

CURRICULUM VITÆ OF ALF VAN DER POORTEN AM

Name.

Alfred Jacobus (Alf) van der Poorten

Family.

Married to Joy Patricia née FitzRoy

d. Kate Joy 1974

s. David Korstiaan 1976

c. 'Talleyrand' 1983–1998; 'Sally' 2005–

Private Address.

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Place and Date of Birth.

Amsterdam, the Netherlands, on 16 May, 1942

Citizenship.

Australian

Formal Education.

At the University of New South Wales: MBA (1973); BA (1970) with Honours in Philosophy; PhD in Pure Mathematics (9 September, 1968); BSc (1965) with Honours Class I, University Medal in Pure Mathematics, and STC Union Award.

Current Activity.

Research mathematician

Honorary Professor, Sydney University

Emeritus Professor, Macquarie University, Sydney

Recent Employment.

Professor of Mathematics (1979–2002);

Director, Centre for Number Theory Research (1991–2002);

Vice-President, and Chair, Academic Senate (1986–1987), (1997–2001)

at Macquarie University, Sydney

Honours, Awards, and Recognition.

17th Isidore and Hilda Dressler Lecturer*, Kansas State University, Manhattan, Kansas (12/05)

Distinguished Visiting Professor of Mathematics, Brown University, Providence, Rhode Island (01–05/2005).

Member in the Order of Australia, AM

[appointed in the Australia Day Honours List 2004, for “service to mathematical research and education, particularly in the field of number theory”.]

George Szekeres Medal of the Australian Mathematical Society

[awarded at the 2002 Annual Meeting of the Society “for his outstanding research achievement in the Mathematical Sciences”]:

Citation: Alf van der Poorten is a mathematician whose work encompasses number theory, algorithms and cryptography. He has a worldwide reputation among number theorists and analysts. Some of his most significant results connect automata theory to transcendence theory, and solve an old problem of Pisot’s. He has also written a prize-winning book, “Notes on Fermat’s Last Theorem”.

Stieltjes Institute Visiting Professor, Universiteit Leiden (10/02)

First Annual Oliver Lecturer, and Class of 60’s Speaker, The Williams College, Massachusetts (10/01)

New Zealand Mathematical Society Lecturer, NZ Maths Colloquium, Waikato U. (11/00)

Member, Committee on Electronic Information and Communication of the International Mathematical Union (1998–2008)

Australian delegate to Quadrennial Assembly of the IMU (Dresden, 1998), (Shanghai, 2002), (Santiago de Compostella, 2006).

Dhc (Docteur honoris causa) conferred by Université Bordeaux 1, January 9, 1998.

President, Australian Mathematical Society (1996–1998).

Notes on Fermat’s Last Theorem was awarded the Association of American Publishers Professional/Scholarly Publishing Award, 1996, for Excellence in Mathematics.

Australian Youth Citizenship Award 1966 (awarded at the Australian Citizenship Convention for “attainments in community service, academic achievement and youth leadership, whereby he has provided an outstanding example to the community”).

Membership of Review Committees.

Ad hoc subcommittee to advise NSERC on Mathematics Major Resources Support Grants (02/07)

Review Committee for Academic Research in Mathematics in the Netherlands, member for Algebra and Number Theory (05–09/03) [This Committee conducts a quinquennial review on behalf of the Union of Dutch Universities (VSNU)]

*Former Dressler lecturers include Hugh Montgomery, John Conway, Wolfgang Schmidt, Enrico Bombieri, Barry Mazur, Kenneth Ribet, Peter Sarnak, Carl Pomerance,

Fonds zur Förderung der wissenschaftlichen Forschung (FWF: Austrian Science Fund) review panel for the Joint Research Program (FSP) “Number-Theoretic Algorithms and their Applications”, Vienna (01/02)

Canadian National Science and Engineering Research Council (NSERC) site visit committee to evaluate Canada’s three national Mathematical Sciences Research Institutes (09/98).

Chairman of the Working Party[†] appointed to conduct the Strategic Review of Mathematical Sciences Research and Advanced Mathematical Services in Australia (1994–95).

Impact. “Alf van der Poorten is known worldwide among number theorists and those working in immediately related fields by virtue of his insightful simplifying observations, a variety of unexpected and interesting theorems, and the excellence of his expository writings and lectures. His publications include joint papers with a wide variety of other well known names in number theory.

Van der Poorten’s present work, motivated by methods of modern cryptography, computational number theory, and transcendence theory, includes a study algebraic curves by way of their sequence of Padé approximants.

The special case, continued fraction convergents, is relevant to the hyperelliptic case. That has already provided insights into matters as apparently diverse as pseudo-elliptic integrals [amusing, and relevant to computer integration], families of hyperelliptic curves of increasing genus g and with relatively high torsion in terms of g [here it is ‘believed’ one can do no better than $O(g^2)$], Somos sequences [thus also elliptic divisibility sequences in the generic elliptic case], regulators of parametrised sequences of quadratic number fields of increasing discriminant, ”

TEN CAREER BEST PUBLICATIONS

- [37] ‘Linear forms in logarithms in the p -adic case’, in *Transcendence theory — advances and applications*, ed. A. Baker and D. W. Masser, (Academic Press London and New York, 1977), Chapter 2, 29–57.
- [45] ‘A proof that Euler missed... Apéry’s proof of the irrationality of $\zeta(3)$; An informal report’, *The Mathematical Intelligencer* **1** (1979), 195–203.
- [70] ‘Zeros of p -adic exponential polynomials II’ (with Robert S. Rumely), *J. Lond. Math. Soc.* **36** (1987), 1–15.
- [76] ‘Some quantitative results related to Roth’s theorem’ (with E. Bombieri), *J. Austral. Math. Soc. (Series A)* **45** (1988), 233–248; Corrigenda: *ibid.* **48** (1990), 154–155.
- [77] ‘Solution de la conjecture de Pisot sur le quotient de Hadamard de deux fractions rationnelles’, *C. R. Acad. Sc. Paris (Série 1)* **306** (1988), 97–102.
- [100] ‘The Eisenstein constant’ (with B. M. Dwork), *Duke Math. J.* **65** (1992), 23–43; ‘Corrections to “The Eisenstein constant” ’ (with B. M. Dwork), *Duke Math. J.* **76** (1994), 669–672.

[†]Subsequently, the group’s Executive Officer and I produced the federal government report: *Mathematical Sciences: Adding to Australia* (Australian Research Council, Discipline Research Strategies), (Canberra: Australian Government Publishing Service, 1996), 120+ *xxiii* pp

- [112] ‘Effective measures of irrationality for cubic extensions of number fields’ (with Enrico Bombieri and Jeffrey D. Vaaler), *Annali della Scuola Normale di Pisa* (Classe di scienze), **23** (1996), 211–248.
- [119] *Notes on Fermat’s Last Theorem*, (New York, N. Y.: Wiley-Interscience, 1996), xvi+222pp.
- [136] ‘Values of the Dedekind eta function at quadratic irrationalities’ (with Kenneth S. Williams), *Canad. J. Math.*, **51** (1999), 176–224.
- [141] ‘Formal power series and their continued fraction expansion’, in Joe Buhler ed., *Algorithmic Number Theory* (Proc. Third International Symposium, ANTS-III, Portland, Oregon, June 1998), Springer Lecture Notes in Computer Science **1423** (1998), 358–371.

Some Research Highlights.

In the mid-seventies, Van der Poorten noticed that the disjoint sequences of refinements to Baker’s inequalities were after all readily unified. His first principles approaches made the ‘difficulties’ in the p -adic case vanish forever. John Loxton and he generalised ‘Mahler’s Method’ and established it as a major technique in transcendence theory.

In 1978, his lively exposition of Apéry’s claims provided the only detailed exposition of the proof. More recently, Alf van der Poorten’s book, *Notes on Fermat’s Last Theorem*, an explanation of the basics underlying Wiles’ proof, attracted warm critical support.

Van der Poorten proved Pisot’s conjecture to the effect that if the *Hadamard quotient* $\sum_{h=0}^{\infty} (c_h/b_h)X^h$ of two rational functions $\sum_{h=0}^{\infty} c_hX^h$ and $\sum_{h=0}^{\infty} b_hX^h$ is possibly rational then in fact it is rational, using a new rationality criterion dual to that employed in Dwork’s proof of the Weil conjectures. An application is a complete proof of Morgan Ward’s question about recurrence sequences yielding divisibility sequences.

In 1982 he remarked that by excluding vanishing subsums and by applying specialisation principles developed in the course of studying the HQT, it followed that there are only finitely many solutions to equations $u_1 + u_2 + \cdots + u_n = 1$ in elements u_i of a finitely generated group. This is the celebrated S -unit theorem.

Jointly with Bernie Dwork, van der Poorten studied the ‘Eisenstein constant’, providing sharp bounds on the Taylor coefficients of an algebraic power series.

Kenneth Williams and he succeeded in breaking up the Chowla–Selberg formula, allowing evaluation of the Dedekind eta function for all discriminants in terms of singular values of L -functions.

Alf van der Poorten has made himself a, probably the, expert in usefully torturing continued fraction expansions, both of numbers and of formal power series. He is not yet certain whether current work exploring continued fraction expansion of square roots of generic polynomials is incisive or merely amusing.

Work, begun in the early eighties, led to Enrico Bombieri’s invariant Thue–Siegel method and has been pursued by Van der Poorten in the form of explicit construction of curves with prescribed singularities at $(0, 0)$, $(1, 1)$ and (∞, ∞) .

Previous Employment.

Associate Professor (1975–78), Senior Lecturer (1971–75), Lecturer (1967–71), Teaching Fellow (1965–67)

in Mathematics at the University of New South Wales.

Extended Visits and Visiting Appointments.

Brown University, Rhode Island, (01–05/2005); Italy [Udine and Roma Tre], (10/03) Universiteit Leiden (10/2002); University of East Anglia (03/2002; 06/2002); Université de Lille I (07/2001); Università degli studi Roma Tre (10/1998); Universität Basel (06/1997); Université Bordeaux I (05/1997); MSRI, Berkeley (02/1993); Université Aix-Marseille (01/1991); Université Bordeaux I (03/1990); Technische Universiteit Delft (01/1990); Rutgers University, New Jersey and Institute for Advanced Study, Princeton (11–12/1989); MSRI, Berkeley (07/1989); Rijksuniversiteit Leiden (03/1986); Institute for Advanced Study, Princeton (01/1986); Université Bordeaux I (10/1982–02/1983); Technische Hogeschool Delft (09/1982); Université Bordeaux I (07/1981); Queen’s University, Kingston, Ontario (09–12/1978); DPMMS, University of Cambridge (01–07/1975); Rijksuniversiteit Leiden (08–12/1974).

Other Recent Activities.

Head of the School of Mathematics and Physics; later the School of Mathematics, Physics, Computing and Electronics (1980–1987), (1991–1996);

Member of the Council of Macquarie University[‡] (1990–2001), (1986–1987);

Chair, Undergraduate Studies Committee (1996–2001); Chair, Postgraduate Studies Committee (1997–2001); Chair, Science and Technology Advisory Committee[§] (1997–2001);

Director, Macquarie University Professorial Superannuation Pty Limited (1995–2002);

Some Former Activities.

Australian–American Educational Foundation (Fulbright Scheme) [Member of New South Wales selection committee (1986–1991); Chairman (1987–1991)]; New South Wales Secondary Schools Board[¶] [Member of the Board and its Executive Committee (1983–1987; until the Board was amalgamated)]; University of New South Wales International House Ltd [Member of Board of Directors (1988–1990)].

and Yet Longer Ago Activities.

The Council[‡] of the University of New South Wales [Member elected by the undergraduates (1967–69) and Member nominated by the Minister to represent employee organisations (1969–73)]; University Co-operative Bookshop Ltd [Member of Board of Directors (1965–79, 1979–82); Deputy Chairman (1970–73, 1975–78); Chairman of Directors (1979–82)]; Member of Academy of Science delegation of mathematicians to China 1980; Commissioned as Justice of the Peace in the State of New South Wales 1970; Federation of Australian University Staff Associations [Member of National Executive (1972–73); Member of Salaries Committee (1970–74)]; The University of New South Wales Students’ Union [Member of Students’ Union Council (1963–68); Vice-President (1963–64); President (1963–64); Hon.Treasurer (1967–68)]; The University of New South Wales Union

[‡]The Board of Governors/Trustees of the University; at Macquarie University I served variously as member elected by the academic staff, and ex-officio as Chair of the Senate.

[§]The Committee of Heads of the Science and Technology Divisions (Information and Communication Sciences; Environmental and Life Sciences; Psychology and Linguistics)

[¶]In effect, then the state-wide Board of Education for all Junior High School matters.

[Member of Board of Management (1964–72); President of the Union (1965–67); Honorary Life Member (1967)]; National Union of Australian University Students [Member of National Executive (1965); leader of NUAUS delegation to Papua-New Guinea (1964)].

Research Grants.

Torsion on Hyperelliptic Curves ARC DG 2003–05; *Composition in Cubic Number Fields and Function Fields* MURDG 2002; *Effective Diophantine Approximation* ARC 1997–99, ARC SG 2000; *Applications of Padé approximation to diophantine approximation*, MURG 1998, 1999; *Continued Fractions* ARC IREX 2000-02, ARC SG 1991–92, ARC 93–95; *Factorisation of differential equations* (with I E Shparlinski) ARC SG 1995–97; *Thue’s method and curves with prescribed singularities* ARC SG 1995; *Arithmetic, Automata and Power Series* ARC 1989–94; Macquarie University Research Fellow 1991–95 (Thomas A Schmidt, Deanna Caveny, Pieter Moree); *Chaotic Phenomena in Arithmetic* (with J H Loxton and R R Moore) MURG 1990, ARC SGS 1991–93; *Diophantine Approximation* ARGS 1986–88; and Macquarie University Research Fellow (Bela Brindza) 1986–89; *Distribution of Numbers and Probabilistic Analysis* (with G Brown and J H Loxton) ARGS 1986–88; *Approximation by Rationals* ARGS 1980–85, and National Research Fellow (Jon Glass) 1986–89; *p-Adic Methods in Number Theory* (with J H Loxton) ARGS 1983–88; and various other Macquarie University Research Grants.

Postgraduate Students.

David Mooney, ‘On the diophantine equation $x^m \pm y^m = z^n$ ’, MSc The University of New South Wales, 1977.

Andrew M Adams, ‘Applications of the Gel’fond–Baker method to elementary number theory’, MSc The University of New South Wales, 1978.

Deryn Griffiths, ‘Power series expansion of algebraic functions’, PhD Macquarie University, Sydney, 1992 [now at National Bureau of Meteorology, Sydney].

Takao Komatsu, ‘Results on fractional parts of linear functions and their application to Beatty sequences’, PhD Macquarie University, Sydney, 1994 [now at Hirosaki University, Japan].

Drew Vandeth, ‘Mahler functions’, PhD Macquarie University, Sydney, 2000 [now at U. Ottawa and CSA].

Xuan Chuong Tran, ‘Periodic continued fractions in function fields’, PhD Macquarie University, Sydney, 2001 [now at University of Technology, Sydney].

Roger Patterson, ‘Creepers: Quadratic fields with large class number’, PhD Macquarie University, Sydney, 2004 with Vice-Chancellor’s commendation [now in Melbourne].

William B Hart, ‘Evaluation of the Dedekind eta function’, PhD Macquarie University, Sydney, 2004 [now at UIUC].

Postdoctoral Fellows.

Jonathan Glass, 1982–1984 [now merchant banker, Sydney]

Bela Brindza, 07/1986–1989 [d. once Professor at Kossuth Lajos U, Debrecen]

Thomas A Schmidt, 1991 [now at U Oregon, Corvallis]

Deanna Caveny, 07/1993–1994 [now Head of Department at College of Charleston, SC]

Pieter Moree, 09/1994–1995 [now at Max Plank Institute, Bonn]

Membership of Professional Societies.

American Mathematical Society (1969–); Australian Mathematical Society (1965–) [President (1996–98); Medal Committee (1996–98); elected FAustMS 1995; Member of Council (1969–71), (1974–78), (1979–82), (1984–87), (1995–99), (2001–02), (2005–); Vice-President (1981–82), (1998–99), (2001–02); founding Editor, *The Gazette* (1974–77); Hon. Auditor (1972, 1973)]; ANZIAM=Australian and New Zealand Society for Industrial and Applied Mathematics (foundation member); Australasian Association for Philosophy (1964–96); Canadian Mathematical Society (1979–); SIAM (1999–2000); London Mathematical Society (1975–); Deutsche Mathematiker-Vereinigung (1975–2000); Mathematical Association of America (1970–); Royal Society of New South Wales (1971–97) [Member of Council (1972–74)]; Société Mathématique de France (1976–2002); Wiskundig Genootschap (1974–); T_EX User's Group (1991–).

Editorial.

The Ramanujan Journal — Editorial Committee (1995–2003); *Journal de Théorie des Nombres, Bordeaux*; — Editorial Board (1993–); *The Mathematica Journal* — Consulting Editor (1990–); *Bulletin of the Australian Mathematical Society* — Associate Editor (1979–2006); *The Mathematical Intelligencer* — Correspondent (1983–86); *Journal of the Australian Mathematical Society* — Associate Editor (1979–82); *The Australian Mathematical Society Gazette* — Founding Editor (1973–77).

Fairly Recent Invited Lectures, Conferences, and Meetings.

11/07 CEIC Meeting, Providence RI; Colloquium U Wyoming, Laramie; 10/07 Henri Cohen 60, Bordeaux 09/07 AustMS Annual Meeting, Latrobe U, Melbourne; 08/07 Invited Lecture, EECFNT, Monastir, Tunisia; 07–08/07 AARMS Summer School, 30hr graduate course, Halifax, NS; 05/07 Invited Talk ANT Turku; 4hr mini-course Turku, Finland; 04/07 Colloquium, Oulu, Finland 12/06 Seminar, UCLA; 11/06 Colloquium, Dalhousie U, Halifax, NS; CEIC Meeting, Halifax; 09/06 CIRM Meeting on diophantine approximation; CIRM Meeting on analytic number theory in honour of Jean-Marc Deshouillers 60; 08/06 GA of the IMU, Santiago de Compostella; IMC2006 Madrid; 07/06 ANTS 7, Berlin; 06/06 CMS Meeting in honour of Richard Guy 90, Calgary; 03/06 Mathematics Colloquium, University of Ballarat 02/06 Computational Mathematics Seminar, TU Berlin; CEIC Meeting, ZIB Berlin 12/05 Dressler Lecture and Number Theory seminar, KSU, Manhattan, Kansas 11/05 BIRS Meeting on Cryptology, Banff, Alberta; 09/05 AustMS Meeting, Perth 06/05 Joint AMS/DMV/ÖMG Meeting, Mainz, Germany; 04/05 Number Theory Seminar, Boston U; MSRI Meeting on Retrodigitization, Berkeley; Number Theory Seminar, Penn State; 03/05 ArithmeTexas, College Station, TX; CEIC Meeting, Grenoble, France; 02/05 Colloquium, Brown University; 01/05 Algebra and Number Theory Seminar, Brown

University, RI; EURANDOM meeting on Dynamical Systems, Probability Theory and Statistical Mechanics, Eindhoven 12/04 Oberwolfach meeting on Finite Fields; 11/04 Banff International Research Station Conference on Diophantine Approximation; 10/04 Keynote speaker at Conference on Analytic Number Theory, Research Institute for Mathematical Sciences, Kyoto University; Two seminars, Hirosaki U.; 09/04 Seminar, Houston University; Number Theory Seminar, Graduate Seminar, Algebra/Combinatorics Seminar, Texas A&M, College Station, Texas; 08/04 Workshop on Analytic and Computational Number Theory, Dalhousie University, Halifax, Nova Scotia; 07/04 4ecm (4th European Congress of Mathematicians), Stockholm; 06/04 ANTS 6, Burlington, Vermont; Fields Meeting in Honour of the 60th birthday of W. Dale Brownawell, Waterloo, Ontario; CNTA 8, Toronto, Ontario; ‘New Developments in Electronic Publishing of Mathematics’, KTH, Stockholm; 03/04 CEIC Meeting, Duke University, Durham, NC; 10/03 Università degli studi Roma Tre; 09/03 Two seminars, Università degli studi Udine, Italy; 08/03 Meeting of Review Committee for Academic Research in Mathematics in the Netherlands, Utrecht; 07/03 Stieltjes Institute Meeting on Diophantine Methods, in honour of Rob Tijdeman on his 60th Birthday, Leiden; TUG Annual Meeting, Hawaii; ICIAM 2003, Sydney; 06/03 PIMS Workshop on Mahler’s Measure, SFU Vancouver; CECM Colloquium, SFU Vancouver; 05/03 Computational Number Theory in Honour of Hugh Williams on his 60th Birthday, Banff; CEIC Meeting, Berlin.

PAPERS AND MANUSCRIPTS SINCE 2001: A J VAN DER POORTEN

- [135] ‘A powerful determinant’, *Experimental Math.*, **10:2** (2001), 307–320.
- [136] ‘Values of the Dedekind eta function at quadratic irrationalities’ (with Kenneth S. Williams), *Canad. J. Math.*, **51** (1999), 176–224; Corrigendum, *ibid.*, **53** (2001), 434–448.
- [145] ‘Non-periodic continued fractions in hyperelliptic function fields’ (Dedicated to George Szekeres on his 90th birthday), *Bull. Austral. Math. Soc.* **64** (2001), 331–343.
- [148] ‘Computer verification of the Ankeny-Artin-Chowla conjecture for all primes less than 100 000 000 000 (with Herman J. J. te Riele and Hugh C. Williams), *Math. Comp.*, **70** (2001), 1311–1328.
- [150] *Recurrence Sequences* (Graham Everest, Alf van der Poorten, Igor Shparlinski, and Thomas Ward), Mathematical Surveys and Monographs 104, American Mathematical Society 2003, 318pp. ISBN 0-8218-3387-1.
- [151] ‘On Number Theory and Kustaa Inkeri’, in *Number Theory* (Proc. Turku Symposium on Number Theory in Memory of Kustaa Inkeri, Turku, May 31–June 4, 1999), Matti Jutila and Tauno Metsänkylä eds., Walter de Gruyter, Berlin 2001, 281–292.
- [153] ‘Ideal constructions and irrationality measures of roots of algebraic numbers’ (with Paula Beazley Cohen), *Illinois J. Math.*, **46.1** (2002), 63–80.
- [154] ‘A note on NUCOMP’, *Math. Comp.*, **72.244** (2003), 1935–1946.
- [156] ‘Binary quadratic forms and the eta function’ (with Robin Chapman), in *Number Theory for the Millennium*, Proc. Millennial Conf. Number Theory (Urbana, IL, May 21–26, 2000) (M. A. Bennett et al., eds.), A K Peters, Boston, 2002, 215–227.
- [157] ‘Symmetry and Folding’ (dedicated to Michel Mendès France on his 65th birthday), *Jour. Théorie des Nombres de Bordeaux*, **14.2** (2002), 603–611.

- [158] ‘Periodic continued fractions in elliptic function fields’ (with Xuan Chuong Tran), in Claus Fieker and David R. Kohel eds, *Algorithmic Number Theory* (Proc. Fifth International Symposium, ANTS-V, Sydney, NSW, Australia July 2002), Springer Lecture Notes in Computer Science 2369 (2002), 390–404.
- [159] ‘Squares from products of consecutive integers’ (with Gerhard J. Woeginger), *Amer. Math. Monthly*, **109.5** (2002), 459–462.
- [160] ‘Computational aspects of NUCOMP’ (with Michael J Jacobson Jr), in Claus Fieker and David R. Kohel eds, *Algorithmic Number Theory* (Proc. Fifth International Symposium, ANTS-V, Sydney, NSW, Australia July 2002), Springer Lecture Notes in Computer Science 2369 (2002), 120–133.
- [161] ‘Life on the edge’, *Amer. Math. Monthly*, **109.9** (2002), 850–853.
- [162] ‘On the twin prime conjecture’ (with Teur Ah-Mah), *The AustMS Gazette* **31.1** (2004), 36–39.
- [163] ‘Periodic continued fractions and elliptic curves’, in *High Primes and Misdemeanours: lectures in honour of the 60th birthday of Hugh Cowie Williams*, Alf van der Poorten and Andreas Stein eds., Fields Institute Communications **42**, American Mathematical Society, 2004, 353–365.
- [164] ‘Specialisation and reduction of continued fraction expansions of formal power series’ (to Jean-Louis Nicolas on his 60th birthday), *The Ramanujan J.* **9** (2005), 83–91; or see arXiv: math.NT/0403225.
- [165] ‘Quadratic irrational integers with partly prescribed continued fraction expansion’ (in memory of Professor Dr Bela Brindza), *Publ. Math. Debrecen*, **65.3-4** (2004), 481–496.
- [166] ‘Integer Sequences and Periodic Points’ (with G. Everest, Y. Puri, and T. Ward), *Journal of Integer Sequences* **5**, 02.2.3, (2002), 1–10.
- [166c] ‘Corrigenda and addition to “Computer verification of the Ankeny-Artin-Chowla conjecture for all primes less than 100 000 000 000”’ (with Herman J. J. te Riele and Hugh C. Williams), *Math. Comp.*, **72.241** (2002), 521–523.
- [167a] ‘Peer refereeing . . . will it be missed?’, in Fengshan Bai and Bernd Wegner eds. *Electronic Information and Communication in Mathematics*, Springer Lecture Notes in Computer Science 2730 (2003), 132–143.
- [167b] ‘Three views of peer review’ (with Steven Krantz and Greg Kuperberg, in *Notices of the American Mathematical Society*, **50.6** (2003), 678–682.
- [168] ‘Squares from products of integers’ (with William D Banks), *The AustMS Gazette* **31.1** (2004), 40–42.
- [169] ‘Elliptic sequences and continued fractions’, *Journal of Integer Sequences*, **8** 05.2.5 (2005), 1–19.
- [170e] (edited, with Andreas Stein) *High Primes and Misdemeanours: lectures in honour of the 60th birthday of Hugh Cowie Williams*, Fields Institute Communications **42**, American Mathematical Society, 2004.
- [171] ‘Jeepers, Creepers, . . .’ (with Roger D. Patterson), in *High Primes and Misdemeanours: lectures in honour of the 60th birthday of Hugh Cowie Williams*, Alf van der Poorten and Andreas Stein eds., Fields Institute Communications **42**, American Mathematical Society, 2004, 305–316.
- [171a] ‘Advice to Referees . . .’ (with Andreas Stein), in *High Primes and Misdemeanours: lectures in honour of the 60th birthday of Hugh Cowie Williams*, Alf van der Poorten and Andreas Stein eds., Fields Institute Communications **42**, American Mathematical Society, 2004, 391–392.
- [172] ‘Curves of genus 2, continued fractions, and Somos sequences’, *Journal of Integer Sequences*, **8** 05.3.4 (2005), 1–9. paper; or see arXiv: math.NT/0412293.

- [173] ‘Pseudo-elliptic integrals, units, and torsion’ (with Francesco Pappalardi), *J. Austral. Math. Soc.* **79** (2005), 335–347.
- [174a] ‘A curious cubic identity and self-similar sums of squares’ (with Kurt Thomsen and Mark Wiebe), *The Math. Intelligencer*, **29.2** (Spring, 2007), 39–41.
- [174b] ‘Exactly one hundred nontrivial composites’, *The AustMS Gazette* **33.5** (2006), 326–327.
- [175] ‘Recurrence relations for elliptic sequences: every Somos 4 is a Somos k ’ (with Christine S. Swart), *Bull. London Math. Soc.* **38.4** (2006), 546–554; see arXiv: math.NT/0412293.
- [175r] Review of *Automatic Sequences* by Jean-Paul Allouche and Jeffrey Shallit, Cambridge University Press, 2003; *Math. Comp.*, **74** Number 250, (2005), 1039–1040.
- [177] ‘Characterization of a generalized Shanks sequence’ (with R. D. Patterson and H. C. Williams), *Pacific J. Math.* **230.1** (2007), 185–215.
- [178] ‘Hyperelliptic curves, continued fractions, and Somos sequences’, Proc. RIMS Conference on Analytic Number Theory and Related Areas (Kyoto, October 18–22, 2004), RIMS August (2006), 98–107.
- [179] ‘Continued fractions and Somos sequences’, EURANDOM workshop on Dynamical Systems, Probability Theory, and Statistical Mechanics, January 3–7, 2005; *IMS Lecture Notes–Monograph Series in Dynamics and Stochastics*, **48** (2006), 212–224.
- [180] ‘Determined sequences, continued fractions, and hyperelliptic curves’, *Algorithmic Number Theory* (Proc. Seventh International Symposium, ANTS 7, TU Berlin July 2006), *Springer Lecture Notes in Computer Science* 4076 (2006), 393–405.
- [180r] Review of ‘Introduction to Modern Number Theory’, by Yu. I. Manin and A. A. Panchishkin, 2nd Edition; *AustMS Gazette* **34.1** (2007), 47–48.

ACCEPTED MANUSCRIPTS

- [161d] Arthur Bertram Chandler (1912–1984), science fiction author, to appear in the *Australian Dictionary of Biography*, **17** (2007).

COMPLETED MANUSCRIPTS

- [181] ‘Sequences of Jacobian varieties with torsion divisors of quadratic order (with R. D. Patterson and H. C. Williams).
- [183] ‘Fermat’s four squares theorem’.