Unger, J Fabregat, V Reglero and J M Grunsfeld (1993), "Infrared and optical observations of the newly identified Be/X-ray binary LSI +61°235", *MNRAS* 261, 599
- Matthew Colless, Richard S Ellis, T J Broadhurst, Keith Taylor and Bruce A Peterson (1993), "Faint blue galaxies: high or low redshift?", *MNRAS* 261, 19
- L Cuesta, J P Phillips and A Mampaso (1993), "Spectroscopy and shock modelling of the unusual bipolar outflow NGC 6905", *Astron Astrophys* 267, 199

- J O Doyle, M Mathioudakis, H M Murphy, S Avgoloupis, L N Mavridis and J H Seiradakis (1993), "Rotational modulation and flares on the RS Canum Venaticorum binary II Pegasi in July/September 1990: spots and flares on II Peg", *Astron Astrophys* 278, 499
- P W Draper, S M Scarrott and C N Tadhunter (1993), "The optical polarization of the low-redshift radio galaxies 3CR 33, 305, 321 and 459", *MNRAS* 262, 1029
- J E Drew, D H P Jones and J A Woods (1993), "The donor star of the long-period dwarf nova DX Andromedae", *MNRAS* 260, 803
- P L Dufton, E S Conlon, F P Keenan, R J H McCausland and D E Holmgren (1993), "Three stars at high galactic latitudes with peculiar helium abundances", *Astron Astrophys* 269, 201
- P L Dufton, D Holmgren, E S Conlon and F P Keenan (1993), "The nature of the high latitude B-type binary, SU Piscium", *Astron Astrophys* 278, 68
- C Eiroa, R Lenzen, L F Miranda, J M Torrelles, G Anglada and R Estalella (1993), "Optical and near-infrared observations of S 140N", *Astron J* 106, 613
- J F Gameiro and M T V T Lago (1993), "Rotational velocities for T Tauri stars with strong emission lines", *MNRAS* 265, 359
- J F Gameiro, M T V T Lago, N M Lima and A C Cameron (1993), "Optical and ultraviolet observations of the star LkH $\alpha$  264", *MNRAS* 261, 11
- Ramón J García López, Rafael Rebolo, Artemio Herrero and John E Beckman (1993), "Oxygen abundances in F-type stars of the Hyades and the Ursa Major group", *Astrophys J* 412, 173
- P García-Lario, A Manchado, K C Sahu and S R Pottasch (1993), "IRAS 06562-0337: final mass-loss episodes before the formation of a planetary nebulae?", *Astron Astrophys* 267, L11
- G Gómez and R López (1993), "A multiple supernova event in the  $z = 0.05$  galaxy MCG 10-24-007", *Astron J* 106, 245
- E van Groningen (1993), "An analysis of the spectra of 3 Seyfert-1 galaxies with strong Ca II emission", *Astron Astrophys* 272, 25
- Michiel P van Haarlem, Laura Cayón, Carlos Gutiérrez de la Cruz, Enrique Martínez-González and Rafael Rebolo (1993), "The dynamics of the outer regions of the Coma cluster", *MNRAS* 264, 71
- P J Hakala, M G Watson, O Vilhu, B J M Hassall, B J Kellett, K O Mason and V Piirola (1993), "The discovery of a new bright eclipsing AM Her system", *MNRAS* 263, 61
- S T Hodgkin, M A Barstow, T A Fleming, R Monier and J P Pye (1993), "ROSAT/ IUE discovery of a white dwarf companion to HD 33959C (F4V)", *MNRAS* 263, 229
- J Y Hu, S Slijkhuis, T de Jong and B W Jiang (1993), "A systematic study of IRAS selected proto-planetary nebula candidates - I: Selection of the sample and observations of the southern objects", *Astron Astrophys Suppl* 100, 413

- J M van der Hulst, E D Skillman, T R Smith, O D Bothun, S S McGaugh and W J G de Blok (1993), "Star formation thresholds in low surface brightness galaxies", *Astron J* 106, 548
- R J Ivison, M F Bode, A Evans, A Skopal and J Meaburn (1993), "A multi-frequency study of symbiotic stars - III: Simultaneous ultraviolet and optical observations of AX Persei", *MNRAS* 264, 875
- Robert J Ivison, Ulisse Munari, and Fred Marang (1993), "On the symbiotic star V919 Sagittarii", *Astron Astrophys* 277, 510
- R D Jeffries, K H Elliott, B J Kellett and G E Bromage (1993), "RE 0618+75: a very short-period, binary dMe system", *MNRAS* 265, 81
- D J Lennon, P L Dufton and A Fitzsimmons (1993), "Galactic B-supergiants - II: Line strengths in the visible - evidence for evolutionary effects?", *Astron Astrophys Suppl* 97, 559
- Xiao-wei Liu and John Danziger (1993), "Observations of the Bowen fluorescence mechanism and charge transfer in planetary nebulae - I", *MNRAS* 261, 465
- Eduardo L Martín and Rafael Rebolo (1993), "EK Cephei B: a test object for pre-ZAMS models of solar-type stars", *Astron Astrophys* 274, 274
- P Marziani, J W Sulentic, M Calvani, E Perez, M Moles and M V Penston (1993), "The peculiar Balmer line profiles of OQ 208", *Astrophys J* 410, 56
- R M Massey and J Mcabum (1993), "Extensive, high-speed gas around the Trapezium cluster of the Orion nebula (M42, NGC 1976)", *MNRAS* 262, L48
- C Muñoz-Tuñón, S M Vílchez and H O Castañeda (1993), "Resolving the kinematical structure within the nuclear starburst of NGC 253", *Astron Astrophys* 278, 364
- Miriani G Pastoriza, Horacio A Dottori, Elena Terlevich, Roberto Terlevich and Angeles Díaz (1993), "Optical and near-IR spectrophotometry of the galaxy NGC 3310", *MNRAS* 260, 177
- R F Peletier (1993), "The stellar content of elliptical galaxies: optical and infrared colour profiles of M32 and NGC 205", *Astron Astrophys* 271, 51
- A H N Reid, C T Bolton, R A Crowe, M S Fieldus, A W Fullerton, D R Gies, I D Howarth, D McDavid, R K Prinja and K C Smith (1993), "Time-series observations of O-stars - II: Optical observations of  $\zeta$  Ophiuchi", *Astrophys J* 417, 320
- P Roche, M J Coe, C Overall, J Fabregat, A J Norton, V Reglero and S J Unger (1993), "Multi-wavelength observations of phase changes in X Persei", *Astron Asxrophys Suppl* 97, 277
- N Roche, T Shanks, N Metcalfe and R Fong (1993), "The angular correlation function of galaxies with  $B \sim 25$  mag", *MNRAS* 263, 360
- René G M Rutten, V S Dhillon, Keith Horne, E Kuulkers and J van Paradijs (1993), "Spectrally resolved eclipse maps of the accretion disk in UX Ursae Majoris", *Nature* 362, 518
- J L Sanz, J Clavel, T Naylor and W Wamsteker (1993), "The Lyman  $\alpha$  forest towards the  $z = 2.72$  QSO HS 1700+6416", *MNRAS* 260, 468

- S M Scarrott, P W Draper and C N Tadhunter (1993), "Imaging polarimetry of the bipolar nebula Parsamyan 22", MNRAS 260, 171
- S M Scarrott, P W Draper and C N Tadhunter (1993), "The nature of the optical nebulosity surrounding the star RNO 91 in the L43 dark cloud," MNRAS 262, 306
- Martin Shaw (1993), "The photometric properties of "box/peanut" galactic bulges", MNRAS 261, 718
- M Shaw (1993), "The stellar dynamics of "box/peanut" galactic bulges - II: NGC 1055", Astron Astrophys 280, 33
- M Shaw, A Wilkinson and D Carter (1993), "The stellar dynamics of "box/peanut" galactic bulges - I: NGC 3079", Astron Astrophys 268, 51
- Robert Connon Smith, R J Fiddik, N A Hawkins and M S Catalán (1993), "Evidence for non-axisymmetric absorption in V1315 Aquilae", MNRAS 264, 619
- C Stanghellini, C P O'Dea, S A Baum and E Laurikainen (1993), "Optical CCD imaging of GHz-peaked-spectrum radio sources", Astrophys J Suppl 88, 1
- I Vidal and J A Belmonte (1993), "Prospects of stellar variability using a CCD: the discovery of a new W Ursae Majoris system in the open cluster NGC 6802", Astron Astrophys 274, 265
- N A Walton, J R Walsh and S R Pottasch (1993), "Imaging and spectroscopy of Abell 63 (UU Sge)", Astron Astrophys 275, 256

## **JKT**

- K Beurle, D Harper, D H P Jones, C D Murray, D B Taylor and I P Williams (1993), "Preliminary analysis of CCD observations of Saturn's satellites ", Astron Astrophys 269, 564
- J Bouvier, S Cabrit, M Fernández, E L Martín and J M Matthews (1993), "COYOTES I: the photometric variability and rotational evolution of T Tauri star", Astron Astrophys 272, 176
- J Bouvier, S Cabrit, M Fernández, E L Martín and J M Matthews (1993), "COYOTES I: multisite UBVRI photometry of 24 pre-main-sequence stars of the Taurus-Auriga cloud", Astron Astrophys Suppl 101, 485
- Matthew Colless, D Burstein, G Wegner, R P Saglia, R McMahan, R L Davies, E Bertschinger and G Baggley (1993), "Photoelectric and CCD photometry of E and SO galaxies", MNRAS 262, 475
- F Comerón, J Torra, C Jordi and A E Gómez (1993), "Anomalous proper motions in the Cygnus superbubble region", Astron Astrophys Suppl 101, 37
- E L Folgheraiter, A J Penny and W K Griffiths (1993), "The chemical inhomogeneity of M13", MNRAS 264, 991
- R Hes and R F Peletier (1993), "The bulge of M104: stellar content and kinematics", Astron Astrophys 268, 539



- H U Nørgaard-Nielsen, P Goudfrooij, H E Jørgensen and L Hansen (1993), "The extinction and star clusters in NGC 1275", *Astron Astrophys* 279, 61
- M A O'Dell and A Collier Cameron (1993), "Rotation periods of selected members of the  $\alpha$  Persei cluster", *MNRAS* 262, 521
- R P Saglia, Edmund Bertschinger, G Bagglely, David Burstein, Matthew Colless, Roger L Davies, Robert K McMahan, Jr and Gary Wegner (1993), "The effects of seeing on the photometric properties of elliptical galaxies", *MNRAS* 264, 961
- B Smalley (1993), "The atmospheric parameters of A and F stars - II: The calibration of the Strömngren  $\delta m_0$  index for A-type stars", *Astron Astrophys* 274, 391
- B Smalley and M M Dworetsky (1993), "The atmospheric parameters of A and F stars - I: Comparison of various methods", *Astron Astrophys* 271, 515
- I A Steele, R F Jameson and N C Hambly (1993), "RIJHK photometry of low-mass stars and brown dwarfs in the Pleiades", *MNRAS* 263, 647
- A Szomoru, J H van Gorkom, M Gregg and R S de Jong (1993), "The first HI-discovered galaxy in the Bootes void", *Astron J* 105, 464

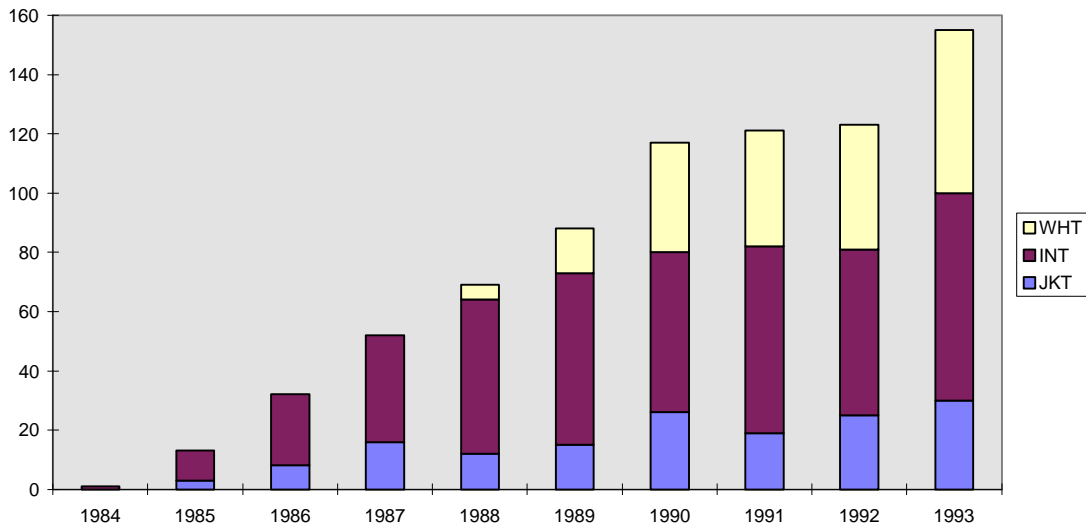
## Analysis

The above list contains 117 publications, some of which include results from more than one telescope. 55 papers contain results from the WHT, 70 contain results from the INT and 30 contain results from the JKT. The corresponding figures for 1992 were 42 from the WHT, 56 from the INT and 25 from the JKT. As can be seen from the figure below, the combined publication rate has jumped by over 30 publications compared with 1992.

Note that papers containing results from more than one telescope have been credited to each telescope used.

The chart below shows the authorship of all papers from 1984-1993 according to national group. The nationality of each author is attributed according to his or her address and equal weight is given to each author.

**Figure 1 Papers per telescope in refereed journals (1984-1993)**



**Figure 2 Paper authorship (1984-1993)**

