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[26] **THOMAS, P.J.** Zoueshtiagh, F., Ali, R., Carpenter, P.W. (2003) Boundary-Layer Transition Over a Rough Rotating Disk. In: Abstract volume for the *5th EUROMECH Fluid Mechanics Conference*, p. 394, Toulouse, France, 24-28 August.

[25] **THOMAS, P.J.**, Cros, A., Ali, R., Le Gal, P., Schouveiler, L., Carpenter, P.W., Chauve, M.P. 2002 Experiments on the Influence of Wall Compliance on the Laminar-Turbulent Transition of Torsional Couette Flow. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 47, No. 10, pp. 137-138, Program of the 55th Annual Meeting of the Division of Fluid Dynamics, Dallas, Texas, USA, 24-26 November.

[24] **THOMAS, P.J.** 2002 Stars and Stripes in Jars and Pipes : Patterns in Rotating Suspensions. Invited talk given at the *Particle Size Segregation, Mixing and Pattern Formation in Granular*

Media workshop, St. Martins College, Lancaster, UK, 11-16 August 2002.

[23] **THOMAS, P.J.**, Zoueshtiagh, F., del Mar Flexas, M., Linden, P.F., Sommeria, J. 2001 Experiments on Gravity-Driven Surface Currents Simulating Fresh-Water River Discharges into the Ocean. Published as paper presented at the 3rd International Symposium on Environmental Hydraulics, Arizona State University, Tempe, Arizona, USA, 5-8 December 2001.

[22] **THOMAS, P.J.**, Riddell, G.D., King, G.P. 2001 Granular Banding – The Fine Structure. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 46, No. 10, p. 223, Program of the 54th Annual Meeting of the Division of Fluid Dynamics, San Diego, California, USA, 18-20 November 2001.

[21] **THOMAS, P.J.**, del Mar Flexas, M., Zoueshtiagh, F., Linden, P.F., Sommeria, J. 2001 Simulating River Discharges into the Ocean – Small Scale vs. Large Scale Experiments. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 46, No. 10, p. 115, Program of the 54th Annual Meeting of the Division of Fluid Dynamics, San Diego, California, USA, 18-20 November 2001.

[20] **THOMAS, P.J.**, Picarelli, A. 2001 Bubbles in Trouble. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 46, No. 10, p. 60, Program of the 54th Annual Meeting of the Division of Fluid Dynamics, San Diego, California, USA, 18-20 November 2001.

[19] Zoueshtiagh, F., **THOMAS, P.J.** 2001 Granular Ripple Patterns in Fluvial Systems. Paper presented at Sand-Fluid Interface Workshop, 2-5 May, Paris, France

[18] Cros, A., Ali, R., Schouveiler, L., **THOMAS, P.J.**, Le Gal, P., Chauve, M.P., Carpenter, P.W., Davies, C. 2001 Transition of torsional Couette flow between a compliant rotating disk and a stationary rigid wall. In: Symposium book of IUTAM Symposium on *'Flow in collapsible tubes and past other highly compliant boundaries'* University of Warwick, Coventry, 26-30 March, published by Kluwer Academic Publishers.

[17] **THOMAS, P.J.**, Riddell, G.D., Kooner, S., King, G.P. 2000 Flow patterns in two-phase rimming flow. In: *Book of Abstracts*, p.177, 4th EUROMECH Fluid Mechanics Conference, Eindhoven, The Netherlands, 19-23 November, published by Universiteit Eindhoven, ISBN 90-386-2652-5.

[16] Zoueshtiagh, F., **THOMAS, P.J.** 2000 Wavelength scaling of ripple patterns in rotating and non-rotating fluvial systems. In: *Book of Abstracts*, p.178, 4th EUROMECH Fluid Mechanics Conference, Eindhoven, The Netherlands, 19-23 November, published by Universiteit Eindhoven, ISBN 90-386-2652-5.

[15] Zoueshtiagh, F., **THOMAS, P.J.** 2000 Computational and experimental study of spiral patterns in granular media under a rotating fluid. In *Abstract Book* of the 20th International Congress of Theoretical and Applied Mechanics (organized by Int. Union of Theor. and Appl. Mech.), 27 August - 2 September, Chicago, USA. *Abstract Book* published as *Tech. Report*} no. 950, ISSN 0073-5264, Dept. of Theor. and Appl. Mech., University of Illinois at Urbana-Champaign.

[14] Zoueshtiagh, F., **THOMAS, P.J.** 2000 Fluvial Ripple Patterns in Rotating and Non-Rotating Systems. Paper presented at XVII Sitges Euroconference on Coherent Structures in Classical Systems, 5-9 June 2000, Sitges, Spain.

[13] **THOMAS, P.J.**, Zoueshtiagh, F. 2000 A Cellular-Automaton Model to Simulate Spiral Patterns in Granular Media Underneath a Rotating Fluid (Invited Talk). Abstract published in *Program of British Applied Mathematics Colloquium*, UMIST, Manchester, 25-28 April 2000.

[12] **THOMAS, P.J.**, Colley, A.J., Carpenter, P.W., Cooper, A.J., 1999 Experiments on Boundary-Layer Transition Over a Rotating, Compliant Disc. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 44, No. 8, p. 58-59, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, New Orleans, Louisiana, USA, 21-23 November 1999.

[11] Zoueshtiagh, F., **THOMAS, P.J.** 1999 Ripple Patterns in Granular Media Underneath a Rotating Fluid. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 44, No. 8, p. 47, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, New

Orleans, Louisiana, USA, 21-23 November 1999.

[10] Zoueshtiagh, F., **THOMAS, P.J.** 1999 Spiral Patterns Formed by Granular Media Underneath a Rotating Fluid - Experiment vs. Computation. Poster contribution to the *Gallery of Fluid Motion* contest held at the 52nd Annual Meeting of the Division of Fluid Dynamics, New Orleans, USA, 21-23 November 1999. The poster was selected as one of the winning entries to the contest.

[9] **THOMAS, P.J.**, Boote, O. 1998 Experiments on the Effects of Granular Additives on Transitions between Flow States of a Rimming Flow. Abstract of talk published in *of the American Physical Society* (ISSN 0003-0503), 43 , No. 9, p. 1991, Program of the 51st Annual Meeting of the Division of Fluid Dynamics, Philadelphia, Pennsylvania, USA, 22-24 November 1998.

[8] **THOMAS, P.J.**, Linden, P.F. 1997 Experiments on the Influence of a Sloping Bottom on the Dynamics of Boundary Currents in a Rotating System . Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 42, No. 11, p. 2200, Program of the 50th Annual Meeting of the Division of Fluid Dynamics, San Francisco, California, USA, 23-25 November 1997.

[7] Colley, A.J., **THOMAS, P.J.**, Carpenter, P.W. 1997 An experimental study of the stability of the boundary-layer over a rotating disk covered with a compliant coating. Talk presented by THOMAS, P.J. Abstract of talk published in: *Book of Abstracts of the 3rd European Fluid Mechanics Conference*, Göttingen, Germany 15-18 September.

[6] **THOMAS, P.J.** 1996 The response behaviour of seeding particles to a flow region with a large spatial velocity gradient. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 41, No. 9, p. 1804, Program of the 49th Annual Meeting of the Division of Fluid Dynamics, Syracuse, New York, USA, 24-26 November 1996.

[5] + **THOMAS, P.J.**, Linden, P.F. 1996 An experimental study of gravity currents in a rotating frame of reference . Abstract of talk published in *Book of abstracts of the XIXth International Congress of Theoretical and Applied Mechanics*, p.493, Kyoto, Japan, 25-31 August 1996. Paper was awarded the IUTAM Bureau Prize in fluid dynamics for the outstanding contribution by a younger scientist.

[4] **THOMAS, P.J.**, Linden, P.F. 1995 A laboratory simulation of mixing across tidal fronts. Abstract of talk published in *Bulletin of the American Physical Society* (ISSN 0003-0503), 40, No. 12, p. 1997, Program of the 48th Annual Meeting of the Division of Fluid Dynamics, Irvine, California, USA, 19-21 November 1995.

[3] **THOMAS, P.J.** 1994 Pattern formation of granules on the bottom of a differentially rotating tank. Abstract of talk published in *Abstracts of papers of the 2nd European Fluid Mechanics Conference*, Warsaw, Poland, 20-24 September 1994.

[2] Leuchter, O., Amram, K., **THOMAS, P.J.** 1992 Etude theorique et experimentale du comportement des particules a la traversée d'une onde de choc. In: *Proc. of 3éme Congres Francophone de velocimetrie Laser*, pp. 1.3.1-1.3.8, Toulouse, France, 21-24 September 1992 (organized by CERT-ONERA).

[1] **THOMAS, P.J.** 1991 Folgeverhalten von Teilchen unter dem Einfluß großer Geschwindigkeitsgradienten (English Translation of title: Motion of particles under the influence of large velocity gradients). Abstract of talk published in: Proc. STAB Workshop, Nov. 1991, Göttingen, Germany

C) Other Publications

[4] Kitaura, H., Murai, Y., Takeda, Y. **THOMAS, P.J.** (2010) Velocity Vector Field Measurement of Vortex Ring Using UVP (in Japanese). *Trans. Japanese Soc. Mech. Eng.*, 76(12), no. 772.

[3] Pedcenko, A., Molokov, S., **THOMAS, P.J.**, Lukyanov, A., Priede, J. (2008) Transfer Report on the Aluminium Smelting Project, Coventry University, 31 Oct., 24 pages.

[2] **THOMAS, P.J.** 1991 Experimentelle und theoretische Untersuchungen zum Folgeverhalten von Teilchen unter dem Einfluß großer Geschwindigkeits-gradienten in kompressibler Strömung (English translation of title: Experimental and theoretical investigations of the particle lag of particles under the influence of large velocity gradients in compressible flow. Ph.D. Thesis, Georg-August-Universität Göttingen. Published by Deutsche Forschungsanstalt für Luft- und Raumfahrt (DLR) (German Aerospace Research Establishment) as *Research Report* DLR-FB 91-25, ISSN 0939-2963.

[1] **THOMAS, P.J.** 1988 Experimentelle Untersuchung von Stabwirbeln in Wasser (English translation of title: Experimental investigation of rectilinear vortices in water, Diplom Thesis, Georg-August-Universität Göttingen. Published by Max-Planck-Institut für Strömungsforschung as Report 15/1988, ISSN 0436-1199.

D) Invited National and International Research Seminars since 1994

[45] **THOMAS, P.J.** (2016) Sharks, Aeroplanes and the Rotating-Disk Boundary Layer. Seminar given to Department of Engineering, University of Cambridge, Cambridge, UK, 25 April.

[44] **THOMAS, P.J.** (2016) Complexity, Segregation and Pattern Formation in Particle-Laden Rotating-Drum Flows. Seminar given to Department of Mathematics, University of Cardiff, Cardiff, UK, 16 February.

[43] **THOMAS, P.J.** (2015) Effects of Surface Roughness on the Stability of the Rotating-Disk Boundary Layer, Seminar given to German Aerospace Centre (Deutsche Forschungsanstalt für Luft- und Raumfahrt, DLR), Göttingen, Germany, 2 October.

[42] **THOMAS, P.J.** (2015) Particle-Laden Flows in Rotating Drums: The Silent Secrets, Seminar given to the Department of Chemical Engineering, University of Cambridge, Cambridge, UK, 11 February.

[41] **THOMAS, P.J.** (2015) Particle-Laden Flows in Rotating Drums: The Silent Secrets, Seminar given to the KTH Royal Institute of Technology, School of Engineering Sciences, Stockholm, Sweden, 29 January.

[40] **THOMAS, P.J.** (2011) Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to Department of Engineering, University of Cambridge, Cambridge, UK, 29 November.

[39] **THOMAS, P.J.** (2010) Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to Department of Mathematics, University of Leicester, Leicester , UK, 25 March.

[38] **THOMAS, P.J.** (2010) Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to School of Mechanical an Systems Engineering, University of Newcastle, Newcastle, UK, 18 March.

[37] **THOMAS, P.J.** (2009) Silent Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to BP Institute of Multiphase Flow, University of Cambridge, Cambridge, UK, 12 March.

[36] **THOMAS, P.J.** (2009) Silent Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to School of Mathematics, University of Bristol, Bristol, UK, 5 March.

[35] **THOMAS, P.J.**, (2009) Silent Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Department of Mathematical Sciences, Applied Mathematics Research Centre, University of Coventry, Coventry, UK, 5th February.

[34] **THOMAS, P.J.**, (2008) Experiments on Particle-Laden Rimming Flow, given to the Department of Mathematics, University of Limerick, Limerick, Ireland, 26th September.

[33] **THOMAS, P.J.**, (2008) Grains, Oils, Oceans and Eddy Decay, given to the School of Mathematics, University of Birmingham, Birmingham, UK, 27th February.

[32] **THOMAS, P.J.** 2007 From Coastal Currents to Vortex Rings: How background system rotation affects their dynamics. Seminar given to Department of Engineering Science, University of Liverpool, UK, 28 March.

[31] **THOMAS, P.J.** 2007 From Coastal Currents to Vortex Rings: How background rotation affects their dynamics. Seminar given to School of Engineering Science, University of Southampton, UK, 14 February.

[30] **THOMAS, P.J.** 2006 From Coastal Currents to Vortex Rings: Experiments Investigating Effects of Background Rotation on their fluid dynamics. School of Physics, Trinity College, Dublin, Ireland, 27 January.

[29] **THOMAS, P.J.** 2005 From Coastal Currents to Vortex Rings: Effects of Background Rotation on their Fluid Dynamics. Department of Aeronautics, Imperial College, London, UK, 16 November.

[28] **THOMAS, P.J.** 2005 From Coastal Currents to Vortex Rings: Effects of Background Rotation on their Fluid Dynamics. School of Mathematics, University of Birmingham, Birmingham, UK, 3 November.

[27] **THOMAS, P.J.** 2005 (a) Modeling Oceanographic Coastal Currents in the Laboratory: Small-scale vs. Large-scale Experiments. (b) Investigation of the Influence of Background Rotation on the Dynamics and the Stability of Vortex Rings – Preliminary Results) Two-part seminar given to School of Mathematics, Cardiff University, Cardiff, UK, 16 March.

[26] **THOMAS, P.J.** 2004 (a) Modeling Oceanographic Coastal Currents in the Laboratory: Small-scale vs. Large-scale Experiments. (b) Investigation of the Influence of Background Rotation on the Dynamics and the Stability of Vortex Rings – Preliminary Results) Two-part seminar given to Department of Physics, Eindhoven University of Technology, Eindhoven, The Netherlands, 10 December.

[25] **THOMAS, P.J.** 2004 (a) Modeling Oceanographic Coastal Currents in the Laboratory: Small-scale vs. Large-scale Experiments. (b) Investigation of the Influence of Background Rotation on the Dynamics and the Stability of Vortex Rings – Preliminary Results) Two-part seminar given to Laboratoire de Mécanique de Lille, Université des Sciences et Technologies de Lille, Lille, France, 9 December.

[24] **THOMAS, P.J.** 2004 Modeling Oceanographic Coastal Currents in the Laboratory: Small-scale vs. Large-scale Experiments. Seminar given to Department of Civil and Environmental Engineering, Imperial College, London, UK, 2 February.

[23] **THOMAS, P.J.** 2003 Granules – Wet and Rotating. Invited lecture presented at the Granular and Particle-Laden Flows program held at the Isaac Newton Institute for Mathematical Sciences, Cambridge, UK between September to December, talk given on 16 September.

[22] **THOMAS, P.J.** 2003 Mathematics vs. The Real World – On the delights of being an experimental philosopher. Invited guest lecture given at the LMS/EPSRC sponsored instructional course on hydrodynamic stability theory, held at Keele University, Department of Mathematics, June 22-27, talk given on 26 June.

[21] **THOMAS, P.J.** 2002 Laboratory Simulations of Gravity-Driven Coastal Currents. Seminar given to Southampton Oceanography Centre, Southampton, UK, 7 November.

[20] **THOMAS, P.J.** 2002 Laboratory Simulations of Gravity-Driven Coastal Currents. Seminar given to Department of Atmospheric, Oceanic and Planetary Physics, University of Oxford, Oxford, UK, 5 November.

[19] **THOMAS, P.J.** 2002 Granular spirals under rotating fluids. Seminar given to Institut de

Recherche sur les Phénomènes Hors Equilibre, Universités d'Aix Marseille I et II, Marseille, France, 12 April.

[18] **THOMAS, P.J.** 2001 Are sandstorms in fishtanks Mars in a nutshell? Seminar given to Department of Engineering, University of Cambridge, Cambridge, UK, 17 May.

[17] **THOMAS, P.J.** 2001 What ‘s Dirt Got To Do With It? – Patterns in Suspensions, Seminar given to Department of Physics and Astronomy, University of Manchester, 14 March.

[16] **THOMAS, P.J.** 2001 Are sandstorms in fishtanks Mars in a nutshell? Seminar given to Department of Mathematics, University of Bristol, Bristol, UK, 1 February.

[15] **THOMAS, P.J.** 2000 Are sandstorms in fishtanks Mars in a nutshell? Seminar given to Department of Mathematics, University College London, London, UK, 4 December.

[14] **THOMAS, P.J.** 2000 Sandstorms in fishtanks. Seminar given to Laboratoire des Ecoulements Géophysiques et Industriels (LEGI), Grenoble, France, 26 October.

[13] **THOMAS, P.J.** 2000 Are sandstorms in fishtanks Mars in a nutshell? Seminar given to School of Engineering Science, University of Southampton, UK, 31 May.

[12] **THOMAS, P.J.** 1999 Pattern formation in solid-liquid two-phase flows: Two experimentally observed new phenomena. Seminar given to Institut de Recherche sur les Phénomènes Hors Equilibre, Universités d'Aix Marseille I et II, Marseille, France, 9 June.

[11] **THOMAS, P.J.** 1998 Overview of the research activities of the fluid dynamics group of the School of Engineering at Warwick. Lunchtime Seminar given to Department of Applied Mathematics and Theoretical Physics, Geophysical Fluid Dynamics Group, University of Cambridge, Cambridge, UK, ca. October.

[10] **THOMAS, P.J.** 1998 Rotierende Kübel, rasende Krümel und Spiralen wie Sand am Meer. Seminar given to Institut für Experimentelle Physik, Otto-von-Guericke Universität, Magdeburg, Germany, 6 April.

[9] **THOMAS, P.J.** 1997 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Physics and Astronomy, University of Manchester, Manchester, UK,17 December.

[8] **THOMAS, P.J.** 1997 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to School of Mathematical and Information Sciences, Coventry University, Coventry, UK, 27 October.

[7] **THOMAS, P.J.** 1997 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Physics, Technical University Eindhoven, The Netherlands, 27 March.

[6] **THOMAS, P.J.** 1995 Spiralmusterbildung aus der Reorganisation kleiner Partikel am Boden eines flüssigkeitsgefüllten, beschleunigt rotierenden Behälters. Seminar given to Max-Planck-Institut für Strömungsforschung and Institut für Angewandte Mechanik, Georg-August-Universität, Göttingen, Germany, 25 April.

[5] **THOMAS, P.J.** 1995 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Engineering, University of Warwick, Coventry, UK, 27 January.

[4] **THOMAS, P.J.** 1995 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Physics, University of Oxford, UK, 16 January.

[3] **THOMAS, P.J.** 1994 Spiral-pattern formation of granules on the bottom of a fluid-filled tank". Seminar given to Hermann-Föttinger-Institut für Thermo- und Fluiddynamik, Technische Universität Berlin, Berlin, Germany, 20 May.

[2] **THOMAS, P.J.** 1994 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Applied Mathematics and Theoretical Physics, University of

Cambridge, Cambridge, UK, 28 October.

[1] **THOMAS, P.J.** 1994 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Zentrum für Angewandte Raumfahrttechnologie und Mikrogravitation (ZARM), University of Bremen, Germany, 19 May.

E) Internal Research Seminars since Commencement of Position at Warwick in August 1995

[9] **THOMAS, P.J.** (2017) Sharks, Aeroplanes and the Rotating-Disk Boundary Layer, Seminar given to Fluid Dynamics Research Centre, School of Engineering, University of Warwick, Coventry, 21 June.

THOMAS, P.J. (2015) Particle-Laden Flows in Rotating Drums: The Silent Secrets, Seminar give to MIR@W, Understanding Small-Scale Flows Workshop, Dept. of Mathematics, 8 June 2015

[8] **THOMAS, P.J.** (2009) Silent Secrets of a Seemingly Simple System: Segregation in Particle-Laden Rimming Flow, Seminar given to Fluid Dynamics Research Centre, School of Engineering, University of Warwick, Coventry, 4 March.

[7] **THOMAS, P.J.** (2008) Pattern Formation from Particle Segregation in Particle-Laden Flow, invited talk to be given at the workshop on "Pattern formation in particle systems" held at the Department of Mathematics, University of Warwick, UK, 25th February.

[6] **THOMAS, P.J.** 2005 Vortex Rings : Effects of Background Rotation on their Dynamics, Seminar given to Fluid Dynamics Research Centre, School of Engineering, University of Warwick, Coventry, UK, 5 October.

[5] **THOMAS, P.J.** 2004 Modelling Oceanographic Coastal Currents in the Laboratory: Small-scale vs. large-scale experiments, Seminar given to Fluid Dynamics Research Centre, School of Engineering, University of Warwick, Coventry, UK, 21 April.

[4] **THOMAS, P.J.** 2002 Sandstorms in Fishtanks : Granular Spiral Patterns Under Rotating Fluids, Department of Physics, University of Warwick, Coventry, UK, 27 October.

[3] **THOMAS, P.J**. 1999 Something old, something new, something borrowed and something blue – Some things that granules do. Seminar given to Fluid Dynamics Research Centre, School of Engineering, University of Warwick, Coventry, UK, 27 October.

[2] **THOMAS, P.J.** 1997 A layman's introduction to 2D turbulence. Talk given at MIR@W, 2D Turbulence Day held at Mathematics Department, University of Warwick, Coventry, UK, 12 November.

[1] **THOMAS, P.J.** 1996 Spiral-pattern formation of granules on the bottom of a fluid-filled tank. Seminar given to Department of Mathematics, University of Warwick, Coventry, UK, 21 October.