

## William TOBIN, Ph.D.: PUBLICATIONS

### A. Refereed articles and invited reviews:

1. "EVOLUTION OF THE FOUCAULT-SECRETAN REFLECTING TELESCOPE"  
William Tobin. *Journal of Astronomical History and Heritage*, **19**, (2), 106-184 & **19**, (3), 361-362 (2016).
2. "TRANSITS OF VENUS AND MERCURY AS MUSES" William Tobin. *Journal of Astronomical History and Heritage*, **16**, (3), 224-249 (2013).
3. "A NEWLY-DISCOVERED ACCURATE EARLY DRAWING OF M51, THE WHIRLPOOL NEBULA" William Tobin & J.B. Holberg. *Journal of Astronomical History and Heritage*, **11**, (2), 107-115 (2008).  
⇒SEE ALSO: "HISTORIC SKETCH FOUND" J.B. Holberg. *Sky & Telescope*, **117** (2) 10-12 (2009).
4. "FULL-TEXT SEARCH CAPABILITY: A NEW TOOL FOR RESEARCHING THE DEVELOPMENT OF SCIENTIFIC LANGUAGE. THE 'WHIRLPOOL NEBULA' AS A CASE STUDY" William Tobin. *Notes & Records of the Royal Society*, **62**, 187-196 (2008) plus 7 pages of electronic supplementary material.
5. "LES PENDULES DE FOUCAULT" William Tobin, James Lequeux & Thierry Lalande. *La revue du Musée des arts et métiers*, **48**, 63-69 (2007).
6. "ALFRED DONNÉ AND LÉON FOUCAULT: THE FIRST APPLICATIONS OF ELECTRICITY AND PHOTOGRAPHY TO MEDICAL ILLUSTRATION" William Tobin. *Journal of Visual Communication in Medicine*, **29**, 6-13 (2006).  
⇒ THIS PAPER WON THE INFORMA HEALTHCARE AWARD FOR THE BEST ARTICLE IN THE JOURNAL IN 2006. ⇐
7. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS - VII. THE ECLIPSING BINARIES MACHO\*05:36:48.7–69:17:00 IN THE LMC AND MOA J005018.4–723855 & J005623.5–722123 IN THE SMC" G.P. Bayne, W. Tobin, J.D. Pritchard, K.R. Pollard & M.D. Albrow. *Monthly Notices of the Royal Astronomical Society*, **349**, 833-840 (2004) plus 3 pages of electronic data.
8. "THE MOA CATALOGUE OF ECLIPSING BINARY STARS IN THE SMALL MAGELLANIC CLOUD" G. Bayne, W. Tobin, J.D. Pritchard, I. Bond, K.R. Pollard, S.C. Besier, S. Noda, T. Sumi, T. Yanagisawa, M. Sekiguchi, M. Honda, Y. Muraki, M. Takeuti, J.B. Hearnshaw, P.M. Kilmartin, R.J. Dodd, .J. Sullivan & P.C.M. Yock. *Monthly Notices of the Royal Astronomical Society*, **331**, 609-614 (2002) plus 44 pages of electronic data.
9. "CHARACTERISTICS OF THE MT JOHN SERIES 200 CCD SYSTEM" S.I. Barnes, M. Clark, P.L. Cottrell, J.B. Hearnshaw, Orlon K.L. Petterson, Karen R. Pollard, J.D. Pritchard, A. Richards & William Tobin. *Southern Stars*, **39**, 1-8 (2000).
10. " $\beta$  PICTORIS: THE VARIABLE Ca II H & K ABSORPTIONS FROM 1994 TO 1996" O.K.L. Petterson & W. Tobin. *Monthly Notices of the Royal Astronomical Society*, **304**, 733-742 (1999) plus 89 pages of electronic data.

11. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. VI. THE ECLIPSING BINARY HV 982 IN THE LMC" J.D. Pritchard, W. Tobin, M. Clark & E.F. Guinan. *Monthly Notices of the Royal Astronomical Society*, **299**, 1087-1096 (1998).
12. "LÉON FOUCAULT" William Tobin. *Scientific American*, **279**, 52-59 or 70-77 [pagination varies with edition] (July 1998). Translations into numerous languages. E.g. *Pour la Science*, No. 251, 80-87 (septembre 1998), *Świat Nauki*, **9**, 84-91 (Wrzesień 1998), *Investigación y ciencia*, No. 264, 32-39 (Septiembre 1998), *Majallat Al-Oloom*, **14**, August-September 1998), *Spektrum der Wissenschaft*, 78-86 (oktober 1999).
13. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. V. THE ECLIPSING BINARIES HV 1620 AND HV 2241" J.D. Pritchard, W. Tobin, M. Clark & E.F. Guinan. *Monthly Notices of the Royal Astronomical Society*, **297**, 278-290 (1998).
14. "A FOCAL REDUCER FOR THE MT JOHN ECHELLE SPECTROGRAPH" William Tobin, J.B. Hearnshaw, G.M. Kershaw, G.R. Nankivell, Stephen Persson, N.J. Rumsey & Rob Thirkettle. *Southern Stars*, **37**, 197-205 (1998).
15. "THE  $\beta$  PICTORIS CIRCUMSTELLAR DISK. XXIV. CLUES TO THE ORIGIN OF THE STABLE GAS" A-M. Lagrange, H. Beust, D. Mouillet, M. Deleuil, P.D. Feldman, R. Ferlet, L. Hobbs, A. Lecavelier des Etangs, J-J. Lissauer, M.A. McGrath, J.B. McPhate, J. Spyromilio, W. Tobin & A. Vidal-Madjar. *Astronomy & Astrophysics*, **330**, 1091-1108 (1998).
16. "RV TAURI STARS. II. A SPECTROSCOPIC STUDY" Karen R. Pollard, P.L. Cottrell, W.A. Lawson, Michael D. Albrow & W. Tobin. *Monthly Notices of the Royal Astronomical Society*, **286**, 1-22 (1997).
17. "THE  $\beta$  PICTORIS CIRCUMSTELLAR DISK. XXI. RESULTS FROM THE DECEMBER 1992 SPECTROSCOPIC CAMPAIGN" A-M. Lagrange, F. Plazy, H. Beust, D. Mouillet, M. Deleuil, R. Ferlet, J. Spyromilio, A. Vidal-Madjar, W. Tobin, J.B. Hearnshaw, M. Clark & K.W. Thomas. *Astronomy & Astrophysics*, **310**, 547-563 (1996).
18. "EROS VARIABLE STARS: FUNDAMENTAL-MODE AND FIRST-OVERTONE CEPHEIDS IN THE BAR OF THE LARGE MAGELLANIC CLOUD" J.P. Beaulieu, P. Grison, W. Tobin, J.D. Pritchard, R. Ferlet, F. Lepeintre, A. Vidal-Madjar, E. Maurice, L. Prévot, C. Gry, J. Guibert, O. Moreau, F. Tajhamady, E. Aubourg, P. Bareyre, C. Coutures, M. Gros, B. Laurent, M. Lachièze-Rey, E. Lesquoy, C. Magneville, A. Milsztajn, L. Moscoso, F. Queinnec, C. Renault, J. Rich, M. Spiro, L. Vigroux, S. Zylberajch, R. Ansari, F. Cavalier, & M. Moniez. *Astronomy & Astrophysics*, **303**, 137-154 (1995).
19. "H $\alpha$  MONITORING OF THE X-RAY PULSAR GX 1+4 DURING AN X-RAY FLARE" J.G. Greenhill, R.D. Watson, William Tobin, J.D. Pritchard & M. Clark. *Monthly Notices of the Royal Astronomical Society*, **274**, L59-L61 (1995).
20. "EROS CATALOGUE OF ECLIPSING BINARY STARS IN THE BAR OF THE LARGE MAGELLANIC CLOUD" P. Grison, J.P. Beaulieu, J.D. Pritchard, W. Tobin, R. Ferlet, A. Vidal-Madjar, J. Guibert, C. Alard, O. Moreau, F. Tajhamady, E. Maurice, L. Prévot, C. Gry, E. Aubourg, P. Bareyre, S. Bréhin, M. Gros, M. Lachièze-Rey, B. Laurent, E. Lesquoy, C. Magneville, A. Milsztajn, L. Moscoso, F. Queinnec, C. Renault, J. Rich, M. Spiro, L. Vigroux, S. Zylberajch, R. Ansari, F. Cavalier, & M. Moniez. *Astronomy & Astrophysics Supplement Series*, **109**, 1-24 (1995).

21. "FOUCAULT, HIS PENDULUM AND THE ROTATION OF THE EARTH" W. Tobin & Sir A.B. Pippard. *Interdisciplinary Science Reviews*, **19**, 326-337 (1994).
22. "THE SPACELAB-1 VERY WIDE FIELD SURVEY OF UV-EXCESS OBJECTS. IV. THE PERFORMANCE OF THE INSTRUMENT IN COMBINATION WITH OPTICAL PHOTOMETRY AS A MEANS OF IDENTIFYING STARS WITH PECULIAR PROPERTIES" W. Tobin, M. Viton & J.-P. Sivan. *Astronomy & Astrophysics Supplement Series*, **107**, 385-401 (1994).
23. "CHARGE-COUPLED DEVICE DETECTION OF TWO-BEAM INTERFERENCE WITH PARTIALLY COHERENT LIGHT" B. Tom King & W. Tobin. *American Journal of Physics*, **62**, 133-137 (1994).
24. "TOOTHED WHEELS AND ROTATING MIRRORS: PARISIAN ASTRONOMY AND MID-NINETEENTH CENTURY EXPERIMENTAL MEASUREMENTS OF THE SPEED OF LIGHT" W. Tobin. *Vistas in Astronomy*, **36**, 253-294 (1993).  

⇒ THIS PAPER WON THE ARTHUR BEER MEMORIAL PRIZE FOR THE BEST ARTICLE IN THE JOURNAL IN 1991-93. ⇐
25. "ORBITAL ELEMENTS OF GSC 01144 01023, A NEW ECLIPSING BINARY" L. Prévot, M. Imbert, M. Viton & W. Tobin. *Astrophysics & Space Science*, **207**, 83-89 (1993).
26. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. IV. THE ECLIPSING BINARY HV 1761 AND NEARBY FIELD VARIABLES" S.P.R. Duncan, William Tobin, R.D. Watson & A.C. Gilmore. *Monthly Notices of the Royal Astronomical Society*, **265**, 189-198 (1993).
27. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. III. THE ECLIPSING BINARY HV 12484" William Tobin, S.P.R. Duncan, S.R.D. West & A.C. Gilmore. *Monthly Notices of the Royal Astronomical Society*, **260**, 777-794 (1993).
28. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. II. THE ECLIPSING BINARY HV 2274" R.D. Watson, S.R.D. West, William Tobin & A.C. Gilmore. *Monthly Notices of the Royal Astronomical Society*, **258**, 527-532 (1992).
29. "GAIN, NOISE AND RELATED CHARACTERISTICS OF THE MT JOHN PHOTOMETRICS CCD SYSTEM" William Tobin. *Southern Stars*, **34**, 421-429 (1992).
30. "CCD PHOTOMETRY OF VARIABLE STARS IN THE MAGELLANIC CLOUDS. I. THE ECLIPSING BINARIES HV 2208 AND HV 12634" S.R.D. West, William Tobin & A.C. Gilmore. *Monthly Notices of the Royal Astronomical Society*, **254**, 419-426 (1992).
31. "STAR FORMATION AT LARGE GALACTIC z?" William Tobin. In IAU Symposium No. 144 'The Interstellar Disk-Halo Connection in Galaxies' H. Bloemen (Ed.) pp. 109-119. Kluwer, Dordrecht, (1991)
32. "THE SPACELAB-1 VERY WIDE FIELD SURVEY OF UV-EXCESS OBJECTS. II. AN ANALYSIS OF 7 STARS OF VARIOUS NATURE" M. Viton, M. Deleuil, W. Tobin, L. Prévot, & P. Bouchet. *Astronomy & Astrophysics*, **242**, 175-187 (1991).
33. "THE FAINT, APPARENTLY-NORMAL HIGH-LATITUDE B STARS: WHAT MIGHT THEY BE, AND WHAT OBSERVATIONS ARE NEEDED?" W. Tobin. In IAU Colloquium No. 95 'The Second Conference on Faint Blue Stars' A.G. Davis Philip, D.S. Hayes & J.W. Liebert (Eds.) pp. 149-160. L. Davis Press, Schenectady, (1987).

34. "FOUCAULT'S INVENTION OF THE SILVERED-GLASS REFLECTING TELESCOPE AND THE HISTORY OF HIS 80cm REFLECTOR AT THE OBSERVATOIRE DE MARSEILLE" W. Tobin. *Vistas in Astronomy*, **30**, 153-184 (1987).
35. "LOW RESOLUTION *IUE* OBSERVATIONS OF FOUR UNREDDENED, 11th MAGNITUDE B STARS AT HIGH GALACTIC LATITUDES" W. Tobin. *Astronomy & Astrophysics*, **155**, 326-332 (1986).
36. "FOUR-COLOUR AND  $H\beta$  PHOTOMETRY OF BLUE STARS SELECTED FROM A BALLOON-ULTRAVIOLET SURVEY AND OTHER SOURCES" W. Tobin. *Astronomy & Astrophysics Supplement Series*, **60**, 459-470 (1985).
37. "THE GALACTIC REDDENING LAW: THE EVIDENCE FROM  $uvby\beta$  PHOTOMETRY OF B STARS" W. Tobin. *Astronomy & Astrophysics*, **142**, 189-198 (1985).
38. "FOUR-COLOUR AND  $H\beta$  PHOTOMETRY OF B STARS IN FEHRENBACH AND BURNAGE RADIAL VELOCITY FIELDS AT  $b \sim -30^\circ$ " W. Tobin. *Astronomy & Astrophysics Supplement Series*, **57**, 427-434 (1984).
39. "FOUR-COLOUR PHOTOMETRY OF B STARS NORTH OF  $b = +45^\circ$  AND COMPARISON WITH THE SOUTH" W. Tobin. *Astronomy & Astrophysics Supplement Series*, **56**, 221-228 (1984).
40. "ANALYSIS OF THE THREE HIGH-VELOCITY B STARS HD 125924, 165955 AND CPD-72°1184" William Tobin & J.P. Kaufmann, *Monthly Notices of the Royal Astronomical Society*, **207**, 369-392 and Microfiche MN207/1 (1984).
41. "DETERMINATION OF EFFECTIVE TEMPERATURES FOR HOT STARS FROM INTEGRATED FLUXES" W. Tobin. *Astronomy & Astrophysics*, **125**, 168-171 (1983).
42. "APPLICATIONS OF AN OBSERVATIONAL GRID OF LOW-METALLICITY STELLAR SPECTRA" William Tobin & K.H. Nordsieck. *Astronomical Journal*, **86**, 1360-1376 (1981).
43. "ON THE APPARENT NORMALITY OF O AND B STARS FAR FROM THE GALACTIC PLANE" William Tobin & David Kilkenny. *Monthly Notices of the Royal Astronomical Society*, **194**, 937-946 (1981).
44. "RESTRICTIONS ON MODELS FOR SUPERLIGHT FLUX VARIATIONS IN RADIO SOURCES" T.W. Jones & William Tobin. *Astrophysical Journal*, **215**, 474-482 (1977).

## B. Books:

1. "THE LIFE AND SCIENCE OF LÉON FOUCAULT: THE MAN WHO PROVED THE EARTH ROTATES" William Tobin. Cambridge University Press, Cambridge. xiv+338 pp. ISBN 0-521-80855-3 (2003).
2. "LÉON FOUCAULT. LE MIROIR ET LE PENDULE" William Tobin (French adaptation by James Lequeux). EDP-Sciences, Les Ulis. xii+354 pp. ISBN 2-86883-615-1 (2002).  
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This book was awarded the Prix spécial du Jury of the Prix du livre de l'astronomie – Haute-Maurienne/Vanoise – Festival de l'astronomie 2003.
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3. "STARS IN A CLUSTER" W. Tobin & G.E. Evans (Editors). Department of Physics & Astronomy, University of Canterbury, Christchurch. 128 pp. ISBN 0-473-03838-2 (1996).

## C. Other publications:

1. "THE WANDERINGS OF AN ASTRONOMER" William Tobin (Travelogue.) *Southern Stars*, **57**, (3), 5-10 (2018).
2. "OUR PASSPORT'S STRANGE ASTRONOMY" William Tobin. *Southern Stars*, **57**, (1), 3-4 and front cover (2018).
3. "THE LOUWMAN COLLECTION OF HISTORIC TELESCOPES" William Tobin. (Museum review.) *Southern Stars*, **56**, (2), 6-9 and front cover (2017).
4. "CONCERNING HERITAGE TELESCOPES" William Tobin. (Book & Heritage review.) *Southern Stars*, **55**, (4), 21-23 (2016).
5. "WOLF TELESCOPES: A COLLECTION OF HISTORICAL TELESCOEPS – BY EDWARD D. WOLF" William Tobin. (Book review.) *Journal of Astronomical History and Heritage*, **19**, (3), 349-351 (2016).
6. "EXPLORING THE HISTORY OF NEW ZEALAND ASTRONOMY: TRIALS, TRIBULATIONS, TELESCOPES AND TRANSITS – BY WAYNE ORCHISTON" William Tobin. (Book review.) *Journal of Astronomical History and Heritage*, **19**, (2), 234-237 (2016).
7. "SETTING ASIDE ALL AUTHORITY: GIOVANNI BATTISTA RICCIOLI AND THE SCIENCE AGAINST COPERNICUS IN THE AGE OF GALILEO — BY CHRISTOPHER M. GRANEY" William Tobin. (Essay review.) *Southern Stars*, **54**, (3), 14-17 (2015).
8. "TÉLESCOPE DE FOUCAULT: STUPEUR DANS LE COLLIMATEUR" Guillaume Trap & William Tobin. *Découverte, Revue du Palais de la découverte*, No. 393, 42-49 (2014).
9. "L'OBSERVATOIRE DE PARIS: 350 ANS DE SCIENCE — EDITED BY LAURENCE BOBIS AND JAMES LEQUEUX" William Tobin. (Book review.) *Journal of Astronomical History and Heritage*, **17**, (1), 136-137 (2014).
10. "VENUS: A QUEST" William Tobin. (DVD review.) *Southern Stars*, **52**, (4), 14-15 (2013).
11. "LA CAILLE AND THE FAR SOUTHERN SKY" William Tobin. (Includes book reviews.) *Southern Stars*, **52**, (3), 3-15 and front cover (2013).
12. "TRANSITS OF VENUS AS A MUSE" William Tobin. In *Proceedings of the Third International Starlight Conference, Lake Tekapo, New Zealand*, Hearnshaw, J., Pollard, K. & Head, M. (Eds.) pp. 89-94, Starlight Conference Organising Committee, University of Canterbury (2013).
13. "LET'S ALL BE GOOD!" William Tobin. (Opinion piece.) *New Zealand Science Review*, **69**, (3), 76-77 (2012).
14. "USING SI UNITS IN ASTRONOMY — BY RICHARD DODD" William Tobin. (Book review.) *Southern Stars*, **51**, (3), 15-18 (2012).
15. "ABOUT THE TRANSIT OF VENUS" Web pages prepared for the Royal Society of New Zealand 2012 *Transit of Venus Forum*.  
<http://www.royalsociety.org.nz/events/2012-transit-of-venus-forum-lifting-our-horizon/about-the-transit-of-venus/>  
(available via the Wayback Machine on <http://archive.org>)

16. "A TRANSIT OF VENUS PRIMER" William Tobin. *Southern Stars*, **51**, (1), 3-18 and covers (2012).
  17. "HINDSIGHT AND POPULAR ASTRONOMY — BY ALAN B. WHITING" William Tobin. (Book review.) *Southern Stars*, **50**, (4), 25-26 (2011).
  18. "THE PHYSICS INSTRUMENT COLLECTION AT THE UNIVERSITY OF RENNES 1, FRANCE" Dominique Bernard, William Tobin, Alain Canard & Jean-Paul Taché. *Bulletin of the Scientific Instrument Society*, **111**, 34-93 (2011).
  19. "UNDER CAPRICORN – UNDER CANCER" William Tobin. *Southern Stars*, **50**, (3), 3-9 and covers (2011).
  20. "A VISIT TO THE GERMAN SOFIA INSTITUTE" William Tobin. *Southern Stars*, **50**, (2), 9-14 (2011).
  21. "THE AGE OF WONDER: HOW THE ROMANTIC GENERATION DISCOVERED THE BEAUTY AND TERROR OF SCIENCE — BY RICHARD HOLMES" William Tobin. (Book review.) *Southern Stars*, **49**, (4), 24-25 (2010).
  22. "THE LONG ROUTE TO THE INVENTION OF THE TELESCOPE — BY ROLF WILLACH" William Tobin. (Book review.) *Southern Stars*, **49**, (2), 14-15 (2010).
  23. "PORTRAITS OF ASTRONOMERS — BY LUCINDA DOUGLAS-MENZIES, and EXPLORERS OF THE UNIVERSE by MAX ALEXANDER" William Tobin. (Book and Exhibition review.) *Southern Stars*, **49**, (1), 40-42 (2010).
  24. "THE COSMIC DETECTIVE — BY MANI BHAUMIK" William Tobin. (Book review.) *Southern Stars*, **48**, (2), 13 (2009).
  25. "IYA OPENING CEREMONIES IN PARIS" Stacey Kalinnikova, Yvette Perrott & William Tobin. *Southern Stars*, **48**, (1), 3-8 and cover (2009).
  26. "THE AWA BOOK OF NEW ZEALAND SCIENCE — EDITED BY REBECCA PRIESTLY" William Tobin. (Book review.) *Southern Stars*, **48**, (1), 26 (2009).
  27. "AMERICA IN SPACE: NASA'S FIRST FIFTY YEARS — BY S.J. DICK, R. JACOBS, C. MOORE, A.M. SPRINGER & B. ULRICH" William Tobin. (Book review.) *Southern Stars*, **47**, (2), 14-13 (2008).
  28. "THE BIOGRAPHICAL ENCYCLOPEDIA OF ASTRONOMERS" (T. Hockey, Editor; Springer, Publisher) (2007).  
 Entries by W. Tobin: Jean Chacornac; Hippolyte Fizeau; Léon Foucault; Édouard Stephan.
- ⇒ THE 2ND EDITION OF THIS ENCYCLOPEDIA WON THE 2017 DONALD E. OSTERBROCK BOOK PRIZE AWARDED BY THE HISTORICAL ASTRONOMY DIVISION OF THE AMERICAN ASTRONOMICAL SOCIETY. ⇐
29. "TEACHING ANTARCTIC ASTRONOMY" W. Tobin. In *1st Arena Conference on "Large Astronomical Infrastructures at CONCORDIA, prospects and constraints for Antarctic Optical/IR Astronomy"*, Epchtein, N. & Candidi, M. (Eds.) pp. 343-346, EDP Sciences, Les Ulis (2007). (EAS Publications Series No. 25.)
  30. "SIRIUS: BRIGHTEST DIAMOND IN THE NIGHT SKY — BY JAY HOLBERG" William Tobin. (Book review.) *Southern Stars*, **46**, (2), 25 (2007).

31. "FOUCAULT GYROSCOPE AND INDUCTION-CURRENT APPARATUS IN THE UNIVERSITY OF RENNES PHYSICS COLLECTION" William Tobin & Dominique Bernard. Poster presented at SICU2, Oxford, Miss. 21-24 June 2007. Available on-line at <http://cst.univ-rennes1.fr/PDF/FoucaultGiroscope.pdf>
32. "BRIGHT STAR: BEATRICE HILL TINSLEY, ASTRONOMER — BY CHRISTINE COLE CATLEY" William Tobin. (Book review.) *Southern Stars*, **46**, (1), 15-14 (2007).
33. "ARE ANGELS OK? THE PARALLEL UNIVERSES OF NEW ZEALAND WRITERS AND SCIENTISTS — EDITED BY PAUL CALLAGHAN AND BILL MANHIRE" William Tobin. (Book review.) *Southern Stars*, **45**, (3), 13 (2006).
34. "PROBING THE FABRIC OF SPACE" William Tobin. *Physics Review*, **15**, (4), 30-33 (2006)
35. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY DEPARTMENT OF PHYSICS & ASTRONOMY AND AT THE MT JOHN UNIVERSITY OBSERVATORY. ANNUAL REPORT 2005" William Tobin. *Southern Stars*, **45**, (1), 9-15 (2006)
36. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY DEPARTMENT OF PHYSICS & ASTRONOMY AND AT THE MT JOHN UNIVERSITY OBSERVATORY. REPORT FOR THE PERIOD 2002 JANUARY 1 TO 2003 DECEMBER 31" William Tobin. *Southern Stars*, **44**, (3), 21-26 (2005)
37. "STARGAZER: THE LIFE AND TIMES OF THE TELESCOPE" William Tobin. (Book review) *Southern Stars*, **44**, (3), 20 (2005)
38. "PROBING THE FABRIC OF SPACE: FROM FOUCAULT'S GYROSCOPE TO GRAVITY PROBE B" William Tobin. *Southern Stars*, **44**, (3), 12-14 (2005)
39. "FOUCAULT'S SPINNING MIRROR AND THE DISTANCE TO THE SUN" Anonymous, but written by William Tobin. Part of report "Meeting of the Royal Astronomical Society, Friday 2004 December 10 at 16<sup>h</sup>00<sup>m</sup> in the Geological Society Lecture Theatre, Burlington House." *Observatory*, **125**, 131-133 (2005)
40. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY DEPARTMENT OF PHYSICS & ASTRONOMY AND AT THE MT JOHN UNIVERSITY OBSERVATORY. ANNUAL REPORT 2004" William Tobin. *Southern Stars*, **44**, (2), 18-23 (2005)
41. "VENUS' RENDEZ-VOUS — J-E ARLOT (EDITOR)" William Tobin. (CD-ROM review.) *Southern Stars*, **44**, (1), 38 (2005).
42. "HIGH-RESOLUTION SPECTROSCOPY IN THE SALT ERA" W. Tobin, P.L. Cottrell, S.I. Barnes, M.D. Albrow & G.M. Kershaw. In *Stellar Astrophysics with the World's Largest Telescopes*, Mikołajewska, J. & Olech, A. (Eds.) pp.22-25, American Institute of Physics, Melville (2005). (AIP Conference Proceedings No. 752.)
43. "THE VARIABLE Ca II ABSORPTIONS IN  $\beta$  PICTORIS" William Tobin, S.I. Barnes & Karen R. Pollard. In *Extrasolar planets: Today and Tomorrow*, Beaulieu, J.-P., Lecavelier des Etangs, A. & Terquem, C. (Eds.) pp.327-328, Astronomical Society of the Pacific, Provo (2004). (Astronomical Society of the Pacific Conference Series No. 321.)
44. "PHOTOMETRY OF ECLIPSING BINARY STARS IN THE LARGE AND SMALL MAGELLANIC CLOUDS" G.P. Bayne, W. Tobin, J.D. Pritchard, I. Bond, K.R. Pollard, S.C. Besier, S. Noda, T. Sumi, T. Yanagisawa, M. Sekiguchi, M. Honda, Y. Muraki, M.

- Takeuti, J.B. Hearnshaw, P.M. Kilmartin, R.J. Dodd, D.J. Sullivan & P.C.M. Yock. *Revista Mexicana de Astronomía y Astrofísica (Serie de Conferencias)* **21**, 116-20 (2004).
45. "PHOTOMETRY OF ECLIPSING BINARY STARS IN THE LARGE AND SMALL MAGELLANIC CLOUDS" G.P. Bayne, W. Tobin, J.D. Pritchard, K.R. Pollard & M.D. Albrow. In *Variable Stars in the Local Group, IAU Colloquium 193*. Eds. D.W. Kurtz & K.R. Pollard. *ASP Conference Series*, No. 310, 407-? (2004).
  46. "LÉON FOUCAULT ET L'HORLOGERIE ASTRONOMIQUE" William Tobin. *Horlogerie Ancienne* **55**, 6-18 (2004).
  47. "1845 LE PREMIER CLICHÉ" William Tobin. *La Recherche Hors Série* **15**, 48-49 (2004 April).
  48. "FARTHER FIGURES" William Tobin. (Letter to the editor) *The Times Higher Education Supplement*, 2004 March 26.
  49. "DEGREES OF SEPARATION" W. Tobin. (Letter to the editor) *The Times Higher Education Supplement*, 2004 February 27.
  50. "FOUCAULT FACTS" William Tobin. (Letter to the Editor) *Physics World* **16**, (10), 20 (2003 October).
  51. "LÉON FOUCAULT. LE MIROIR ET LE PENDULE" Laurence Bobis, James Lequeux & William Tobin. Brochure for exhibition at Paris Observatory 2002 October 16-December 15. 16 pp.
  52. "GETTING A GRIP ON REMOTES" William Tobin. (Ask A Scientist column) *The Press* (Christchurch). 2002 January 21, p.9.
  53. "THE GREAT COMET OF 1744 AND A POEM BY ALEXANDER MACDONALD ON THE PRETENDER" Andrew Breeze & William Tobin. *Éigse* **32**, 135-7 (2000).
  54. "THE VARIABLE Ca II ABSORPTION IN  $\beta$  PICTORIS DURING 1998" S.I. Barnes, William Tobin & K.R. Pollard. *Publications of the Astronomical Society of Australia* **17**, 241-3 (2000).
  55. "OUR EVOLVING UNIVERSE" William Tobin. (Book Review) *New Zealand Science Monthly*, **10**, No. 2, 13 (1999).
  56. "MAGELLANIC CLOUD ECLIPSING BINARIES: PRIMARY DISTANCE INDICATORS" J.D. Pritchard, W. Tobin, J.V. Clausen, E.F. Guinan, E.L. Fitzpatrick, A. Giménez & I. Ribas. In *New Views of the Magellanic Clouds* (IAU Symposium No. 190) Y.-H. Chu, N.B. Suntzeff, J.E. Hesser & D.A. Bohlender (Eds.) pp. 563-564 Astronomical Society of the Pacific, Provo (1999).
  57. "FOUCAULT, TOUCHE-À-TOUT DE GÉNIE" William Tobin (ghostwritten). *Le Figaro*, p. 12C, 3 septembre 1998.
  58. "THE MOUNT JOHN UNIVERSITY OBSERVATORY MAGELLANIC CLOUD VARIABLE STAR PROGRAMME" J.D. Pritchard, W. Tobin, M. Clark, A.C. Gilmore & A. Batten. In *The Third Pacific Rim Conference on Recent Development on Binary Star Research* (ASP Conference Series, Vol. 130) K.-C. Leung (Ed.) pp. 53-56 (1997).



59. "THE NATURE OF THE EROS CATALOGUE ECLIPSING BINARIES" J.D. Pritchard, W. Tobin, L.-B. Keep, L. Skuljan & M. Zambri. In *The Third Pacific Rim Conference on Recent Development on Binary Star Research* (ASP Conference Series, Vol. 130) K.-C. Leung (Ed.) pp. 49-52 (1997).
60. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY DEPARTMENT OF PHYSICS AND ASTRONOMY AND MT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1996" W. Tobin. *Southern Stars*, **37**, 116-122 (1997).
61. "STARS AND THEIR SPECTRA: AN INTRODUCTION TO THE SPECTRAL SEQUENCE" William Tobin. (Book Review) *New Zealand Science Monthly*, **8**, No. 5, 12 (1997).
62. "SURVEYS FOR STELLAR ASTROPHYSICS—WHAT WOULD BE IDEAL?" W. Tobin. In *Variable Stars and the Astrophysical returns of Microlensing Surveys* (Proceedings of the 12th IAP Astrophysics Meeting) R. Ferlet, J-P. Maillard & B. Raban (Eds.) pp. 347-356. Editions Frontières, Gif-sur-Yvette (1997).
63. "ECLIPSING BINARIES IN THE EROS SURVEY" W. Tobin, J.D. Pritchard, M. Zambri, L-B. Keep & L. Skuljan In *Variable Stars and the Astrophysical returns of Microlensing Surveys* (Proceedings of the 12th IAP Astrophysics Meeting) R. Ferlet, J-P. Maillard & B. Raban (Eds.) pp. 303-307. Editions Frontières, Gif-sur-Yvette (1997).
64. "ABOUT TIME—EINSTEIN'S UNFINISHED REVOLUTION" William Tobin. (Book Review) *New Zealand Science Monthly*, **7**, No. 11, 17 (1996/97).
65. "ECLIPSING BINARIES IN THE MAGELLANIC CLOUDS" William Tobin. *Journal of the Korean Astronomical Society*, **29**, S89-S91 (1996).
66. "EXPLORERS OF THE SOUTHERN SKY: A HISTORY OF AUSTRALIAN ASTRONOMY" William Tobin. (Book Review) *Endeavour* (New Ser.) **20**, 182 (1996).
67. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY DEPARTMENT OF PHYSICS AND ASTRONOMY AND MT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1995" W. Tobin. *Quarterly Journal of the Royal Astronomical Society* **37**, 829-835 (1996) and *Southern Stars*, **37**, 26-33 (1996).
68. "FOUCAULT, SON PENDULE, ET LA ROTATION DE LA TERRE" William Tobin. *L'Astronomie*, **110**, 50-60 (1996).
69. "DEC. 1992 MULTISITES CAMPAIGN ON  $\beta$  PICTORIS" A.-M. Lagrange, F. Plazy, P. Cororon, M. Deleuil, J. Spyromilio, W. Tobin, C. Emerich, R. Ferlet, H. Beust & A. Vidal-Madjar. In *Multi-site Continuous Spectroscopy. Proceedings of the Fourth MUSICOS Workshop on held at Beijing, China June 19-24, 1994* Lin Huang, Di-Sheng Shai, C. Catala & Bernard H. Foing (Eds.) pp. 185-194. ESA ESTEC, Noordwijk (1995).
70. "L'ASTRONOMIE AUX ANTIPODES" William Tobin. *L'Astronomie*, **109**, 261-269 (1995).
71. "FLYING TELESCOPE MAY HAVE ITS WINGS CLIPPED" William Tobin. *The Press* (Christchurch). 10 June 1995.
72. "METRIC SYSTEM TO CELEBRATE 200th BIRTHDAY" William Tobin. *The Press* (Christchurch). 11 April 1995.
73. "LE GRAND ART DES PIÈGES À LUMIÈRE" William Tobin & Gérard Chevalier. *Les Cahiers de Science & Vie*, No. 25, 50-67 (1995).

74. "HV982: A MAGELLANIC CLOUD ECLIPSING BINARY STAR SYSTEM" J.D. Pritchard, W. Tobin & M. Clark. *Experimental Astronomy*, **5**, 43-48 (1994).
75. "THE MT JOHN PROGRAMME OF CCD PHOTOMETRY OF ECLIPSING BINARIES IN THE MAGELLANIC CLOUDS" William Tobin. *Experimental Astronomy*, **5**, 67-74 (1994).
76. "ECLIPSING BINARIES AS ACCURATE DISTANCE INDICATORS TO NEARBY GALAXIES" A. Giménez, J.V. Clausen, E.F. Guinan, F.P. Maloney, D.H. Bradstreet, J. Storm & W. Tobin. *Experimental Astronomy*, **5**, 181-183 (1994).
77. "SIZING UP STARS IN THE MAGELLANIC CLOUDS" William Tobin. *Southern Sky*, No. 8, 48-49 (1994).
78. "A CCD PHOTOMETER HEAD" W. Tobin, G.M. Kershaw, R.A. Ritchie, L. Ma, G.J. Graham & S.B. Hemmingsen. In *Poster Papers on Stellar Photometry* (Proceedings of IAU Colloquium No. 136) I. Elliott & C.J. Butler (Eds.) pp.153-155. Dublin Institute for Advanced Studies, Dublin. (1993).
79. "PROBLEMS OF CCD FLAT FIELDING" William Tobin. In *Stellar Photometry—Current Techniques and Future Developments* (Proceedings of IAU Colloquium No. 136) C.J. Butler & I. Elliott (Eds.) pp.304-310. Cambridge University Press, Cambridge. (1993).
80. "SPACE FRONTIERS OPEN UP DESPITE FLAWED TELESCOPE" John Mathis & William Tobin. *The Press* (Christchurch). 25 May 1993.
- ⇒ THIS ARTICLE WON THE NZ INSTITUTE OF PHYSICS SCIENCE JOURNALISM AWARD FOR 1993. ⇐
81. "20th-CENTURY PHYSICS" William Tobin. *The Press* (Christchurch). (Book reviews of 'Stephen Hawking—A Life in Science' & 'The New Physics') 26 December 1992.
82. "IS CPD—61°455 A DOUBLE-LINED SPECTROSCOPIC BINARY?" William Tobin. In *Luminous High-Latitude Stars*, Astronomical Society of the Pacific Conference Series Vol. 45, D.D. Sasselov (Ed.) pp. 244-250. Astronomical Society of the Pacific, San Francisco. (1993)
83. "THE OXFORD ILLUSTRATED ENCYCLOPEDIA, Vol. 8: THE UNIVERSE" (Prof. A.E. Roy, Editor; OUP, Publisher) (1992).  
 Entries by W. Tobin: Angular measure; Astrometry; Black body; Bode's Law; Canopus; CCD camera; Colour index; 61 Cygni; Effective temperature; European Southern Observatory; Foucault's knife-edge test; Foucault's pendulum; Galactic halo; Gould Belt; Jewel Box; Kuiper Airborne Observatory; Le Verrier; Light year; Local group of galaxies; Magellanic Clouds; Occultation; Opacity; Optical depth; Paris Observatory; Parsec; Parallax; Photometer; Photometry; Photosphere; Planck's law; Siding Spring Observatory; Speckle interferometry; Spectral line; Stefan's law; Stephan's quintet; Stellar temperature; Velocity of light; Wien's displacement law.
84. "CCD PHOTOMETRY OF THE ECLIPSING BINARY HV 2274 IN THE LARGE MAGELLANIC CLOUD" R.D. Watson, S.R.D. West, W. Tobin & A.C. Gilmore. In IAU Symposium No. 151, 'Evolutionary Processes in Interacting Binary Stars' Y. Kondo *et al.* (Eds.) pp.509-513. Kluwer, Dordrecht, 1992.
85. "MAGELLANIC CLOUDS VIEW EXPLOITED" William Tobin. *The Press* (Christchurch). 29 July 1992.

86. "THE MT JOHN CCD SYSTEM: STATUS AND FIRST SCIENTIFIC RESULTS" William Tobin. *Proceedings of the Astronomical Society of Australia*, **9**, 164-166 (1991).
87. "EXTENDING THE INTEGRATION TIME OF A PHILIPS TYPE 56470 CCD CAMERA FOR USE IN TELESCOPE OFFSET GUIDING" C. Maclean & W. Tobin. *Proceedings of the Astronomical Society of Australia*, **9**, 167-169 (1991).
88. "FIRST CCD OBSERVATIONS OF MAGELLANIC CLOUD VARIABLE STARS FROM THE MT JOHN UNIVERSITY OBSERVATORY, NEW ZEALAND" William Tobin, A.C. Gilmore, Alan Wadsworth & S.R.D. West. In IAU Symposium No. 148 'The Magellanic Clouds' R. Haynes & D. Milne (Eds.) p. 381. Kluwer, Dordrecht (1991).
89. "A CCD FOR MOUNT JOHN" William Tobin. *Southern Stars*, **34**, No. 3 155-158 (1991).
90. "THE IMPORTANCE OF DEADTIME IN PHOTON-COUNTING PHOTOELECTRIC PHOTOMETRY" William Tobin & Alan Wadsworth. *Southern Stars*, **34**, No. 3 49-55 (1991).
91. "A NEW EYE ON DEEP SPACE" William Tobin. *The Press* (Christchurch). 27 April 1990.
92. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY PHYSICS DEPARTMENT AND THE MOUNT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1988" William Tobin. *Southern Stars*, **33**, 242-248 (1990).
93. "HANDBOOK OF ASTRONOMICAL QUANTITIES" (Prof. A.E. Roy, Editor, Adam Hilger, Publisher.)  
Entries by W. Tobin: 7.4 Bibliographic sources; 7.7 ASCII and related codes for information exchange. (In press.)
94. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY PHYSICS DEPARTMENT AND THE MOUNT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1988" B.G. Wybourne. *Quarterly Journal of the Royal Astronomical Society*, **30**, 477-482 (1989).
95. "PROSPECTS FOR MAGELLANIC CLOUD RESEARCH AT MT JOHN" William Tobin. In 'Proceedings of the Colloquium on Recent Developments of Magellanic Cloud Research' K.S. de Boer, F. Spite & G. Stasinska (Eds.) p. 77. Observatoire de Paris, Paris (1989).
96. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY PHYSICS DEPARTMENT AND THE MOUNT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1987" W. Tobin. *Southern Stars* **32**, 239-243 (1988).
97. "WINTER SCHOOL IN ASTRONOMY – UNIVERSITY OF CANTERBURY – 15-20 MAY 1988" J.B. Hearnshaw & W. Tobin. *NZ Science Teacher*, No. 58, 6-7 (1988).
98. "ASTRONOMY AT THE UNIVERSITY OF CANTERBURY PHYSICS DEPARTMENT AND THE MOUNT JOHN UNIVERSITY OBSERVATORY—ANNUAL REPORT 1987" B.G. Wybourne. *Quarterly Journal of the Royal Astronomical Society*, **29**, 561-564 (1988).
99. "THE NIGHT SKY IN 1988" William Tobin. *NZ Science Teacher*, No. 56, 6-7 (1988).

100. "INTERSTELLAR ABSORPTION LINES IN THE SPECTRA OF THE HIGH-LATITUDE BLUE STARS PB 166, H.O.+23 B, Feige 40" K.S. de Boer, F. Decker, P.R. Preussner, U.J. Schwarz, H. van Woerden, W. Tobin. *Astronomische Gesellschaft Abstract Series*, **1**, 17 (1988).
101. "ULTRAVIOLET PHENOMENOLOGY OF HBB STARS" W. Tobin. In IAU Colloquium No. 95 'The Second Conference on Faint Blue Stars' A.G. Davis Philip, D.S. Hayes & J.W. Liebert (Eds.) pp. 563-566. L. Davis Press, Schenectady (1987).
102. "FOUCAULT'S GIANT MARSEILLES REFLECTOR" William Tobin. *Sky & Telescope*, **74**, 358-359 (1987).
103. "L'ASTRONOMIE FRANÇAISE EN 1921" Marie-Julie Meynent & William Tobin. *Journal des Astronomes Françaises*, **27**, 8-9 (1986).
104. "FOUR ELEVENTH MAGNITUDE B STARS AT HIGH GALACTIC LATITUDES THAT APPEAR TO BELONG TO POPULATION I" W. Tobin. *Bulletin of the American Astronomical Society*, **18**, 638 (1986).
105. "DON'S DIARY" William Tobin. *The Times Higher Education Supplement*, **666**, 4 (9 August 1985).
106. "ANALYSIS OF *uvby* PHOTOMETRY AND LOW-RESOLUTION SPECTROPHOTOMETRY OF B STARS" William Tobin. In IAU Symposium No. 111 'Calibration of fundamental stellar quantities' D.S. Hayes, L.E. Pasinetti & A.G. Davis Philip (Eds.) pp. 503-504. Reidel, Dordrecht (1985).
107. "STARLINK: L'EXPÉRIENCE D'UN UTILISATEUR" William Tobin. In 'Premier séminaire sur le traitement d'images en astronomie' A. Bijaoui (Ed.). Nice (1983).
108. "St. ANDREWS ASTRONOMY DEPT." William Tobin. *Aristeuein*, **2** (2), 11 (1981).
109. "A DIFFERENTIAL POPULATION SYNTHESIS APPROACH TO MASS SEGREGATION IN M92" William Tobin. Ph.D. thesis, University of Wisconsin-Madison, U.S.A. (1979).
110. "POPULATION SYNTHESSES OF GLOBULAR CLUSTERS" William Tobin. *Bulletin of the American Astronomical Society*, **10**, 409 (1978).
111. "RED LIGHT SKY PHOTOGRAPHY" John Davis, William Tobin & Joel Eaton. *Astronomy*, **4**, No. 8, 40-47 (1976).

## **D. Mt John CCD system 'Use & Performance Notes'**

(Those not authored or co-authored by Dr. Tobin were written under his supervision.)

- No. 1: Tobin, W., 1990, *Description of the system*.
- No. 2: Pollard, K., 1989, *Evaluation of the linearity of the Mt John CCD*.
- No. 3: Pollard, K., 1989, *Evaluation of the spectral response for various operating temperatures of the Mt John CCD*.
- No. 4: Hugtenburg, R., Tobin, W., 1990, *Flexure tests of the Mt John Boller & Chivens spectrograph as temporarily modified with a telephoto camera lens for use with the Photometrics*

*CCD detector system.*

No. 5: Gilmore, A.C., Tobin, W., 1991, *Temperature sensitivity of the CE200 electronics unit.*

No. 6: Tobin, W., 1991, *The Boller & Chivens intermediate resolution spectrograph.*

No. 7: Tobin, W., 1991, *Time keeping on the Photometrics CCD system.*

No. 8: Tobin, W., 1991, *Forth acquisition software.*

No. 9: Tobin, W., 1992, *Problems of CCD flat fielding.*

No. 10: Tobin, W., 1992, *Gain, noise and related characteristics of the Mt John Photometrics CCD system.*

No. 11: Tobin, W., 1993, *Shutter map.*

No. 12: Pritchard, J.D., 1993, *McLellan Telescope f/8 seeing values in the green.*

No. 13: Tobin, W., 1993, *Christchurch VMS-based software.*

No. 14: Pritchard, John D., 1993, *Forth commands implemented by the file jdp.*

No. 15: Tobin, W., 1993, *TH7882 quantum efficiency.*

No. 16: Tobin, William, 1993, *Atlas of typical and atypical images.*