### Name

John Francis Toland

Date and Place of Birth

28 April 1949, Derry, Northern Ireland

### At Cambridge University

NM Rothschild Professor of Mathematical Sciences

Director of Isaac Newton Institute for Mathematical Sciences

Fellow of St John's College

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## Qualifications & Awards

Queen's University Belfast, 1967-1970.

B.Sc., Honours First Class, Pure Mathematics, 1970.

University of Sussex. 1970 - 1973.

M.Sc., with Distinction, Mathematics, 1971; D.Phil., Mathematics, 1973.

Fellow of the Royal Society 1999.

London Mathematical Society Senior Berwick Prize 2000.

DSc: QUB (2000); Edinburgh (2007); Heriot-Watt (2007); Essex (2009)

Fellow of the Royal Society of Edinburgh (2003); Honorary Fellow of UCL (2008).

Royal Society/Wolfson Research Merit Award 2008.

Vice-Chancellor's Medal for Research, University of Bath, 2010.

Sylvester Medal of the Royal Society, 2012.

### Appointments

University of Essex 1973- 1979: Lecturer in Mathematics and member of Fluid Mechanics Research Institute.

University College London 1979-1982: Lecturer in Mathematics

University of Bath 1982 -2011: Professor of Mathematics

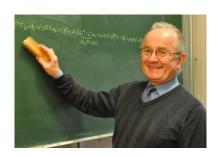
EPSRC Senior Fellow, 1997-2002.

International Centre for Mathematical Sciences Edinburgh, Scientific Director 2002-2010.

Director, Isaac Newton Institute for Mathematical Sciences, University of Cambridge, 2011 -

# Personal Research

Rigorous mathematical analysis of partial differential equations, especially those arising in hydrodynamic wave theory. Special interest in bifurcation theory and global topological, variational and analytic arguments leading to existence of solutions. Many invited talks in the UK, Europe, USA, Australia, Russia, China, Korea and about 100 research papers in international journals.



### Visiting Appointments

Batelle Advanced Studies Centre, Geneva. Visiting Research Fellow, April - October 1973; Geneva University, J.M. Jauch Memorial Workshop, August 1975; University of Eindhoven, Netherlands, Visiting Research Fellow, February - April, 1976; Ecole Polytéchnique Fédérale Lausanne. 3mè siècle Rommand, April 1978; Université de Dijon. Visiting Research Fellow, October, 1978; University of Wisconsin, Madison SRC Senior Visiting Fellow, Mathematics Research Centre, July - December 1979; University of Chicago, Visiting Professor, Summers 1983, 1987, 1990; Australian National University, Visiting Fellow, July/August 1984; University of Minnesota, Visiting Fellow, April 1985; Ecole Polytéchnique Fédérale Lausanne. Visiting Research Fellow, June 1989, Professeur Invité, September 1992, Professeur Invité, Easter 1994; University of New England, Australia. Visiting Professor, Summer 1991; Penn State University, Visiting Professor, July 1992; Université de Pierre et Marie Curie, Paris, Professeur Invité, April 1992; Sydney University, Australia, Visiting Professor, September 1995; Visiting Professor, Free University Berlin, January 1997; University of Sydney Australia, Visiting Professor, September 1998; Ecole Polyechnique Federale Lausanne, Professeur Invité, Jan/Feb 2000; Université Paris Dauphine, Professeur Invité, June 2000; Université de Nice, Sophia Antipolis, Professeur Invité, June 2001; Université de Nice, Sophia Antipolis, Professeur Invité, June 2002; Honorary Professor, Mathematics Department, Edinburgh University; Honorary Professor, Mathematics Department, Heriot-Watt University

### Other Professional Activity

Editorial Board of London Mathematical Society Periodicals, 1983 - 1988; Editorial Adviser for John Wiley's International Series on Pure and Applied Mathematics.-2000 Editorial Consultant, Proceedings for the Royal Society of Edinburgh; Editorial Board, SIAM Journal of Mathematical Analysis, 1988 - 1994; Editorial Board of Nonlinearity (a joint Institute of Physics and LMS Journal), 1988 - 1993; SERC Instrumentation Panel, 1988; SERC Earmarked Studentship Panel, 1990; Keck Foundation Assessor, Mathematics Department, Penn State University, 1990 - 1992; Joint Director, SERC Conference on Mathematics of Nonlinear Systems, 1991; SERC/EPSRC Mathematics Committee, 1992 - 1994; SERC Earmarked Studentship Panel, 1993; Isaac Newton Institute Steering Committee, 1993/4, 1996 - 1999; SERC Advanced Fellowships in Mathematics Panel, Chairman, 1993/4; EPSRC Mathematics College, 1995 - present; Editorial Board of Advances in Differential Equations, 1995 - 2000: Council of London Mathematical Society, 1995 - 2002: HEFCE Research Assessment Exercise, Pure Mathematics Panel, 1996; Executive Committee, International Committee for the interaction of Mathematics and Mechanics, January 1996 - December 1999; Editorial Board of Progress in Nonlinear Differential Equations and Applications (Book Series, Birkhäuser, New York), 1996 - present; Editorial Board of Dynamics of Continuous, Discrete and Impulsive Dynamical Systems; 1997 - 2002; Editorial Adviser, Springer Undergraduate Mathematics Series (SUMS), 1996 - present; Adviser, London Mathematical Society Monographs; 1998 - 2003; Chairman, EPSRC Senior and Advanced Fellowships (Mathematics) Committee, 1998; Research and Academic Awards Committe, Leverhulme Trust, 1999-2006; Editorial Board A, Philosophical Transactions of the Royal Society, 2000-2005; Royal Society NATO Panel, 2002-2005; Trustee Bath Royal Literary and Scientific Institution, 2002 -7; Journal of London Mathematical Society, Joint Honorary Editor, 2003 - 8; President of the London Mathematical Society 2005-7; Vice Chair ERCOM European Research Centres on Mathematics 2006-9 Chair, UK REF 2014 Mathematical Sciences Sub-committee

### Statement on IMU Activity

The creation of a stable headquarters for IMU in Berlin with an appropriate relationship between the headquarters secretariat and the IMU executive committee has, I believe, been a great success. I have been part of the IMU sub-committee which monitors its performance. I am a member of the Board which manages MARM (Mentoring African Research in Mathematics) and have some insight into developing countries issues. (It is suported by the LMS secretariat and funded the UK based charities.) The LMS is a stronger supporter, both financially and morally, of IMU activity.