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John Michael T Thompson, MA, PhD, ScD, DSc, FRS

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Education

Oct 1955 – Sep 1958 **University of Cambridge**
MA (first class honours), Mechanical Sciences (Engineering Dept)
Cambridge, United Kingdom

Thesis

Research Experience

Apr 2006 – present **Distinguished Sixth Century Professor (part time)**
University of Aberdeen, School of Engineering
Aberdeen, United Kingdom

Oct 2003 – Oct 2014 **Honorary Research Fellow**
University of Cambridge, Department of Applied Mathematics and Theoretical
Physics
Cambridge, United Kingdom

Jan 1964 – present **Lecturer, Reader, Professor, Emeritus Professor**
University College London, Department of Civil, Environmental and Geomatic
Engineering
London, United Kingdom
Director and Founder, Centre for Nonlinear Dynamics

Sep 1962 – Oct 1963 **Research Associate**

Stanford University, Department of Aeronautics and Astronautics

Palo Alto, United States

One year visit with a Fulbright grant

Statistics

RG Score 38.03

Publications 204

Total Impact Points 386.89

Views 5k

Downloads 929

Citations 2279

Awards & Grants

Jan 2013 Award: Lyapunov Award (American Society of Mechanical Engineers)

Jan 2010 Award: Elected to the Hungarian Academy of Sciences

Jan 2004 Award: Gold Medal of the IMA for contributions to mathematics

Jul 2002 Award: Elected to the Council of the Royal Society

Jan 1992 Award: James Alfred Ewing Medal, Institution of Civil Engineers

Mar 1985 Award: Fellow of the Royal Society

Skills & Activities

Skills Dynamics, Nonlinear Analysis, Structural Dynamics, Structural Analysis, Applied Mechanics, Dynamic Analysis, Structural Vibration, Structural Stability

Languages

Scientific Memberships Fellow of the Royal Society
Fellow of the IMA

Interests Married with 2 children, 10 grandchildren and one great-grandson, recreations include astronomy with my grandchildren, wild-life photography, badminton

and table-tennis.

Publication Highlights

[authors]: [title]. [details]

Books

Brian Launder, J Michael T Thompson: *GEO-ENGINEERING CLIMATE CHANGE: Environmental necessity or Pandora's Box?*. 01/2010; Cambridge.

P.R. Sammonds, J.M.T. Thompson: *ADVANCES IN EARTH SCIENCE: from earthquakes to global warming*. 01/2007; Imperial College Press.

A.G. Davies, J.M.T. Thompson: *ADVANCES IN NANOENGINEERING: electronics, materials and assembly*. 01/2007; Imperial College Press.

John Michael T Thompson: *ADVANCES IN ASTRONOMY: from the big bang to the solar system*. 01/2005; Imperial College Press, London.

John Michael T Thompson, H.B. Stewart: *NONLINEAR DYNAMICS AND CHAOS (Second Edition)*. 01/2002; John Wiley.

John Michael T Thompson: *VISIONS OF THE FUTURE: ASTRONOMY AND EARTH SCIENCE*. 01/2001; Cambridge University Press.

John Michael T Thompson: *VISIONS OF THE FUTURE: CHEMISTRY AND LIFE SCIENCE*. 01/2001; Cambridge University Press.

A. R. Champneys, G. W. Hunt, J. M. T. Thompson: *Localization and solitary waves in solid mechanics*.. 01/1999; World Scientific.

J. M. T. Thompson, S. R. Bishop: *Nonlinearity and Chaos in Engineering Dynamics*. 10/1994; Wiley.

J. M. T. Thompson, H. B. Stewart: *Nonlinear dynamics and chaos: Geometrical methods for engineers and scientists*. 01/1986; John Wiley.

J. M. T. Thompson, G. W. Hunt: *Elastic instability phenomena*. 01/1984; John Wiley.

John Michael T Thompson, and Giles W Hunt: *COLLAPSE: THE BUCKLING OF STRUCTURES IN THEORY & PRACTICE*. 01/1983; Cambridge University Press.

John Michael T Thompson: *Instabilities & Catastrophes in Science & Engineering*. 01/1982; Wiley.

J. M. T. Thompson, G. W. Hunt: *A General Theory of Elastic Stability*. 10/1973; Wiley.

Book Chapters

G. Rega, S. Lenci, J.M.T. Thompson: *Controlling Chaos: The OGY Method, Its Use in Mechanics, and an Alternative Unified Framework for Control of Non-regular Dynamics*. 05/2010: pages 211-269;

John Michael T Thompson: *Supercoiling of DNA molecules*. 01/2002: pages 513-524;

John Michael T Thompson: *Global dynamics of driven oscillators: fractal basins and indeterminate bifurcations*. 01/1996: pages 1-47;

John Michael T Thompson: *Chaos and fractal basin boundaries in engineering*. 01/1993: pages pp 201-221;

Journal Publications

J. Michael T. Thompson: *Advances in Shell Buckling: Theory and Experiments*. 09/2014;

J. Michael T. Thompson, Jan Sieber: *Nonlinear dynamic interactions between flow-induced galloping and shell-like buckling*. International Journal of Mechanical Sciences. 01/2014;

J. M. T. Thompson, G. H. M. van der Heijden: *Quantified 'shock sensitivity' above the Maxwell load*. 11/2013;

J Michael T Thompson: *Advice to a young researcher: with reminiscences of a life in science..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/2013; 371(1993):20120425.

John Michael T Thompson, G. H. M. van der Heijden: *A graphical criterion for the instability of elastic equilibria under multiple loads: with applications to drill-strings*. International Journal of Mechanical Sciences 01/2013; 68:160-170.

A A Travers, G Muskhelishvili, J M T Thompson: *DNA information: from digital code to analogue structure..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 06/2012; 370(1969):2960-86.

J Michael T Thompson, Jan Sieber: *Climate predictions: the influence of nonlinearity and randomness..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 03/2012; 370(1962):1007-11.

Jan Sieber, J Michael T Thompson: *Nonlinear softening as a predictive precursor to climate tipping..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 03/2012; 370(1962):1205-27.

John Michael T Thompson, M. Silveira, G.H.M. van der Heijden, M. Wiercigroch: *Helical post-buckling of a rod in a cylinder: with applications to drill-strings*. Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/2012; 468:1591-1614.

J. Michael T. Thompson, Jan Sieber: *Predicting Climate tipping as a Noisy bifurcation: a Review..* International Journal of Bifurcation and Chaos 01/2011; 21:399-423.

B. Horton, J. Sieber, J.M.T. Thompson, M. Wiercigroch: *Dynamics of the nearly parametric pendulum*. International Journal of Non-Linear Mechanics. 01/2011;

J. M. T. Thompson, Jan Sieber: *Climate tipping as a noisy bifurcation: a predictive technique*. 07/2010;

J. M.T. Thompson: *Cutting DNA: Mechanics of the topoisomerase*. The European Physical Journal Special Topics 12/2008; 165(1):175-182.

- J Michael T Thompson: *Introduction. Progress in astronomy: from gravitational waves to space weather..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 10/2008; 366(1884):4359-64.
- J Michael T Thompson: *Introduction. Progress in Earth science and climate studies..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 10/2008; 366(1885):4503-8.
- Brian Launder, J Michael T Thompson: *Preface. Geoscale engineering to avert dangerous climate change..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 09/2008; 366(1882):3841-2.
- Qingjie Cao, Marian Wiercigroch, Ekaterina E. Pavlovskaja, Celso Grebogi, J. Michael T. Thompson: *The limit case response of the archetypal oscillator for smooth and discontinuous dynamics.* International Journal of Non-Linear Mechanics 07/2008;
- John S Reid, Charles H-T Wang, J Michael T Thompson: *James Clerk Maxwell 150 years on..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 06/2008; 366(1871):1651-9.
- B. Horton, J. Sieber, J. M. T. Thompson, M. Wiercigroch: *Dynamics of the elliptically excited pendulum.* 04/2008;
- Qingjie Cao, Marian Wiercigroch, Ekaterina E Pavlovskaja, J Michael T Thompson, Celso Grebogi: *Piecewise linear approach to an archetypal oscillator for smooth and discontinuous dynamics..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 03/2008; 366(1865):635-52.
- Q Cao, M Wiercigroch, E Pavlovskaja, C Grebogi, J Michael, T Thompson: *The SD oscillator and its attractors.* Journal of Physics Conference Series 02/2008; 96(1):012064.
- J. Michael T. Thompson: *Single-molecule magnetic tweezer tests on DNA: bounds on topoisomerase relaxation.* Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/2008; 464(2099):2811-2829.
- J Michael T Thompson: *Ten years of science in Philosophical Transactions A: with the University Research Fellows..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/2008; 365(1861):2779-97.
- Qingjie Cao, Marian Wiercigroch, Ekaterina E Pavlovskaja, Celso Grebogi, J Michael T Thompson: *Archetypal oscillator for smooth and discontinuous dynamics..* Physical Review E 11/2006; 74(4 Pt 2):046218.
- J. Michael T. Thompson, Charles H.-T. Wang: *Emerging frontiers in the physical sciences.* Philosophical Transactions of The Royal Society B Biological Sciences 01/2006; 364:3155-3169.
- J Michael T Thompson, Charles H-T Wang: *Future perspectives in astronomy and the earth sciences..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/2006; 363(1837):2665-73.
- V. G. A. Goss, G. H. M. van der Heijden, J. M. T. Thompson, S. Neukirch: *Experiments on snap buckling, hysteresis and loop formation in twisted rods.* Experimental Mechanics 10/2005; 45(2):101-111.

- J M T Thompson: *Visions of the future by young scientists..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 12/2004; 362(1825):2569-71.
- A A Travers, J M T Thompson: *An introduction to the mechanics of DNA..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 08/2004; 362(1820):1265-79.
- John Michael T Thompson: *Visions of the future by young scientists: in mathematics, physics and engineering.* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 12/2003; 361:2631-2632.
- Nina Morgan, J M T Thompson: *A worthwhile investment: research-council scientists speak out..* Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/2003; 360(1801):2671-80.
- G.H.M. van der Heijden, S. Neukirch, V.G.A. Goss, J.M.T. Thompson: *Instability and self-contact phenomena in the writhing of clamped rods.* International Journal of Mechanical Sciences 01/2003;
- G. H. M. Van Der Heijden, J. M. T. Thompson, S. Neukirch: *A Variational Approach to Loaded Ply Structures.* Journal of Vibration and Control 01/2003; 9:175-185.
- G.H.M. van der Heijden, J.M.T. Thompson: *The chaotic instability of a slowly spinning asymmetric top.* Mathematical and Computer Modelling 01/2002;
- G.H.M. van der Heijden, A.R. Champneys, J.M.T. Thompson: *Spatially complex localisation in twisted elastic rods constrained to a cylinder.* International Journal of Solids and Structures 01/2002;
- S. Neukirch, G.H.M. van der Heijden, J.M.T. Thompson: *Writhing instabilities of twisted rods: from infinite to finite length.* Journal of the Mechanics and Physics of Solids 01/2002;
- J. M. T. Thompson, G. H. M. van der Heijden, S. Neukirch: *Supercoiling of DNA plasmids: mechanics of the generalized ply.* Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/2002; 458.
- J. M. T. Thompson: *Research frontiers in the physical sciences.* Philosophical Transactions of The Royal Society B Biological Sciences 01/2002; 360:2651-2669.
- A.A. POPOV, J.M.T. THOMPSON, F.A. MCROBIE: *CHAOTIC ENERGY EXCHANGE THROUGH AUTO-PARAMETRIC RESONANCE IN CYLINDRICAL SHELLS.* Journal of Sound and Vibration 02/2001; 248(3):395-411.
- John Michael T Thompson: *VISIONS OF THE FUTURE: PHYSICS AND ELECTRONICS.* Cambridge. 01/2001;
- K. J. Spyrou, J. M. T. Thompson: *The nonlinear dynamics of ship motions: a field overview and some recent developments.* Philosophical Transactions of The Royal Society B Biological Sciences 01/2000; 358.
- J.M.T. Thompson, G.H.M. Van der Heijden: *Special issue on the theme of solitary waves and localisation phenomena in elastic structures.* Nonlinear Dynamics 01/2000; 21(1).
- K.J. Spyrou, J.M.T. Thompson: *Damping coefficients for extreme rolling and capsize: an analytical approach.* Journal of Ship Research 01/2000; 44:1-13.
- G.H.M. van der Heijden, J.M.T. Thompson: *Helical and Localised Buckling in Twisted Rods: A Unified Analysis of the Symmetric Case.* Nonlinear Dynamics 12/1999; 21(1):71-99.

- Carlo R. Laing, Allan McRobie, J. M. T. Thompson: *The Post-processed Galerkin Method Applied to Nonlinear Shell Vibrations*. Dynamics & Stability of Systems. 07/1999; 14:163-181.
- F.A. MCROBIE, A.A. POPOV, J.M.T. THOMPSON: *AUTO-PARAMETRIC RESONANCE IN CYLINDRICAL SHELLS USING GEOMETRIC AVERAGING*. Journal of Sound and Vibration 01/1999;
- N. Morgan, J. M. T. Thompson: *Engineering and the physical sciences: the EPSRC takes an informal look into the future*. Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/1999; 357(1763):3205-3220.
- J. M. T. Thompson: *Philosophical Transactions into the 21st Century: an editorial*. Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/1999; 357(1763):3187-3195.
- A. A. Popov, J. M. T. Thompson, J. G. A. Croll: *Bifurcation Analyses in the Parametrically Excited Vibrations of Cylindrical Panels*. Nonlinear Dynamics 10/1998; 17(3):205-225.
- S. Foale, J.M.T. Thompson, F.A. McRobie: *NUMERICAL DIMENSION-REDUCTION METHODS FOR NON-LINEAR SHELL VIBRATIONS*. Journal of Sound and Vibration 08/1998; 215(3):527-545.
- G. H. M. van der Heijden, A. R. Champneys, J. M. T. Thompson: *Spatially complex localisation in twisted elastic rods constrained to lie in the plane*. Journal of the Mechanics and Physics of Solids 01/1998; 47(1):59-79.
- F. B. J. Macmillen, J. M. T. Thompson: *Preface to Nonlinear flight dynamics of high-performance aircraft. A Theme compiled and edited by J. M. T. Thompson and F. B. J. Macmillen*. Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/1998; 356.
- A. A. Popov, J. M. T. Thompson, F. A. McRobie: *LOW DIMENSIONAL MODELS OF SHELL VIBRATIONS. PARAMETRICALLY EXCITED VIBRATIONS OF CYLINDER SHELLS*. Journal of Sound and Vibration 01/1998; 209(1):163-186.
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- G.H.M. van der Heijden, J.M.T. Thompson: *Lock-on to tape-like behaviour in the torsional buckling of anisotropic rods*. Physica D Nonlinear Phenomena 01/1998;
- A. R. Champneys, G. H. M. van der Heijden, J. M. T. Thompson: *The Spatial Complexity of Localized Buckling in Rods with Noncircular Cross Section*. Siam Journal on Applied Mathematics - SIAMAM. 01/1998; 59(1).
- G Baker, F A McRobie, J M T Thompson: *Implications of chaos theory for engineering science*. ARCHIVE Proceedings of the Institution of Mechanical Engineers Part C Journal of Mechanical Engineering Science 1989-1996 (vols 203-210) 01/1997; 211(5):349-363.
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- AR Champneys, GHM van der Heijden, JMT Thompson: *Spatially complex localisation after one-twist-per-wave equilibrium in twisted circular rods with initial curvature*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1997;
- A. R. Champneys, G. W. Hunt, J. M. T. Thompson: *Localization and solitary waves in solid mechanics (Theme Issue of Phil Trans)*. Philosophical Transactions of The Royal Society A Mathematical Physical and Engineering Sciences 01/1997; 355(1732):2077-2081.
- J. M. T. Thompson: *Designing Against Capsize in Beam Seas: Recent Advances and New Insights*. Applied Mechanics Reviews - APPL MECH REV. 01/1997; 50(5).
- A. R. Champneys, J. M. T. Thompson: *A Multiplicity of Localized Buckling Modes for Twisted Rod Equations*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 03/1996;
- M. S. Soliman, J. M. T. Thompson: *Indeterminate Bifurcational Phenomena in Hardening Systems*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1996; 452(1946):487-494.
- J. M. T. Thompson, A. R. Champneys: *From Helix to Localized Writhing in the Torsional Post-Buckling of Elastic Rods*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1996; 452:The Royal Society--138.
- J. M. T. Thompson, J. R. de Souza: *Suppression of Escape by Resonant Modal Interactions: In Shell Vibration and Heave-Roll Capsize*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1996; 452:2527-2550.
- J.M.T. Thompson: *Danger of unpredictable failure due to indeterminate bifurcation*. Zeitschrift für Angewandte Mathematik und Mechanik (ZAMM). 01/1996; 76.
- H.B. Stewart, J.M.T. Thompson, Y. Ueda, A.N. Lansbury: *Optimal escape from potential wells-patterns of regular and chaotic bifurcation*. Physica D Nonlinear Phenomena 01/1995;
- E. Infeld, J.M.T. Thompson: *Vibrational coupling in floating bodies*. Journal of Technical Physics. 01/1995; 36:49-59.
- F.A. McRobie, J.M.T. Thompson: *Driven oscillators, knots, braids and Nielsen-Thurston theory*. IUTAM Symposium, UCL. 10/1994;
- JM Thompson, HB Stewart, Y Ueda: *Safe, explosive, and dangerous bifurcations in dissipative dynamical systems..* Physical review. E, Statistical physics, plasmas, fluids, and related interdisciplinary topics 03/1994; 49(2):1019-1027.
- E. Infeld, J.M.T. Thompson: *Potential functions for floating bodies*. Journal of Technical Physics. 01/1994; 35:319-340.
- Alastair G. MacMaster, J. M. T. Thompson: *Wave Tank Testing and the Capsizability of Hulls*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1994; 446:217-232.
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- F. A. McRobie, J. M. T. Thompson: *Knot-types and bifurcation sequences of homoclinic and transient orbits of a single-degree-of-freedom driven oscillator*. Dynamics and Stability of Systems - DYN STABILITY SYSTEMS. 01/1994; 9(3):223-251.
- E. Infeld, T. Lenkowska, J.M.T. Thompson: *On the interaction of solitons with floating bodies*. Nonlinear World. 01/1994; 1:65-71.
- J. M. T. Thompson, H. B. Stewart: *a Tutorial Glossary of Geometrical Dynamics*. International Journal of Bifurcation and Chaos 02/1993; 3(02):217-.
- E. Infeld, T. Lenkowska, J. M. T. Thompson: *Erosion of the basin of stability of a floating body as caused by dam breaking*. Physics of Fluids A Fluid Dynamics 01/1993; 5:2315-2316.
- F A McRobie, J M T Thompson: *Braids and Knots in Driven Oscillators*. International Journal of Bifurcation and Chaos 01/1993; 3(6):1343-1461.
- C. Y. Liaw, S. R. Bishop, J. M. T. Thompson: *HEAVE-EXCITED ROLLING MOTION OF A RECTANGULAR VESSEL IN HEAD SEAS*. 01/1993;
- A. N. Lansbury, J. M. T. Thompson, H. B. Stewart: *Basin Erosion in the Twin-Well Duffing Oscillator: Two Distinct Bifurcation Scenarios*. International Journal of Bifurcation and Chaos 09/1992; 2(03):505-532.
- MS Soliman, JM Thompson: *Global dynamics underlying sharp basin erosion in nonlinear driven oscillators..* Physical Review A 04/1992; 45(6):3425-3431.
- Mohamed S. Soliman, J. M. T. Thompson: *The Effect of Damping on the Steady State and Basin Bifurcation Patterns of a Nonlinear Mechanical Oscillator*. International Journal of Bifurcation and Chaos 03/1992; 2(01):81-91.
- J.M.T. Thompson: *Global unpredictability in nonlinear dynamics: capture, dispersal and the indeterminate bifurcations*. Physica D Nonlinear Phenomena 01/1992;
- J. M. T. Thompson, R. C. T. Rainey, M. S. Soliman: *Mechanics of Ship Capsize under Direct and Parametric Wave Excitation*. Philosophical Transactions of The Royal Society B Biological Sciences 01/1992; 338:471-490.
- F. A. McRobie, J. M. T. Thompson: *Invariant Sets of Planar Diffeomorphisms in Nonlinear Vibrations*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1992; 436(1897):427-448.
- M. S. Soliman, J. M. T. Thompson: *Indeterminate Trans-Critical Bifurcations in Parametrically Excited Systems*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1992; 439(1907):601-610.
- M. S. Soliman, J. M. T. Thompson: *Indeterminate SubCritical Bifurcations in Parametric Resonance*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1992; 438(1904):511-518.
- Mohamed S. Soliman, J.M.T. Thompson: *Transient and steady state analysis of capsizes phenomena*. Applied Ocean Research. 04/1991;
- Mohamed S. Soliman, J. M. T. Thompson: *Basin Organization Prior to a Tangled Saddle-Node Bifurcation*. International Journal of Bifurcation and Chaos 03/1991; 1(01):107-118.

- F. A. McRobie, J. M. T. Thompson: *Lobe Dynamics and the Escape from a Potential Well*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1991; 435(1895):659-672.
- S. Foale, J.M.T. Thompson: *Geometrical concepts and computational techniques of nonlinear dynamics*. Computer Methods in Applied Mechanics and Engineering 01/1991;
- J. M. T. Thompson, M. S. Soliman: *Indeterminate Jumps to Resonance from a Tangled Saddle-Node Bifurcation*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1991; 432:101-111.
- R.C.T. Rainey, J.M.T. Thompson: *The transient capsizing diagram: a new method of quantifying stability in waves*. Journal of Ship Research 01/1991; 35:58-62.
- H.B. Stewart, J.M.T. Thompson, A.N. Lansbury, Y. Ueda: *Generic patterns of bifurcation governing escape from potential wells*. International Journal of Bifurcation and Chaos 01/1991; 1(1).
- John Michael T Thompson: *Chaos and the danger of unpredictable failure*. Fellowship of Engineering Newsletter, Supplement to the Spring Newsletter. 01/1991; Spring 1991:1-7.
- Mohamed S. Soliman, J. M. T. Thompson: *Stochastic penetration of smooth and fractal basin boundaries under noise excitation*. Dynamics and Stability of Systems. 01/1990; 5(4):281-298.
- J. M. T. Thompson, M. S. Soliman: *Fractal Control Boundaries of Driven Oscillators and their Relevance to Safe Engineering Design*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1990; 428(1874):1-13.
- F. Aghamohammadi, J.M.T. Thompson: *An experimental study of the large amplitude fish-tailing instabilities of a tanker at a single point mooring*. Applied Ocean Research. 01/1990;
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- A.N. Lansbury, J.M.T. Thompson: *Incurive fractals: a robust mechanism of basin erosion preceding the optimal escape from a potential well*. Physics Letters A 01/1990;
- John Michael T Thompson: *Chaos and fractals in vibrating systems*. Proc. Institute of Acoustics. 01/1990; 12:493-499.
- F.A. McRobie, J.M.T. Thompson: *Chaos, catastrophes and engineering*. The New Scientist 01/1990; 126(1720):41-46.
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- J. M. T. Thompson, Y. Ueda: *Basin boundary metamorphoses in the canonical escape equation*. Dynamics and Stability of Systems - DYN STABILITY SYSTEMS. 01/1989; 4:285-294.
- J. M. T. Thompson: *Chaotic phenomena triggering the escape from a potential well*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1989; 421:195-225.

- M.S. Soliman, J.M.T. Thompson: *Integrity measures quantifying the erosion of smooth and fractal basins of attraction*. Journal of Sound and Vibration 01/1989;
- John Michael T Thompson: *Chaotic dynamics and the Newtonian legacy*. Applied Mechanics Reviews 01/1989; 42:15-25.
- G. W. Hunt, H. M. Bolt, J. M. T. Thompson: *Structural Localization Phenomena and the Dynamical Phase-Space Analogy*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1989; 425:245-267.
- John Michael T Thompson, S.R. Bishop: *From Newton to chaos*. Physics Bulletin. 01/1988; 39:232-234.
- J.M.T. Thompson, L.N. Virgin: *Spatial chaos and localization phenomena in nonlinear elasticity*. Physics Letters A 01/1988;
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- J.M.T. Thompson, L.N. Virgin: *Predicting a jump to resonance using transient maps and beats*. International Journal of Non-Linear Mechanics 01/1986;
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- J.M.T. Thompson, G.W. Hunt: *On the buckling and imperfection-sensitivity of arches with and without prestress*. International Journal of Solids and Structures 01/1983; 19(5):445-459.
- J. M. T. THOMPSON, A. R. BOKAIAN, R. GHAFARI: *Subharmonic Resonances and Chaotic Motions of a Bilinear Oscillator*. 01/1983;
- John Michael T Thompson: *On the convection of a cusp in elastic stability*. Journal of the Mechanics and Physics of Solids 01/1983; 31:205-222.
- J. M. T. Thompson: *Complex Dynamics of Compliant OffShore Structures*. Proceedings of The Royal Society A Mathematical Physical and Engineering Sciences 01/1983; 387:407-427.
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