BRIEF CURRICULUM VITAE

Prof. Dr. Jacobus Pieter van der Weele

Jacobus Pieter (Ko) van der Weele was born in the Netherlands in 1959. He graduated in theoretical physics with Nobel laureate Prof. Dr. Gerard 't Hooft (University of Utrecht, 1983) and did his PhD with Prof. Dr. Hans Capel (University of Amsterdam, 1987). Since then he has been working at the University of Twente (1987-2005), the Hellenic Open University (2006-2007) and the University of Patras (2006-now), where he holds the chair of "Differential Equations with Applications in the Physical and/or Economical Sciences and/or Technology".

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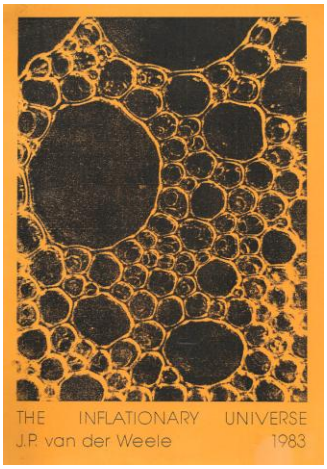
University of Patras, E-mail: weele@math.upatras.gr
26500 Patras, Greece URL: https://www.math.upatras.gr/en/people/weele

Date and place of birth: 17 December 1959, Bruinisse, The Netherlands
Citizenship: Dutch, **Marital status:** Married, two children

EDUCATION

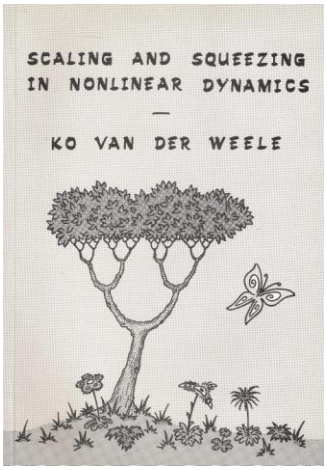


University of Utrecht, The Netherlands:

- **1980: B.Sc. in Physics and Chemistry**
- **1983: M.Sc. in Theoretical Physics and Mathematics**, with diploma thesis on "The Inflationary Universe" under supervision of Nobel laureate Prof. Dr. G. 't Hooft.
- **1980, 1983: Licenses for Teaching Physics, Mathematics,** and **Chemistry**.

University of Amsterdam, The Netherlands:

- **1987: Ph.D. in Theoretical Physics**, with PhD thesis on "Scaling and Squeezing in Nonlinear Dynamics" under supervision of Prof. Dr. H.W. Capel.



PROFESSIONAL EXPERIENCE

Teacher of Physics, College Blaucapel, Utrecht, The Netherlands, Jan. 1984 – Aug. 1984

Research Assistant, Institute of Theoretical Physics, University of Amsterdam, The Netherlands, April 1984 – Nov. 1987

Assistant Professor, Department of Technical Physics, University of Twente, The Netherlands, Dec. 1987 – Dec. 2005 (tenure).

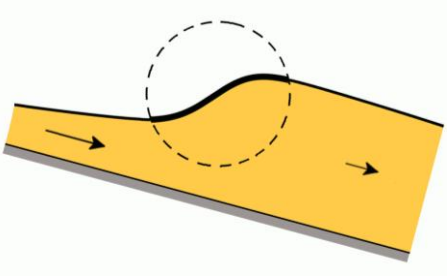
Associate Professor, Department of Mathematics, University of Patras, Greece, Jan. 2006 – July 2010 (tenure).

Instructor of Mathematics and Physics, Department of the Physical Sciences, Hellenic Open University, Greece, Sept. 2006 – Aug. 2007.

Professor, Department of Mathematics, University of Patras, Greece, Aug. 2010 – today (tenure).

Visiting Lecturer/Researcher/Professor at the Universities of Patras (Jan.-March 1998, May 2003), Twente (August 2006, April-May 2013) and Manchester (June 2013).

CURRENT RESEARCH INTERESTS



- Dynamical Systems and Chaos; Mathematical Modeling; Applications of Differential Equations in the Physical Sciences; Collective Phenomena and Wave Propagation in Granular Matter; Fluid Mechanics.

TEACHING & SUPERVISING

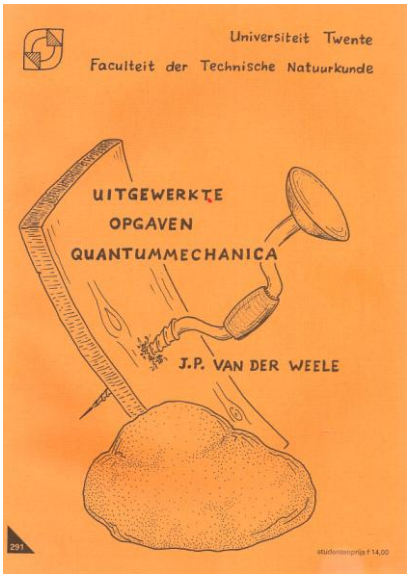
College Blaucapel, Utrecht (1984): Physics classes and practicum covering the secondary school curriculum: Optics, Newtonian Mechanics, the Gas Laws, Electricity, etc.

University of Amsterdam (1984-1987): *MSc courses*: (1) Nonlinear Dynamics and Chaos (Advanced Students Seminar), (2) Theory of the Solid State, (3) tutorial classes on Statistical Physics III. *Tutored MSc theses*: 2.

University of Twente (1987-2005): *BSc courses:* (4) Classical Newtonian Mechanics, (5) Classical Mechanics: Lagrangian and Hamiltonian formalism, (6) Quantum Mechanics I, (7) Quantum Mechanics II, (8) Quantum Mechanics Computer Classes, (9) Statistical Physics, (10) Introduction to Contemporary Physics, *MSc courses:* (11) Special Theory of Relativity, (12) Advanced Statistical Mechanics, (13) Physics of Sports, (14) Dynamics of Nonlinear Systems, (15) Physics of Granular Matter. *Supervised BSc projects*: 3, *MSc theses, MSc projects, and internship reports*: 32, *PhD theses*: 4.

Hellenic Open University (2006-2007): *BSc courses*: (16-18) Introduction to the Physical Sciences: I. Mathematics, II. Classical Mechanics, III. Electromagnetism.

University of Patras (2006-present): *BSc courses*: (19) Real Analysis IV (Vector Analysis and Fourier Series), (20) Fluid Mechanics, (21) Special Theory of Relativity, (22) Chaos and Fractals, (23) Ordinary Differential Equations I, (24) Dynamical Systems, (25) Partial Differential Equations, *MSc courses*: (26) Industrial Mathematics I, (27) Industrial Mathematics II, (28) Applications of Mathematics in Science and Technology, (29) Mathematical Modeling, (30) Nonlinear Wave Equations, (31) Nonlinear Dynamical Systems and Chaos, (32) Topics in Differential Equations. *BSc theses:* 4, *MSc theses and internship reports:* 10, *PhD theses:* 2.



Course books:

1. "Uitgewerkte opgaven Quantummechanica" (Quantum Mechanics Exercise Book I), in Dutch, University of Twente, 1995, 125 pages.
2. "Tweede serie opgaven Quantummechanica" (Quantum Mechanics Exercise Book II), in Dutch, University of Twente, 1997, 95 pages.
3. "Σειρές Φουριέ" (Fourier Series), in Greek, University of Patras, 2007, 120 pages.

Mathematical Olympiads (2013, 2014):

Training and supervision of two student teams, each consisting of six selected, extraordinarily talented students from the Department of Mathematics, University of Patras, to take part in the South-Eastern European Mathematics Olympiad for University Students *"SEEMOUS"*: Athens (March 2013) and Iaşi, Rumania (March 2014). Overall result: 1 championship, 2 gold medals, 2 silver, 7 bronze, and broad coverage in the press.

International Summer Schools:

Postgraduate lecture courses, on a variety of subjects, in the following Schools:

- Four times *International Summer School "Let's Face Chaos through Nonlinear Dynamics"*, University of Maribor, Slovenia: 1996, 2002, 2005, 2008.
- Fifteen times *Panhellenic Summer School on Complexity and Chaotic Dynamics of Nonlinear Systems*: Patras, 1996; Thessaloniki, 1997; Livadeia, 1998; Patras, 1999; Patras, 2001; Volos, 2005; Thessaloniki, 2006; Patras, 2007; Athens, 2008; Patras, 2009; Patras, 2010; Athens, 2018; Athens 2019; Athens 2021; Chania 2022.
- Two *Topical Courses at the Center of Research and Applications of Nonlinear Systems,* University of Patras, Greece: February 1998, May 2003.
- *PhD-School of the Dutch Research School Theoretical Physics*, Jonkerbosch, Nijmegen, The Netherlands: May 2002.
- Two *J.M. Burgers Postgraduate School on Granular Matter*, University of Twente, The Netherlands: February 2003, October 2005.
- Five times *European PhD School "Mathematical Modeling of Complex Systems"*: Patras Greece 2011; Pescara Italy 2012; Athens Greece 2014; Patras Greece 2016; Pescara Italy 2019.

Supervision and guidance of student theses & internship reports:

University of Amsterdam (together with Prof. Dr. H.W. Capel):

1. T. Post (MSc thesis): «Order and chaos in area-preserving maps» (1987)
2. R. Kluiving (MSc thesis): «The period doubling route to chaos» (1987)

University of Twente:

3. A.J. Derking (internship report): «The parametrically driven coupled pendulums: an experimental study» (1990)
4. G.J.L. Bos (internship report): «Phenomenology of weakly coupled parametrically driven pendulums in practice» (1991)
5. J. Nijhof (MSc thesis): «Dynamics of two coupled pendulums in parametric resonance» (1991)
6. M.T. Westra (MSc thesis): «Resonances in symmetric Hamiltonian systems» (1994)
7. T. Claassen (MSc thesis): «Phase space symmetries and bifurcations in dynamical systems» (1995)
8. E. de Kleine (MSc thesis): «Mode competition in a system of two parametrically driven pendulums: the dissipative case» (1995)
9. J.R. Ross (MSc thesis): «The dynamics of a system of two parametrically driven pendulums with nonlinear coupling» (1995)
10. C. Berendsen, H. van Bergen, H. Biemans, and P. Thomasson (freshmen group project): «The bouncing ball: an experimental comparison of various balls» (1996)
11. M.M. Kettenis (MSc thesis): «Symmetry breaking and mode interaction in a system of two coupled nonlinear oscillators» (1996)
12. S. Ey, A. Mewe, R. Nelissen, and T. Staijen (freshmen group project): «The bouncing ball: an experimental study» (1997)
13. P. Timmerman (MSc thesis): «Friction» (1997)
14. M. Oosterhof (MSc thesis): «Mode interaction in a system of four parametrically driven coupled pendulums and its application to animal gaits» (1997)
15. R. Ikink, M. Middel, A. Tempel, F. Smits, and T. Staijen (masters group project): «Granular dynamics: why the large beads rise to the top» (1997)
16. J.M. Bergamin (MSc thesis): «Localized states in quantum-chaotic systems and anharmonic lattices» (1999)
17. H. te Kulve (MSc thesis): «Bouncing ball: the influence of spin and Hertz's theory» (1999)
18. R. Bergmann, A. van Bilsen, X. van Doornum, R. Ikink (masters group project): «Maxwell's demon in a granular gas: experiments and construction of an MD simulator» (2001)

19. J.L. van Velsen (masters individual project): «Clustering beads: the distribution function of the asymmetry parameter» (2001)
20. A. van Bilsen, H. Borel, J. Hegeman, and J. Hessels (masters group project): «Granular dynamics: separation of particles through vibration» (2001)
21. E.J. van Doorn, T. Mekkes, H. van Tooren, and M. Mulder (masters group project): «Granular fountains and Maxwell's demon» (2001)
22. M. Kloosterman (MSc thesis): «Running patterns versus clustering in a granular gas: Maxwell's Demon in a tilted setup» (2001)
23. R. Arts, D. van Gils, and R. Snijdewind (masters group project): «The granular ratchet: an experimental study» (2001)
24. R. Stelwagen, K. Böhm, and S. van Asperen (group project for the minor Physics of Sports): «The physics of swimming: an experimental study» (2001)
25. R. Stelwagen (MSc thesis): «The flight of a baseball» (2001)
26. R. Arts, D. van Gils, and R. Snijdewind (masters group project): «The granular ratchet: an experimental study» (2001)
27. F.D. Hofman and M.C.F. Vervoorn (masters group project): «Granular long jump over boxes: adaptation of Eggers' nearest-neighbor model» (2001)
28. S. van der Meer (internship report): «Segregation in polydisperse granular mixtures» (2002)
29. A. van Bilsen (MSc thesis): «Fluxes and coarsening of a compartmentalized granular gas: a Molecular Dynamics approach» (2002)
30. P.G. Eshuis (MSc thesis): «Leidenfrost effect and coarsening in a granular gas» (2003)
31. T. Mekkes (internship report): «Feasibility study of granular flux models on the motorway» (2003)
32. T. Rozendaal, D. Martens, and C. Crane (masters group project): «Maxwell's Demon in a granular gas: Experiments on the birth and breakdown of clusters» (2003)
33. R. Bos (MSc thesis): «Towards a phase diagram of vertically vibrated granular matter» (2004)
34. H. Derking, S. Hofmans, and W. Wormgoor (masters group project): «Leidenfrost vs. Brazil nut: the granular cliff-hanger effect» (2004)
35. R.M. Snijdewind (internship report): «Particle tracking in granular matter» (2004)
36. R. Rauhé (MSc thesis): «Granular matter: cluster-to-cluster transport and drag on impacting objects» (2004)
37. T. Homan, A. Maas, J. van der Molen, and J.H. Weijs (freshmen group project): «The Leidenfrost effect» (2005)

University of Patras:

38. G. Kanellopoulos (MSc thesis): «Critical Flow of Granular Matter on a Conveyor Belt» (2008)
39. R. Laarman (internship report): «Coarsening of traffic flow on a circular closed highway» (2008)
40. Ch. Tsiavos (MSc thesis): «Pattern Formation and Critical Flow of Granular Matter in a Two-Dimensional Tilted Transport System» (2009)
41. S. Sklaveniti (BSc thesis): «On the geometric interpretation of div, grad and curl» (2011)
42. E.E. Mouloupoulou (BSc thesis): «Gradient, divergence, curl, Laplacian: ubiquitous operators in the physical sciences» (2011)
43. A. Daskalaki (MSc thesis): «Dimensional Analysis» (2011)
44. P. Verra (MSc thesis): «Self-Similarity Solutions in Fluid Dynamics» (2014)
45. V. Stamouli (MSc thesis): «Soliton solutions of the sine-Gordon equation: from the continuous case to the discrete» (2014)
46. D. Kokkinakis (MSc thesis): «Ostwald ripening: mathematical modeling and applications» (2015)

47. M. Mazaraki (BSc thesis): «The Cup of Pythagoras» (2016)
48. A. Liberi (MSc thesis): «Mathematical Modeling of an Epidemic with Spatial Spreading» (2019)
49. N. Sarmas (MSc thesis): «Travelling Wave Solutions of KdV-like equations» (2019)
50. B. Tzamarias (BSc thesis): «Hamiltonian Dynamical Systems in Classical Mechanics and Fluid Dynamics» (2020)
51. D.-M. Katseli (MSc thesis): «Travelling Waves in Cyclic Transport Systems» (2020)

PhD theses supervised:

1. Ir. E.J. Banning, *On the Dynamics of Two Coupled Parametrically Driven Pendulums: Mode Competition and Transitions to Chaos*, Department of Technical Physics, University of Twente, The Netherlands (1993–1997). Dr. ir. E.J. Banning now works for the Shell Oil Company in the Netherlands.
2. René Mikkelsen M.Sc., *Granular Dynamics: Clustering and Shear Flows*, Department of Science and Technology, University of Twente, The Netherlands (2001–2005). Dr. R. Mikkelsen now works for FMC Technologies, Brazil.
3. Ir. Peter G. Eshuis, *Collective Dynamical Phenomena in Vibrated Granular Matter*, Department of Science and Technology, University of Twente, The Netherlands (2003–2008). Dr. ir. P.G. Eshuis now works for Philips Healthcare Technologies, The Netherlands.
4. Ir. Henk-Jan van Gerner, *Newton vs. Stokes: Competing Forces in Granular Matter*, Department of Science and Technology, University of Twente, The Netherlands (2004–2009). Dr. ir. H.J. van Gerner now works for the National Aerospace Laboratory, The Netherlands.
5. Giorgos Kanellopoulos M.Sc., *Transport Phenomena and Clustering in Dynamical Systems consisting of Granular Matter*, Department of Mathematics, University of Patras, Greece (2008–2013). Dr. G. Kanellopoulos is currently employed as high school teacher in Monastiraki Vonitza, Greece.
6. Dimitrios Razis M.Sc., *Nonlinear Waves in the Flow of Granular Matter*, Department of Mathematics, University of Patras, Greece (2013–2020). Dr. D. Razis is now a post-doctoral lecturer at the University of Thessaly, Volos, Greece.

HONORS AND AWARDS

More than 130 invited talks at international conferences, summer schools, colloquia and seminars. Some highlights: Key-note lecture at the Spring Meeting of the German Physical Society, Regensburg: *Birth and Sudden Death of a Granular Cluster* (2002); Plenary after-dinner speech at the Annual Meeting of the Fluid Physics Division of the Dutch Physical Society: *Many Balls in the Air* (2005); Key-note lecture at the Dynamics Days Europe, Loughborough, UK: *Phase Transitions in Vibrated Granular Matter* (2007); Opening address at the Meeting on *Complex Matter*, European Conference on Complex Systems ECCS'12, Brussels (2012); Invited lecture at the Conference Physics of Fluids for the 21st Century, University of Twente, NL: *The granular monoclinal wave and beyond* (2018); Lecture Series on *Nonlinear Waves: the Dynamical Systems Approach* at the 6th European PhD School/Conference on Mathematical Modeling of Complex Systems, Pescara, Italy (2019).

Three winning entries in the annual "Gallery of Fluid Motion" of the American Physical Society: *Granular Eruptions* (2002), *Competitive Clustering in a Granular Gas* (2003), L*eaping shampoo and the stable Kaye effect* (2007); the corresponding three 3-minute videos can be viewed at http://pof.aip.org/gallery_of_fluid_motion.

Teacher of the Year 1991, 1992, 1994, 2005, Department of Physics, University of Twente.

Professional career sketch titled «Ko van der Weele, theoretisch fysicus» included in the Dutch physics book for secondary schools "Systematische Natuurkunde, kernboek N2" by J.W. Middelink *et al*. (Nijgh Versluys Publ., Baarn, The Netherlands, 2000) pp. 113-116.

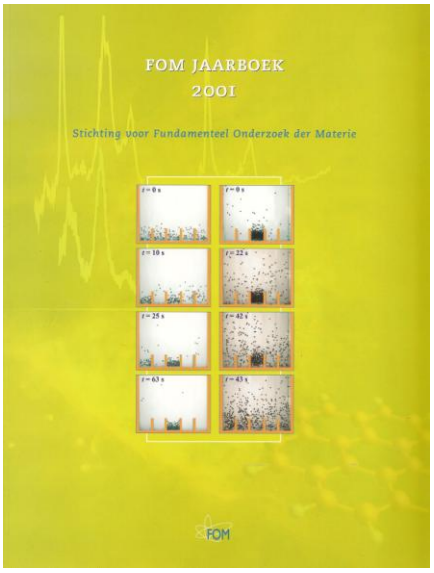
Broad coverage in the national and international press of the work on clustering beads in vibrated compartmentalized containers, in the context of the research programme "*Maxwell's Demon in a Granular Gas*" (see Research Grants below). Also, the experiment was filmed and featured in a science quiz for Dutch television, November 2005.

The work on leaping shampoo and the stable Kaye effect (published in JSTAT, 2006 and Phys. Fluids, 2007) was covered in Nature News (Philip Ball, *Puzzle of leaping liquids solved*, 6 April 2006) and in Nature (News in Brief, *Bouncing fluids make a splash*, 13 April 2006); the 3-minute video of the Kaye effect was a winning entry in the annual "Gallery of Fluid Motion" of the APS in 2006; the same work inspired a problem in the finals of the 21st International Young Physicists' Tournament (a worldwide annual competition for high school students) in Trogir, Croatia, 2009. The tournament was won by the German team, who in the finals presented an experimental and theoretical study of the Kaye effect.

Member of Scientific Panels: Dutch Organization for the Physical Sciences FOM (Project-ruimte 2001), National Committee for selection of Excellent Young Researchers (VENI 2003), Selection Committee for proposals in the Special Research Program Turbulence (2004).

RESEARCH GRANTS AND SCIENTIFIC PROGRAMS

As Principal Investigator:



- ***Complex Dynamics and Synchronization of Nonlinear Oscillators***, funded by the University of Twente, The Netherlands, 1993-1997.
- ***Maxwell's Demon in a Granular Gas***, funded by the Dutch National Science Foundation FOM, 2001-2005. *Featured on the cover of the FOM Year Book 2001*.
- ***Newton vs. Stokes: Competing Forces in Granular Matter***, funded by the National Science Foundation FOM, The Netherlands, 2004-2009.
- ***Nonlinear Transport and Wave Transmission in Technology and Medicine***, funded via the Carathéodory Programme of the Univ. of Patras, Greece, 2007-2010.
- ***Complex Matter***, funded by the ERA-Net "Complexity", European Union, 2011-2012. This project was an international collaboration between four research groups from (1) the University of Patras, Greece, (2) the Free University of Brussels, Belgium, (3) the University of Manchester, UK, and (4) the University of Twente, the Netherlands. Information about the activities can be found at the project's website http://complexmatter.wordpress.com.

As Member of the Research Team (a selection):

- *Rapid granular matter at its edge: Exploring critical phenomena and ratchets*, PI Prof. D. Lohse, funded by the National Science Foundation FOM, The Netherlands, 2003-2008.
- *Mathematical Modeling of Complex Systems with Applications to Biomedicine, Physics and the Technology of Materials ("MACOMSYS")*, PI Prof. T. Bountis, University of Patras, co-financed by the European Union and Greek national funds through the Program THALES, 2012-2015.
- *Complex Visco-Elastic and Visco-Plastic Materials: From Microscopic Structure and Dynamics to Macroscopic Flow ("COVISCO")*, PI Prof. G. Petekidis, IESL-FORTH, University

of Crete, co-financed by the European Union and Greek national funds through the Program THALES, 2012-2015.

As National Representative:

- *European COST-Action MP1305, "Flowing Matter"*, PI F. Toschi, Technical University of Eindhoven, The Netherlands, financed by the European Union, 2014-2018.

DISCIPLINE-RELATED ACTIVITIES

Referee for the following journals:

• Physical Review Letters • Physical Review E • Physical Review Fluids • Journal of Fluid Mechanics • Physics Letters A • Europhysics Letters • Physica A • Physica D • Am. J. Phys. • Proc. Royal Soc. London Series A • Zeitschrift für Physik B: Condensed Matter • Granular Matter • Journal of Chemical Physics • Eur. Phys. J. • IMA Journal of Applied Mathematics. Book reviewer for • Contemporary Physics.

Organization of scientific meetings (a selection):

- Annual "Spring Meeting on Nonlinear Dynamics" (University of Twente, 1988, 1989, 1990, 1991) and editorship of the corresponding conference proceedings.
- Chairman of the monthly "General Physics Colloquium" (University of Twente, 1998–2003).
- Co-organizer of the "International NWO-Symposium on Nonlinear Systems" (2002, 2004).
- Co-organizer or Member of the Advisory Board for various Conferences/Summer Schools on "Nonlinear Science and Complexity" (e.g. Patras 2007, Athens 2019).
- Member of the International Advisory Board for the "Dynamics Days Europe 2008" (University of Delft, The Netherlands, 2008).
- Co-organization of the First European Ph.D. School on "Mathematical Modeling of Complex Systems" (University of Patras, 2011).
- Co-organization of the Satellite Meeting "Phase Transitions and Pattern Formation in Complex Multi-Particle Systems" (ECCS'12 Conference, Brussels, Belgium, 2012).
- Involvement in the organization of the Fifth European Ph.D. School/Conference on "Mathematical Modeling of Complex Systems" (Patras, Greece, 2015).

Managerial positions (a selection):

- Committee Member "Mathematics in the Physics Curriculum" (Univ. of Twente, 1994-2002).
- Chairman "General Physics Colloquium" (University of Twente, 1998-2003).
- Member of the Board of Studium Generale (University of Twente, 2002-2005).
- Member of the Advisory Committee for Post-Graduate Studies (Mathematics Department, University of Patras, 2007-2011, 2013-now).
- Director of the Division of Applied Analysis (Dept. of Mathematics, Univ. Patras, 2008-2010).
- Internal Evaluation Committee of the Department of Mathematics, University of Patras (chairman 2010-2013, member 2017-2022, chairman 2022-now,).

MOST CITED PAPERS (counted with Google Scholar on 03/11/2022, current total number of citations: 2295, h-index = 26)

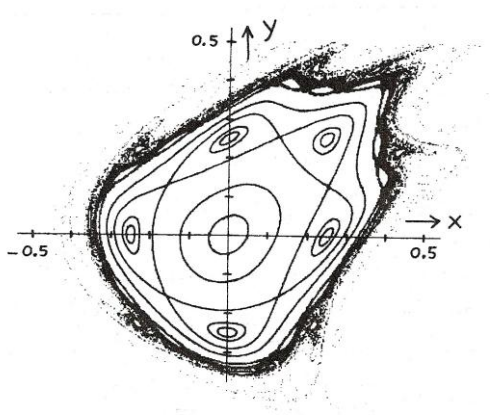
- D. Lohse, R.P.H. Bergmann, R. Mikkelsen, C. Zeilstra, D. van der Meer, M. Versluis, K. van der Weele, M.A. van der Hoef, and J.A.M. Kuipers, *Impact on soft sand: Void collapse and jet formation*, Phys. Rev. Lett. **93**, 198003 (2004) – cited **223** times.
- P. Eshuis, K. van der Weele, D. van der Meer, R. Bos, and D. Lohse, *Phase diagram of vertically shaken granular matter*, Phys. Fluids **19**, 123301 (2007) – cited **162** times.
- P. Eshuis, K. van der Weele, D. van der Meer, and D. Lohse, *Granular Leidenfrost effect: Experiment and theory of floating particle clusters*, Phys. Rev. Lett. **111**, 258001 (2005) – cited **145** times.

- K. van der Weele, D. van der Meer, M. Versluis, and D. Lohse, *Hysteretic clustering in granular gas*, Europhys. Lett. **53**, 328-334 (2001) – cited **136** times.
- A. van der Bilt, L.W. Olthoff, H.W. van der Glas, K. van der Weele, and F. Bosman, *A mathematical description of the comminution of food during mastication in man*, Archives of Oral Biology **32**, 579-586 (1987) – cited **109** times.
- P. Timmerman and J.P. van der Weele, *On the rise and fall of a ball with linear or quadratic drag*, Am. J. Phys. **67** (7), 538-546 (1999) – cited **102** times.
- P. Eshuis, K. van der Weele, D. Lohse, and D. van der Meer, *Experimental realization of a rotational ratchet in a granular gas*, Phys. Rev. Lett. **104**, 248001 (2010) – cited **100** times.
- T. Bountis, H.W. Capel, M. Kollman, J.M. Bergamin, J.C. Ross, and J.P. van der Weele, *Multibreathers and homoclinic orbits in 1-dimensional nonlinear lattices*, Phys. Lett. A **268**, 50-60 (2000) – cited **96** times.
- D. van der Meer, K. van der Weele, and D. Lohse, *Sudden Collapse of a Granular Cluster*, Phys. Rev. Lett. **88**, 174302 (2002) – cited **94** times
- P. Eshuis, D. van der Meer, M. Alam, H.J. van Gerner, K. van der Weele, and D. Lohse, *Onset of convection in strongly shaken granular matter*, Phys. Rev. Lett. **104**, 038001 (2010) – cited **81** times.
- D. van der Meer, P. Reimann, K. van der Weele, and D. Lohse, *Spontaneous Ratchet Effect in a Granular Gas*, Phys. Rev. Lett. **92**, 184301 (2004) – cited **68** times.
- D. van der Meer, K. van der Weele, and D. Lohse, *Bifurcation Diagram for Compartmentalized Granular Gases*, Phys. Rev. E **63**, 061304 (2001) – cited **67** times.
- R. Mikkelsen, D. van der Meer, K. van der Weele, and D. Lohse, *Competitive clustering in a bidisperse granular gas*, Phys. Rev. Lett. **89**, 214301 (2002) – cited **66** times.

PUBLICATIONS BY CATEGORY

A. International journals with referee system

1. J.P. van der Weele, H.W. Capel, and Ch.J. Calkoen, *Crossover from dissipative to conservative systems*, Phys. Lett. **111**A, 5-11 (1985).
2. J.P. van der Weele, H.W. Capel, T. Post, and Ch.J. Calkoen, *Crossover from dissipative to conservative behaviour in period-doubling systems*, Physica A **137**, 1-43 (1986).
3. J.P. van der Weele, H.W. Capel, and R. Kluiving, *On the scaling factors $\alpha(z)$ and $\delta(z)$*, Phys. Lett. **119**A, 15-20 (1986).
4. J.P. van der Weele, H.W. Capel, and R. Kluiving, *Period doubling in maps with a maximum of order z*, Physica A **145**, 425-460 (1987).
5. J.P. van der Weele and H.W. Capel, *The f(α) formalism applied to the crossover from conservative to dissipative scaling behaviour in period-doubling systems*, Physica A **147**, 297-314 (1987).
6. A. van der Bilt, L.W. Olthoff, H.W. van der Glas, K. van der Weele, and F. Bosman, *A mathematical description of the comminution of food during mastication in man*, Archives of Oral Biology **32**, 579-586 (1987).
7. J.P. van der Weele, H.W. Capel, T.P. Valkering, and T.Post, *The squeeze effect in non-integrable Hamiltonian systems*, Physica A **147**, 499-532 (1988).
8. J.P. van der Weele, T.P. Valkering, H.W. Capel, and T. Post, *The birth of Poincaré-Birkhoff chains near 1:3 resonance*, Physica A **153**, 283-294 (1988).



9. T. Post, H.W. Capel, and J.P. van der Weele, *Short-phase anomalies in intermittent band switching*, Phys. Lett. **133**A, 372-377 (1988).
10. T. Post, H.W. Capel and J.P. van der Weele, *Window scaling in one-dimensional maps*, Phys. Lett. **136**A, 109-113 (1989).
11. T. Post, H.W. Capel and J.P. van der Weele, *Phase length distributions in intermittent band switching*, Physica A **160**, 321-350 (1989).
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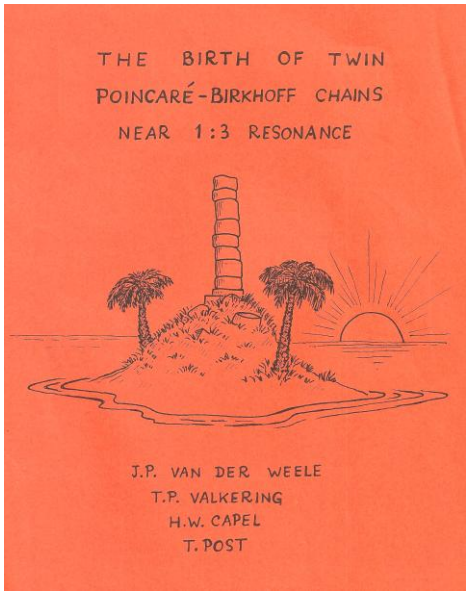

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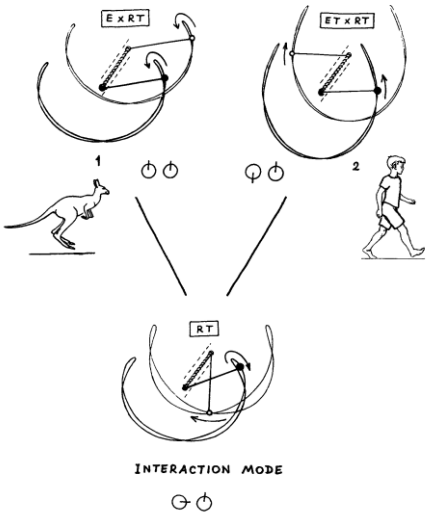

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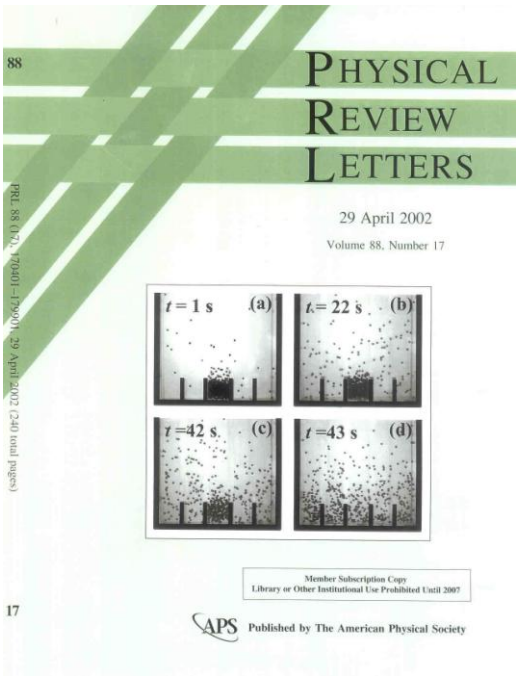

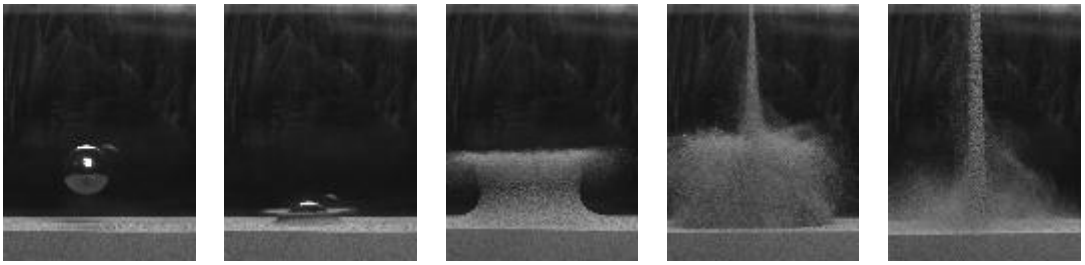

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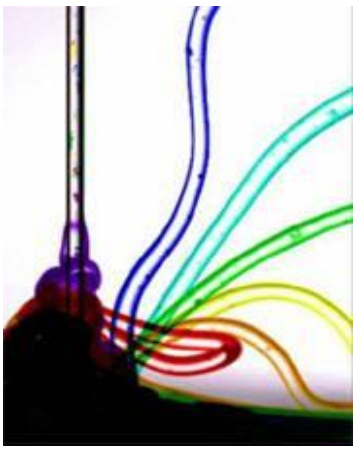

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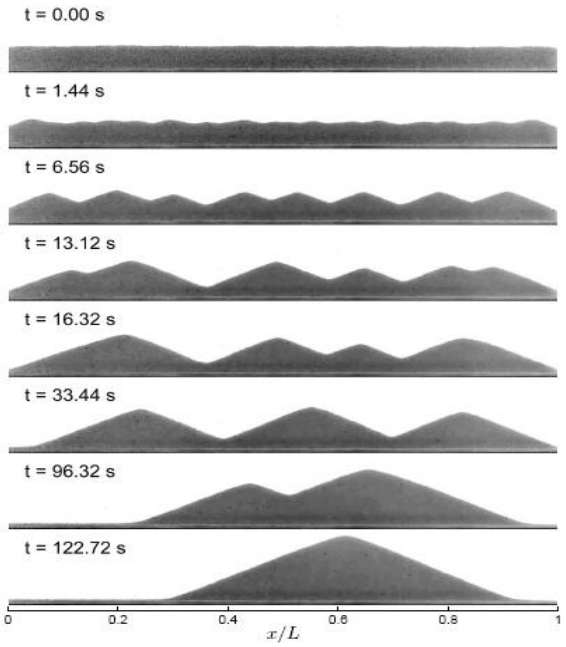

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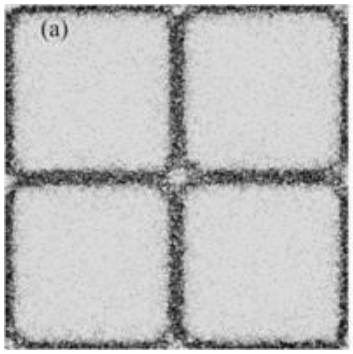

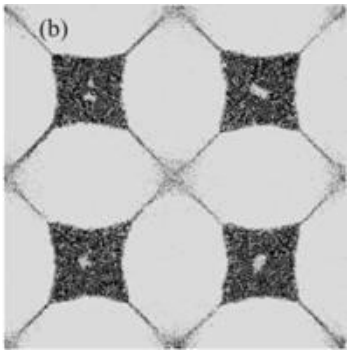

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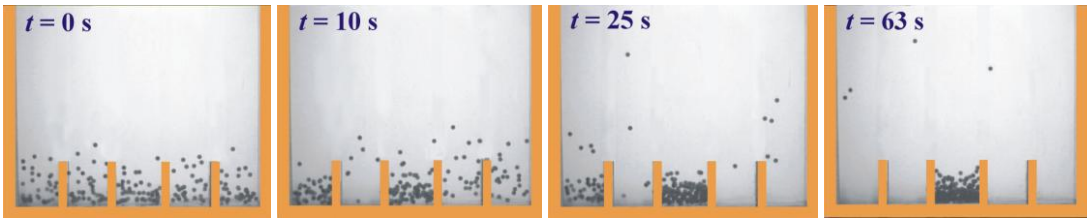

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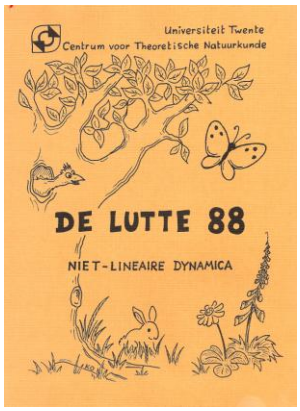

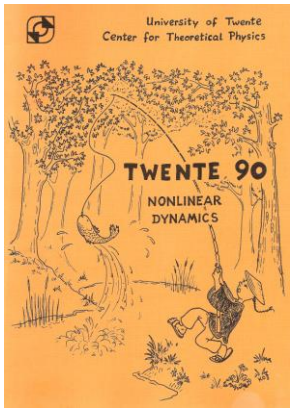

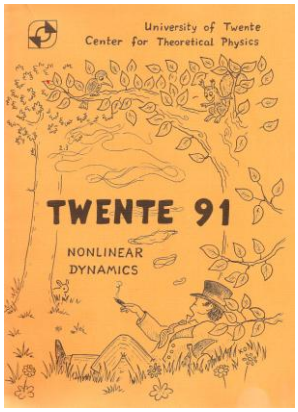

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November 2022