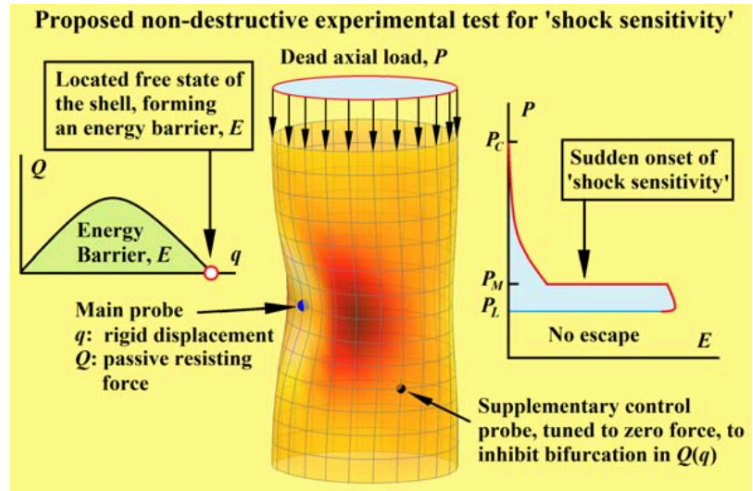




Professor J. Michael T. Thompson



From: "Advances in shell buckling: theory and experiments" by J. Michael T. Thompson, *Int. J. Bifurcation and Chaos*, 2015

See:

<http://www.ucl.ac.uk/~ucess21/>

<http://www.worldcat.org/identities/lccn-n82-120687>

J. Michael T. Thompson: A Brief CV

Homepage: <http://www.ucl.ac.uk/~ucess21/>

Cambridge University, 1955-64

First Class Honours in Mechanical Sciences, **B.A.** (1958), **M.A.** (1962)

Prizes: *Rex Moir*, *Archibald Denny*, *John Winbolt*

Higher degrees: **Ph.D.** (1962), **Sc.D.** (1977)

Research Fellowship, Peterhouse, 1961-64

University College London, 1964-2002

Professor of Structural Mechanics, 1977-91

Senior Fellow, Science & Engineering Research Council, 1988-93

Professor of Nonlinear Dynamics, 1991-2002 (now Emeritus Professor)

Founder and Director of *Centre for Nonlinear Dynamics*, 1991

Centre for Nonlinear Dynamics and its Applications, 1991-2002

This had 31 members: 3 staff, 2 industrial professors, 10 fellows, 16 post-graduates
The MSc course was recognized and supported by EPSRC for many years
Royal Society Research Fellowships: McRobie, Davies, Popov, Heijden
£2 million earned in grants & awards
From 2002 it has become a virtual Centre, linking researchers in many UCL Depts

Visiting Appointments

Fulbright Research Associate, Aeronautics & Astronautics, Stanford, 1962-3
Visiting Professor, Faculté des Sciences, Université Libre de Bruxelles, 1976-8
Visiting Mathematician, Brookhaven National Laboratory, New York, 1984

IUTAM Symposia organised at UCL

Collapse: the buckling of structures in theory and practice, 1982
Nonlinearity and chaos in engineering dynamics, 1993

Principal Honours and Awards

Fellow of the Royal Society, 1985. Elected to the Council, 11 July 2002
OMAE Award, American Society of Mechanical Engineers, 1985
James Alfred Ewing Medal, Institution of Civil Engineers, 1992
Honorary Doctor of Science (DSc), University of Aberdeen, 2004
Gold Medal of the IMA for contributions to mathematics, 2004
Elected, Hungarian Academy of Sciences, 2010
Elected, Academia Europaea, 2010
Lyapunov Award, American Society of Mechanical Engineers, 2013 (for lifelong contributions to the field of nonlinear dynamics)

Industrial Collaborations & Activities

W.S. Atkins: resonance of articulated moorings, 1984; ships in waves, 1992
Defence Research Agency: long-term contract on transient capsizing (1989-98)
British Aerospace: flight dynamics of the Harrier Jump-jet, 1996
SAIPEM: consultancy on the twisting of off-shore pipelines in deep water

Chairman, Board of Directors, ES-Consult 1995-

ES-Consult worked on tuned dampers for Great Belt Bridge (was world's longest span)

Books Published (by John Wiley)

A General Theory of Elastic Stability, 1973
Instabilities & Catastrophes in Science & Engineering, 1982 (Trans: Russia, Japan)

Elastic Instability Phenomena, 1984

Nonlinear Dynamics and Chaos, 1986 (Trans: Japan, Italy). Second Edition, 2002

Editor, Philosophical Transactions (A) of the Royal Society, 1998-07

Special Issues: *Three Millennium Issues*, 1999, 2000. *Triennial Series*, 2002-

Created the new **Royal Society Series on Advances in Science**, with the first book:

Advances in Astronomy, ed. JMT Thompson, Imperial College Press, 2005.

Research Papers

Over 200 papers published. Some journals (with approx numbers of papers in each) are:

<i>Proc. R. Soc. Lond.</i>	(16)	<i>Int. J. Solids & Structures</i>	(5)
<i>J. Mech. Phys. Solids</i>	(13)	<i>Dynamics & Stability of Systems</i>	(5)
<i>Phil. Trans. R. Soc. Lond.</i>	(12)	<i>Physica D</i>	(3)
<i>Physics Letters</i>	(6)	<i>J. Appl. Math. Phys. (ZAMP)</i>	(3)
<i>Int. J. Mech. Sci.</i>	(6)	<i>J. Mech. Engng Sci.</i>	(3)
<i>Int. J. Bifn & Chaos</i>	(6)	<i>Physical Review</i>	(3)
<i>J. Sound & Vibration</i>	(6)	<i>Nature</i>	(3)

Some Opening and Keynote Lectures

General Lecture, *14th IUTAM Congress*, Delft, 1976

General Lecture, *28th British Theoretical Mechanics Meeting*, Bristol, 1986

General Lecture to the *General Assembly of IUTAM*, London, 1986

Opening, AFOSR/ARO Conference, *Nonlinear Vibrations*, Blacksburg, 1987

Closing, Roy. Soc. Meeting on *Newton's Principia and its Legacy*, London, 1987

Fellowship of Engng, *Chaos & the danger of unpredictable failure*, London, 1990

Keynote, *2nd World Congress, Computational Mechanics*, Stuttgart, 1990

General Lecture, Spring Conference, *Institute of Acoustics*, Southampton, 1990

Plenary, *1st European Nonlinear Oscillations Conference*, Hamburg, 1993

Plenary, *Dynamics Day '94*, Theoretical Physics, Eötvös University, Budapest, 1994

Plenary, Conf. *Theory of Ordinary & Partial Differential Equations*, Dundee, 1996

Opening, Conference, *Structural Dynamics*, Palazzo Vecchio, Florence, 1996

Keynote, IUTAM Symp. *Applies Nonlinear ... Dynamics in Mechanics*, Cornell, 1997

Opening, IMA Conf. *Bifurcations: the use and control of chaos*, Southampton, 2003.

Honorary Fellow, Department of Applied Mathematics and Theoretical Physics (DAMTP), Cambridge University, 2003-

Lectures in the Millennium Mathematics Project for the public understanding of mathematics in the Centre for Mathematical Sciences:

Chaos and Fractals (22 Jan 2004). *Instabilities and Catastrophes* (11 Nov 2004).

Distinguished Sixth Century Professor in Theoretical and Applied Dynamics, Aberdeen

Part-time (20%), from April 2006, University of Aberdeen.

Giles Hunt and Lawrence Virgin, “**Michael Thompson: some personal recollections**”, The Royal Society Philosophical Transactions A, May 2013, DOI: 10.1098/rsta.2012.0449

INITIAL WORDS: “For each of us, it is a great pleasure to come together in this tribute to Michael Thompson's remarkable contributions to nonlinear statics and dynamics over the best part of half a century. Although having been friends and colleagues for many years, we have never written anything together, so it is entirely fitting that this should be happening for the first time in this piece. Each of us had Michael as an inspirational research supervisor over a different period in his research career: between us we must span, as close colleagues and collaborators, most of his lifetime of research. . .”