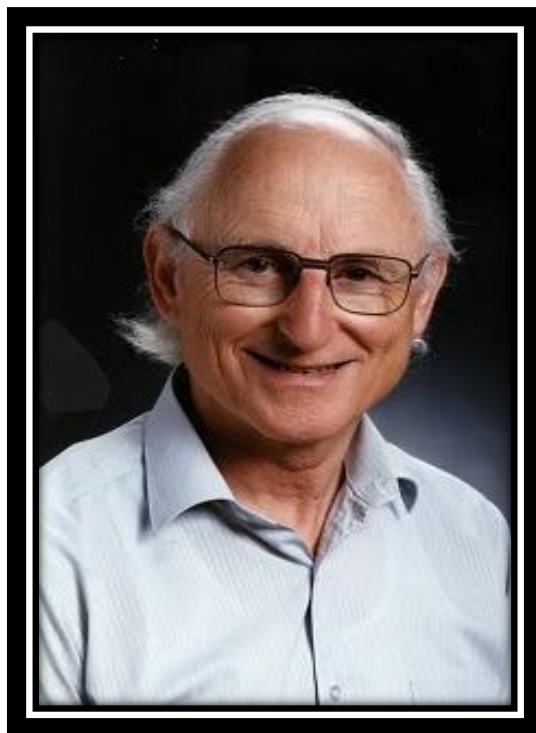# In Memoriam: *Prof. John Turner (1928 – 2022)*

Personal Life:

- Family: Married 37 years (wife Barbara Rosemary, nee Payne, born 18 April 1927, died 27 April 1997); five children: Neil and Jeremy Orton (step-sons), Roseanna Jane, Louise Margaret, Harry John Turner; ten grandchildren.
- Hobbies: Music (piano, 'cello, guitar, treble recorder and mandolin) 'Cello in Waikato Symphony Orchestra (six years), jazz piano in Reeds Keys Duo; treble recorder in Lyric Players Orchestra (over 500 concerts) Solo entertainer with voice and piano. Snooker/Pool; bridge; chess. Many readers will remember him on the piano giving voice to his self-composed songs in leisure moments at International Fibonacci Conferences in Europe and USA.

Higher Education:

- Higher National Diploma, Mechanical Engineering, Doncaster College of Technology, 1951;
- B. Sc. University of Leeds, England. Gained Special Honours in Mathematics, 1954;
- M. Sc. (Leeds), by research; thesis: Reliability of Networks of Components, with distinction, 1966;

- D. Phil. University of Waikato, Hamilton, New Zealand; thesis: Studies of Knot Graphs, 1984.

Mathematics Career:

- 1954–56 Scientific Officer, Armaments Research Development Establishment, Mathematics Division, Kent, England.
- 1956–60 Tutor in Mathematics, Mombasa Institute of Muslim Education, Mombasa, Kenya.
- 1960–62 Lecturer in Mathematics, Nottingham College of Technology, England
- 1962–65 Lecturer in Applied Mathematics, University of Sierra Leone, West Africa
- 1965–67 Senior Lecturer in Statistics, Huddersfield Polytechnic, England.
- 1967–70 Principal Lecturer in Statistics Operations Research, Leeds Polytechnic, England.
- 1970–86 Reader in Mathematics, University of Waikato, New Zealand.
- 1986–90 Foundation Dean, School of Computing and Mathematical Sciences.
- 1986–94 Associate Professor in Mathematics, retired in February 1994.
- 1993 Elected Honorary Life Member of NZ Mathematical Society.
- 1994 Elected Honorary Fellow, University of Waikato.

Positions of Responsibility:

- Deputy Head of the Department of Mathematics & Computer Science, Leeds Polytechnic, 1967–70: responsible for organising degree & diploma courses at all levels, with a staff of 30.
- Responsible for direction of teaching and research in Statistics and Operations Research in the Department of Mathematics, University of Waikato, 1970–1986; the Department offers pure mathematics, mathematical physics, and statistics and O.R., from BSc to Ph.D. levels.
- Acting Director of Computing Services, University of Waikato, 1971–73.
- Chief Examiner for the Bursary and Scholarship Examinations in Applied Mathematics (final High School examinations, set by the N.Z. Department of Education for the University Grants Committee) 1981 and 1982. This involved the setting of papers and organisation of marking teams, to deal with over 5000 scripts per year from schools throughout the country.
- Acting Head of Mathematics Department, University of Waikato, within 1983/84.
- Dean, School of Computing & Mathematical Sciences, June 1986 – January 1990. Foundation Dean, establishing the School's organisation, and the BCMS and other degrees.
- Reviewer (ten years) for American Mathematics Reviews.

Membership of Professional Societies:

- Fellow of the Royal Statistical Society, London, 1956 to 1992.
- Member of the N.Z. Mathematical Society, since 1971.
- Member of the N.Z. Statistical Society, 1971 to 1985.
- Member of the N.Z. Operations Research Society, 1971 to 1978
- Member of the N.Z. Computer Society, 1971 to 1977.
- Member of the N.Z. Association for Research in Education, 1984 to 1990.
- Member of the Waikato Mathematical Association, 1971 to 1993.
- Sustaining Member of The Fibonacci Association, 1986 to 2022.
- N.Z. member of Editorial Board, The Fibonacci Association, 1990–2022.
- Member, Editorial Board, Notes on Number Theory & Discrete Mathematics, 1995–2016.

Society Officer Holder:

- New Zealand Mathematical Society: National Committee Member, 1979. President, 1980, Vice-President, 1981.
- New Zealand Computer Society: National Council Member, 1972/73.
- Waikato and Bay of Plenty Computer Society: Founding member, 1971. Chairman, '71-'73.
- New Zealand Statistical Society: Area Convenor, Waikato and Bay of Plenty, 1973-79.
- Waikato Mathematical Association: Committee Member, 1980-1985.
- New Zealand Federation of Classical Guitar Societies: President, 1977-'79. Treasurer, '83-'85.
- Hamilton Classical Guitar Society: Committee, 1971-2022, President, 1973-75; 1985-1987.
- University of Waikato Bridge Club: President, 1976-1980.
- Hamilton Hang-Gliding Society: Founder, President, 1976/77.
- Founder member, Waikato Branch of the University of the Third Age, Committee, 1995-2022. President 1999/2000.

Publications with NNTDM editors:

- Shannon, A.G., Turner, J.C., & Atanassov, K.T. (1991). A generalized tableau associated with coloured convolution trees. *Discrete Mathematics*, 92, 329–340.
- Turner, J.C., & Shannon, A.G. (1993). On an inhomogeneous, non-linear, second-order recurrence relation. *International Journal of Mathematical Education in Science and Technology*, 24(2), 324–327.
- Atanassov, K.T., Shannon, A.G., & Turner, J.C. (1995). The generation of trees from coupled third order recurrence relations. In: Shtrakov, S., & Mirchev, I. (eds.), *Discrete Mathematics and Applications*, Blagoevgrad: Neofit Rilski University, 46–56.
- Atanassov, K.T., Shannon, A.G., & Turner, J.C. (1997). Remark on Fibonacci sequences and fuzzy sets. *Comptes rendus de l'Academie Bulgare des Sciences*, 50(2), 11–14.
- Turner, J.C., & Shannon, A.G. (1998). Introduction to a Fibonacci geometry. In: Bergum, G. E., Philippou, A. N., & Horadam. A. F. (eds.), *Applications of Fibonacci Numbers*. Volume 7. Dordrecht: Kluwer, 435–448.
- Turner, J.C., & Shannon, A.G. (2000). On Fibonacci sequences, geometry and the *m*-square equation. *The Fibonacci Quarterly*, 38(2), 98–103.
- Atanassov, K.T., Atanassova, V., Shannon, A.G., & Turner, J.C. (2002). *New Visual Perspectives on Fibonacci Numbers*. New York/Singapore: World Scientific.

He had many other publications in Knot Theory and Statistics, the most famous of which was:

- Turner, J.C. (1970). *Modern Applied Mathematics: Probability, Statistics, Operational Research*. London: Hodder Stoughton. Reprinted many times and still in print. Published in Spanish as:
- Turner, J.C. (1974). *Matematica Moderna Aplicada: Probabilidades, Estadística e Investigación Operativa*. Madrid: Alianza Editorial S.A.

Anthony G. Shannon
Warrane College, The University of New South Wales
April 2022