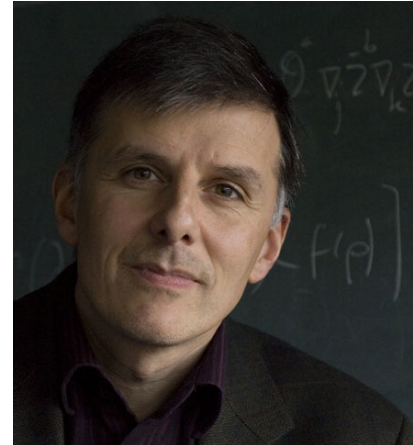


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- 1978 Eindexamen Gymnasium, Stedelijk Gymnasium te Leiden.
- 1982 Doctoraalexamen Natuurkunde (cum laude), Rijksuniversiteit te Leiden.
- 1984 Promotie (cum laude) aan de Rijksuniversiteit te Leiden; Promotor: P. Mazur.
- 1985 Stipendiaat Niels Stensen Stichting; Post-Doc in Stanford en in Santa Barbara (USA).
- 1986 (–1991) Wetenschappelijk medewerker van Philips' Natuurkundig Laboratorium te Eindhoven.
- 1991 Bijzonder Hoogleraar in de theorie van de vaste stof aan de Rijksuniversiteit te Leiden, vanwege het Leids Universiteitsfonds.
- 1992 (–heden) Hoogleraar in de theoretische natuurkunde aan de Universiteit Leiden.



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Onderscheidingen —

- 1985 C.J. Kok prijs voor het proefschrift *On transport properties of concentrated suspensions*.
- 1993 PIONIER subsidie.
- 1993 Koninklijke/Shell prijs (samen met H. van Houten en B.J. van Wees).
- 1997 Winnaar van de Nationale Wetenschapsquiz.
- 1999 NWO/Spinoza prijs.
- 2001 Benoeming tot lid van de Koninklijke Hollandse Maatschappij der Wetenschappen.
- 2002 Benoeming tot lid van de Koninklijke Nederlandse Akademie van Wetenschappen.
- 2003 Physica prijs.
- 2005 NWO/Huygens lezing.
- 2006 AKZO Nobel Science Award.
- 2009 Leigh Page prijs.
- 2009 ERC Advanced Investigator Grant.

Beroepswerkzaamheden —

- Wetenschappelijk adviseur op het Philips' Natuurkundig Laboratorium te Eindhoven (1992–1996).
- Lid van de Raad voor Natuur- en Sterrenkunde van de Koninklijke Nederlandse Akademie van Wetenschappen (2000–2006).
- Lid van de Wetenschappelijke Raad van het Nederlands Forensisch Instituut (2001–2003).
- Lid van de Natuurkunde Adviesraad van het Lorentz Center (2001–2005).
- Bestuurslid van het Lorentzfonds (sinds 2002).
- Lid (vice-voorzitter sinds 2007) van het Uitvoerend Bestuur van de Stichting voor Fundamenteel Onderzoek der Materie en van het Gebiedsbestuur Natuurkunde van de Nederlandse Organisatie voor Wetenschappelijk Onderzoek (2004–2012).
- Bestuurslid van de Niels Stensen Stichting (sinds 2005).

Redactiewerkzaamheden —

- Advisory Editor, *Physica A* (1995–1999).
- Editorial Board Member, *Physical Review B* (1996–2002).
- Editor, *Physics Reports* (1998–2004).
- Divisional Associate Editor, *Physical Review Letters* (2003–2009).
- Editor, *Proceedings of LT25* (2008).
- EPL Distinguished Referee (2009).

Promovendi —

- A. A. M. Staring, *Coulomb-Blockade Oscillations in Quantum Dots and Wires* (1992).

- B. Rejaei-Salmassi, *On the Conductivity of Strongly Correlated Low-Dimensional Systems* (1994).
- M. J. M. de Jong, *Shot Noise and Electrical Conduction in Mesoscopic Systems* (1995).
- P. W. Brouwer, *On the Random-Matrix Theory of Quantum Transport* (1997).
- J. A. Melsen, *Induced Superconductivity in Microstructures* (1997).
- J. C. J. Paasschens, *On the Transmission of Light through Random Media* (1997).
- S. A. van Langen, *Thermal and Electrical Phenomena in Chaotic Conductors* (1998).
- M. C. J. M. Vissenberg, *Opto-Electronic Properties of Disordered Organic Semiconductors* (1999).
- M. Patra, *On Quantum Optics of Random Media* (2000).
- K. J. H. van Bommel, *On Chaotic Wave Dynamics* (2001).
- M. Kindermann, *Electron Counting Statistics in Nanostructures* (2003).
- A. Tajic, *Study of a Stroboscopic Model of a Quantum Dot* (2005).
- A. F. Andreev, *honorary doctorate* (2005).
- M. C. Goorden, *Superconductivity in Nanostructures: Andreev Billiards and Josephson Junction Qubits* (2005).
- J. L. van Velsen, *On the Production and Transfer of Entangled Electrons and Photons* (2005).
- B. D. Michaelis, *On Dephasing and Spin Decay in Open Quantum Dots* (2006).
- J. H. Bardarson, *Effects of Spin-Orbit Coupling on Quantum Transport* (2008).
- I. Snyman, *Scattering Problems Involving Electrons, Photons, and Dirac Fermions* (2008).
- R. A. Sepkhanov, *Light scattering by photonic crystals with a Dirac spectrum* (2009).

Conferentiewerkzaamheden —

- Symposium organisator en voorzitter, 8th General Conference of the European Physical Society (Amsterdam, 1990).
- Lid van de programma-commissie, 7th International Conference on "Superlattices, Microstructures and Microdevices" (Banff, Canada, 1994).
- Lid van de programma-commissie, 11th International Conference on "Electronic Properties of Two-Dimensional Systems" (Nottingham, Groot-Brittannië, 1995).
- Lid van de programma-commissie, 9th International Conference on "Superlattices, Microstructures and Microdevices" (Luik, België, 1996).
- Organisator (met B.I. Halperin), Lorentz Center Workshop on "Directions in Mesoscopic Physics" (Leiden, 1997).
- Lid van de programma-commissie, 24th International Conference on the "Physics of Semiconductors" (Jeruzalem, Israël, 1998).
- Organisator (met H.U. Baranger en M.C. Gutzwiller), Aspen Center Workshop on "Quantum Chaos and Mesoscopic Systems" (Aspen, USA, 1998).
- Lid van de programma-commissie, 22nd International Conference on "Low Temperature Physics" (Helsinki, Finland, 1999).
- Lid van de programma-commissie, LT22 Satellite Conference on "Electron Transport in Mesoscopic Systems" (Gothenburg, Zweden, 1999).
- Organisator (met G. Schön), TMR Network Meeting & School on "Phase Coherent Dynamics of Hybrid Nanostructures" (Bad Herrenalb, Duitsland, 1999).
- Lid van de programma-commissie, Academy Colloquium on "Quantum Optics of Small Structures" (Amsterdam, 1999).
- Organisator (met C.M. Varma), Lorentz Center Workshop on "Interacting Electrons in Disordered Metals" (Leiden, 2000).
- Organisator (met M. Crommie, Y. Imry en P. McEuen), ITP workshop on "Nanoscience" (Santa Barbara, USA, 2001).
- Lid van de programma-commissie, International Conference in Theoretical Physics (Parijs, Frankrijk, 2002).
- Lid van de programma-commissie, 26th International Conference on the "Physics of Semiconductors" (Edinburgh, Groot-Brittannië, 2002).
- Lid van de programma-commissie, Localisation 2002: "Quantum Transport and Quantum Coherence" (Tokyo, Japan, 2002).
- Lid van de organisatie-commissie, Centennial Symposium on "Lorentz, Zeeman & the discovery of the electron" (Leiden, 2002).
- Lid van de organisatie-commissie, NTT Symposium on "Mesoscopic Superconductivity and Spintronics" (Atsugi, Japan, 2002).
- Lid van de programma-commissie, Symposium on "Trends in Theory" (Dalfsen, 2003).
- Organisator (met J.E. Mooij), Lorentz Center Workshop on "Fundamentals of Solid State Quantum Information Processing" (Leiden, 2003).
- Lid van de programma-commissie, International Conference on "Solid State Quantum Information Processing" (Amsterdam, 2003).
- Lid van de programma-commissie, 18th International Conference on "Noise and Fluctuations" (Salamanca, Spanje, 2005).
- Lid van de programma-commissie, International Workshop on "Correlations in finite quantum systems: quantum dots, quantum gases and nuclei" (Mallorca, Spanje, 2005).

- Lid van de programma-commissie, OSA Topical Meeting on “Photonic Metamaterials: from Random to Periodic” (Grand Bahama Island, Bahamas, 2006).
- Organisator (met G. Bauer, V. Cheianov en H. Schomerus), International Conference “Nanoelectronics 2006” (Lancaster, Groot-Brittannië, 2006).
- Organisator (met J. Cserti and A. Pályi), International School on “Fundamentals of Nanoelectronics” (Keszthely, Balatonmeer, Hongarije, 2006).
- Organisator (met L. Vandersypen), Session on “Quantum Information and Computation”, FYSICA 2006 (Leiden, 2006).
- Lid van de programma-commissie, VI Rencontres de Moriond in Mesoscopic Physics (La Thuile, Italië, 2008).
- Lid van de programma-commissie, 25th International Conference on Low Temperature Physics, LT25 (Amsterdam, 2008).
- Lid van de programma-commissie, NATO Advanced Research Workshop on “Recent Advances in Nonlinear Dynamics and Complex System Physics” (Tashkent, Oezbekistan, 2008).
- Lid van de programma-commissie, 20th International Conference on “Noise and Fluctuations” (Pisa, Italië, 2009).
- Organisator (met B. Altshuler, V. Falko en F. Guinea), KITPC Program on “Progress in Graphene Research” (Beijing, China, 2010).
- Lid van de programma-commissie, VII Rencontres de Moriond in Mesoscopic Physics (La Thuile, Italië, 2011).

Spreker op uitnodiging bij internationale conferenties —

- Gordon Research Conference on “Dynamics of Macromolecular and Polyelectrolyte Solutions” (Santa Barbara, USA, 1986).
- 4th International Conference on “Superlattices, Microstructures and Microdevices” (Trieste, Italië, 1988).
- International Workshop on “Electron Transport in Small Systems” (Trieste, Italië, 1988).
- 9th General Conference of the Condensed Matter Division of the European Physical Society (Nice, Frankrijk, 1989).
- Frühjahrstagung der Deutschen Physikalischen Gesellschaft (Münster, Duitsland, 1989).
- 4th International Conference on “Modulated Semiconductor Structures” (Ann Arbor, USA, 1989).
- NATO Advanced Study Institute on “Electronic Properties of Multilayers and Low-Dimensional Semiconductor Structures” (Chateau de Bonas, Frankrijk, 1989).
- Jahrestagung der Österreichischen Physikalischen Gesellschaft (Linz, Oostenrijk, 1989).
- Third Bar-Ilan Conference on “Frontiers in Condensed Matter Physics” (Ramat-Gan, Israël, 1990).
- March Meeting of the American Physical Society (Anaheim, USA, 1990).
- NATO Advanced Study Institute on “Quantum Coherence in Mesoscopic Systems” (Les Arcs, Frankrijk, 1990).
- NATO Advanced Study Institute on “Granular Nanoelectronics” (Il Ciocco, Italië, 1990).
- 19th International Conference on “Low Temperature Physics” (Brighton, Verenigd Koninkrijk, 1990).
- NATO Advanced Study Institute on “Single Charge Tunneling” (Les Houches, Frankrijk, 1991).
- International Symposium on “Nanostructures and Mesoscopic Systems” (Santa Fe, USA, 1991).
- International Symposium on “Science and Technology of Mesoscopic Structures” (Nara, Japan, 1991).
- 14th Taniguchi International Symposium on “Physics of Mesoscopic Systems” (Shima, Japan, 1991).
- IOP Condensed Matter and Materials Physics Conference (Birmingham, Verenigd Koninkrijk, 1991).
- International Workshop on “Quantum-Effect Physics, Electronics and Applications” (Luxor, Egypte, 1992).
- 7th International Winter School on “New Developments in Solid State Physics” (Mauterndorf, Oostenrijk, 1992).
- 12th General Conference of the Condensed Matter Division of the European Physical Society (Prague, Tsjechoeslowakia, 1992).
- NATO Advanced Research Workshop on “Physics of Few-Electron Nanostructures” (Noordwijk, Nederland, 1992).
- NATO Advanced Research Workshop on “Computations for the Nanoscale” (Aspet, Frankrijk, 1992).
- International Workshop on “Spectral Problems in Mathematical Physics” (Institut Mittag-Leffler, Djursholm, Zweden, 1992).
- March Meeting of the American Physical Society (Seattle, USA, 1993).
- XXII International School on “Physics of Semiconducting Compounds” (Jaszowiec, Polen, 1993).
- VIII International Summer School on “Fundamental Problems in Statistical Mechanics” (Altenberg, Duitsland, 1993).
- International Workshop on “Small Semiconductor Structures” (Trieste, Italië, 1993).
- 9th General Conference on “Trends in Physics” of the European Physical Society (Firenze, Italië, 1993).
- Euroconference on “Coherence and Phase Transitions in Superconductors and Mesoscopic Structures” (Torino, Italië, 1993).
- International Workshop on “Quantum Dynamics of Phase Coherent Structures” (Ambleside, Verenigd Koninkrijk, 1994).
- XXIX Rencontres de Moriond on “Coulomb and Interference Effects in Small Electronic Structures” (Villars, Zwitserland, 1994).
- NATO Advanced Research Workshop on “Mesoscopic Superconductivity” (Karlsruhe, Duitsland, 1994).
- International Workshop on “Submicron Quantum Dynamics” (Trieste, Italië, 1994).
- NATO Advanced Study Institute on “Mesoscopic Quantum Physics” (Les Houches, Frankrijk, 1994).
- Technion Advanced Research Workshop on “Free Electrons in Semiconductor Nanostructures” (Kibbutz Ginosar, Israël, 1994).

- WE-Heraeus Workshop on “Mesoscopic Transport, Localization, and Quantum Hall Effect” (Bad Honnef, Germany, 1994).
- Second International Workshop on “Quantum Dynamics of Phase Coherent Structures” (Hamburg, Germany, 1995).
- WE-Heraeus Workshop on “Transport in Classically Chaotic Systems” (Bad Honnef, Germany, 1995).
- 2nd International Conference on “Point-Contact Spectroscopy” (Nijmegen, The Netherlands, 1995).
- International Conference on “Modern Trends in Theoretical Physics” (Moscow, Russia, 1995).
- NATO Advanced Study Institute on “Quantum Transport in Semiconductor Submicron Structures” (Bad Lauterberg, Germany, 1995).
- Symposium on “Physics and Chemistry of Condensed Matter” (Rondablikk, Norway, 1995).
- Course on “Quantum Mechanics at the Mesoscopic Scale” (Champoussin, Switzerland, 1995).
- National Academy of Sciences’ Seventh Annual Symposium on “Frontiers of Science” (Irvine, USA, 1995).
- International Workshop on “Random Matrices and Quantum Localization” (Toulouse, France, 1996).
- Frühjahrstagung der Deutsche Physikalische Gesellschaft (Regensburg, Germany, 1996).
- Conference on “Chaos in Mesoscopic Systems” (Santa Barbara, USA, 1996).
- NATO Advanced Study Institute on “Mesoscopic Electron Transport” (Curaçao, Netherlands Antilles, 1996).
- International Workshop on “Non-Perturbative Approach to Chaos in Mesoscopic Systems and Localization” (Dresden, Germany, 1996).
- Euroconference on “Correlations in Unconventional Quantum Liquids” (Évora, Portugal, 1996).
- International Workshop on “Chaotic Dynamics and Quantum Many-Body Systems” (Trento, Italy, 1997).
- Minerva Workshop on “Mesoscopics, Fractals, and Neural Networks” (Eilat, Israel, 1997).
- First International Symposium on “Phase-Coherent Dynamics of Hybrid Nanostructures” (Miraflores de la Sierra, Spain, 1997).
- Adriatico Research Conference on “Superconductivity, Andreev Reflections and Proximity Effect in Mesoscopic Structures” (Trieste, Italy, 1997).
- 17th European Conference on “Surface Science” (Enschede, The Netherlands, 1997).
- International Workshop on “Disordered Systems and Quantum Chaos” (Isaac Newton Institute, Cambridge, United Kingdom, 1997).
- IV Polish–Dutch Colloquium on “Condensed Matter Physics” (Kraków, Poland, 1998).
- NATO Advanced Study Institute on “Diffuse Waves in Complex Media” (Les Houches, France, 1998).
- International Workshop on “Novel Physics in Semiconductor Nanostructures” (Pisa, Italy, 1998).
- International Workshop on “From Mesoscopic to Microscopic Quantum Transport: New Trends in Theory and Experiment” (Dresden, Germany, 1998).
- Frühjahrstagung der Deutsche Physikalische Gesellschaft (Münster, Germany, 1999).
- International Workshop on “Dynamics of Complex Systems” (Dresden, Germany, 1999).
- Symposium on “Mesoscopic Spectra” (Weizmann Institute, Rehovot, Israel, 1999).
- NATO Advanced Study Institute on “Quantum Mesoscopic Phenomena and Mesoscopic Devices in Microelectronics” (Ankara/Antalya, Turkey, 1999).
- European Commission Summer School on “Exotic States in Quantum Nanostructures” (Windsor, United Kingdom, 1999).
- Workshop on “Mesoscopic Physics of Normal Conductors and Superconductors” (Oslo, Norway, 1999).
- Academy Colloquium on “Quantum Optics of Small Structures” (Amsterdam, The Netherlands, 1999).
- European Network Meeting on “Phase Coherent Dynamics of Hybrid Nanostructures” (Cargèse, Corsica, 2000).
- Nobel Symposium on “Quantum Chaos Y2K” (Bäckaskogs Castle, Sweden, 2000).
- NATO Advanced Study Institute on “Photonic Crystals and Light Localization” (Crete, Greece, 2000).
- International Seminar on “Non-Perturbative Approach to Disordered Systems and Quantum Hall Effect” (Dresden, Germany, 2000).
- XXXVI Rencontres de Moriond on “Electronic Correlations: From meso- to nano-physics” (Les Arcs, France, 2001).
- 7th Gentner Symposium on “Quantum Chaos” (Ein Gedi, Israel, 2001).
- European Network Meeting on “Nanoscale Dynamics, Coherence and Computation” (Mátrafüred, Hungary, 2001).
- Dynamics Days Europe 2001 (Dresden, Germany, 2001).
- WE-Heraeus Workshop on “Electronic Nanostructures” (Bad Honnef, Germany, 2001).
- STW Workshop on “Semiconductor Advances for Future Electronics” — SAFE2001 (Veldhoven, 2001).
- NTT Symposium on “Mesoscopic Superconductivity and Spintronics” (Atsugi, Japan, 2002).
- NATO Advanced Research Workshop on “Quantum Noise in Mesoscopic Physics” (Delft, 2002).
- Workshop on “Mesoscopic Physics and Electron Interaction” (Trieste, Italy, 2002).
- International Conference on Theoretical Physics (Paris, France, 2002).
- WE-Heraeus Workshop on “Localisation, Quantum Coherence, and Interactions” (Hamburg, Germany, 2002).
- International Workshop on “Progress in Condensed Matter Theory” (Dresden, Germany, 2002).
- International Workshop on “Electrons in Zero-Dimensional Conductors” (Dresden, Germany, 2002).
- International Conference on “Nanoelectronics” (Lancaster, United Kingdom, 2003).
- Summerschool on “Quantum Computation at the Atomic Scale” (Istanbul, Turkey, 2003).

- International Workshop on “Quantum Transport and Correlations in Mesoscopic Systems and QHE” (Dresden, Germany, 2003).
- European Research Conference on “Fundamental Problems of Mesoscopic Physics” (Granada, Spain, 2003).
- Conference on “Solid State Quantum Information Processing” (Amsterdam, The Netherlands, 2003).
- XV Chris Engelbrecht Summer School in Theoretical Physics (Drakensberg, South Africa, 2004).
- IOP Condensed Matter and Materials Physics Conference (Warwick, United Kingdom, 2004).
- International Workshop on “Mesoscopic Physics, Quantum Optics, and Quantum Information” (Harvard, USA, 2004).
- International Workshop on “Quantum Systems out of Equilibrium” (Trieste, Italy, 2004).
- International Workshop on “Random Matrix Theory: Condensed Matter, Statistical Physics and Combinatorics” (Trieste, Italy, 2004).
- International Workshop on “Nanoscale Dynamics and Quantum Coherence” (Hamburg, Germany, 2004).
- School and Workshop on “Quantum Entanglement, Decoherence, Information, and Geometrical Phases in Complex Systems” (Trieste, Italy, 2004).
- International Workshop on “Aspects of Quantum Chaotic Scattering” (Dresden, Germany, 2005).
- International Meeting on “Mesoscopic Physics with Matter and Waves” (Orsay, France, 2005).
- 1st Capri Spring School on “Transport in Nanostructures” (Anacapri, Italy, 2005).
- Advanced Research Workshop on “Fundamentals of Electronic Nanosystems” (St. Petersburg, Russia, 2005).
- International School of Physics Enrico Fermi on “Quantum Computers, Algorithms and Chaos” (Varenna, Italy, 2005).
- European Research Conference on “Fundamental Problems of Mesoscopic Physics” (Acquafredda di Maratea, Italy, 2005).
- XI International Summer School on “Fundamental Problems in Statistical Physics” (Leuven, Belgium, 2005).
- 18th International Conference on “Noise and Fluctuations” (Salamanca, Spain, 2005).
- European Network Meeting on “Nanoscale Dynamics and Quantum Coherence” (Catania, Italy, 2005).
- Marie Curie Advanced Study Institute on “Quantum Optics and Quantum Computation” (Riomaggiore, Italy, 2006).
- International Workshop on “Dynamics of Relaxation in Complex Quantum and Classical Systems and Nanostructures” (Dresden, Germany, 2006).
- International School on “Fundamentals of Nanoelectronics” (Keszthely, Hungary, 2006).
- Symposium on “The Best of NanoScience” (Delft, 2006).
- Workshop on “Electronic Properties of Graphene” (Santa Barbara, USA, 2007).
- Lorentz Center workshop on “Graphene” (Leiden, The Netherlands, 2007).
- March Meeting of the American Physical Society (Denver, USA, 2007).
- A.I. Larkin Memorial Conference (Chernogolovka, Russia, 2007).
- Amsterdam Summer Workshop on “Low-D Quantum Condensed Matter” (Amsterdam, The Netherlands, 2007).
- International School on “Fundamentals of Nanoelectronics” (Portorož, Slovenia, 2007).
- Arnold Sommerfeld Summer School (Munich, Germany, 2007).
- Aspen Center Conference on “New Horizons in Condensed Matter Physics” (Aspen, USA, 2008).
- 4th Capri Spring School on “Transport in Nanostructures” (Anacapri, Italy, 2008).
- European Network Meeting on “Fundamentals of Nanoelectronics” (Bremen, Germany, 2008).
- Workshop on “Quantum Coherence and Controllability at the Mesoscale” (San Sebastián, Spain, 2008).
- Graphene Week 2008 (Trieste, Italy, 2008).
- 24th Solvay Conference in Physics on “Quantum Theory of Condensed Matter” (Brussels, Belgium, 2008).
- Symposium for the 80th anniversary of the Flanders Research Foundation (Brussels, Belgium, 2008).
- Workshop on “Quantum Spin Hall Effect and Topological Insulators” (Santa Barbara, USA, 2008).
- 20th International Conference on “Noise and Fluctuations” (Pisa, Italy, 2009).
- Mini-School on “Topological Insulators and Quantum Spin Hall effect” (Lyon, France, 2009).
- KITPC Program on “Progress in Graphene Research” (Beijing, China, 2010).
- Initial Training Network Meeting on “Nanoelectronics — Concepts, Theory and Modeling” (Bremen, Germany, 2010).
- Advanced Research Workshop on “Fundamentals of Electronic Nanosystems” (St. Petersburg, Russia, 2010).
- International Workshop on “Correlated Phenomena in Low-Dimensional Systems” (Dresden, Germany, 2010).

Lijst van publicaties —

1. *Diffusion of spheres in suspension: three-body hydrodynamic interaction effects*, C.W.J. Beenakker and P. Mazur, *Physics Letters A* **91**, 290–291 (1982).
2. *Self-diffusion of spheres in a concentrated suspension*, C.W.J. Beenakker and P. Mazur, *Physica A* **120**, 388–410 (1983).
3. *Diffusion of spheres in a concentrated suspension: resummation of many-body hydrodynamic interactions*, C.W.J. Beenakker and P. Mazur, *Physics Letters A* **98**, 22–24 (1983).
4. *Diffusion of spheres in a concentrated suspension II*, C.W.J. Beenakker and P. Mazur, *Physica A* **126**, 349–370 (1984).
5. *Many-sphere hydrodynamic interactions III. The influence of a plane wall*, C.W.J. Beenakker, W. van Saarloos, and P. Mazur, *Physica A* **127**, 451–472 (1984).
6. *The effective viscosity of a concentrated suspension of spheres (and its relation to diffusion)*, C.W.J. Beenakker, *Physica A* **128**, 48–81 (1984).

7. *On transport properties of concentrated suspensions*, C.W.J. Beenakker, Ph.D. Thesis, Universiteit Leiden (1984).
8. *On the Smoluchowski paradox in a sedimenting suspension*, C.W.J. Beenakker and P. Mazur, *Physics of Fluids* **28**, 767–769 (1985).
9. *Phase separation and pattern formation*, J.S. Langer and C.W.J. Beenakker, in: *Fundamental Problems in Statistical Mechanics VI*, edited by E.G.D. Cohen (North-Holland, Amsterdam, 1985): pp. 313–328.
10. *Many-sphere hydrodynamic interactions IV. Wall-effects inside a spherical container*, C.W.J. Beenakker and P. Mazur, *Physica A* **131**, 311–328 (1985).
11. *Is sedimentation container-shape dependent?*, C.W.J. Beenakker and P. Mazur, *Physics of Fluids* **28**, 3203–3206 (1985).
12. *Theory of Ostwald ripening for open systems*, C.W.J. Beenakker and J. Ross, *Journal of Chemical Physics* **83**, 4710–4714 (1985).
13. *Monte Carlo study of a model of diffusion-controlled reactions*, C.W.J. Beenakker and J. Ross, *Journal of Chemical Physics* **84**, 3857–3864 (1986).
14. *Numerical simulation of diffusion-controlled droplet growth: Dynamical correlation effects*, C.W.J. Beenakker, *Physical Review A* **33**, 4482–4485 (1986).
15. *Ewald sum of the Rotne-Prager tensor*, C.W.J. Beenakker, *Journal of Chemical Physics* **85**, 1581–1582 (1986).
16. *Evolution of two-dimensional soap-film networks*, C.W.J. Beenakker, *Physical Review Letters* **57**, 2454–2457 (1986).
17. *Two-dimensional soap froths and polycrystalline networks: why are large cells many-sided?*, C.W.J. Beenakker, *Physica A* **147**, 256–267 (1987).
18. *Numerical simulation of a coarsening two-dimensional network*, C.W.J. Beenakker, *Physical Review A* **37**, 1697–1702 (1988).
19. *Boundary scattering modified one-dimensional weak localization in submicron GaAs/AlGaAs heterostructures*, H. van Houten, C.W.J. Beenakker, B.J. van Wees, and J.E. Mooij, *Surface Science* **196**, 144–149 (1988).
20. *Quantized conductance of point contacts in a two-dimensional electron gas*, B.J. van Wees, H. van Houten, C.W.J. Beenakker, J.G. Williamson, L.P. Kouwenhoven, D. van der Marel, and C.T. Foxon, *Physical Review Letters* **60**, 848–850 (1988).
21. *Coherent electron focussing in a two-dimensional electron gas*, H. van Houten, B.J. van Wees, J.E. Mooij, C.W.J. Beenakker, J.G. Williamson, and C.T. Foxon, *Europhysics Letters* **5**, 721–725 (1988).
22. *Quantum and classical ballistic transport in constricted two-dimensional electron gases*, H. van Houten, B.J. van Wees, and C.W.J. Beenakker, in: *Springer Series in Solid-State Sciences Vol. 83: Physics and Technology of Submicron Structures*, edited by H. Heinrich, G. Bauer, and F. Kuchar (Springer, Berlin, 1988): pp. 198–207.
23. *Flux-cancellation effect on narrow-channel magnetoresistance fluctuations*, C.W.J. Beenakker and H. van Houten, *Physical Review B* **37**, 6544–6546 (1988).
24. *Four-terminal magnetoresistance of a two-dimensional electron-gas constriction in the ballistic regime*, H. van Houten, C.W.J. Beenakker, P.H.M. van Loosdrecht, T.J. Thornton, H. Ahmed, M. Pepper, C.T. Foxon, and J.J. Harris, *Physical Review B* **37**, 8534–8536 (1988).
25. *Quenching of the Hall effect*, C.W.J. Beenakker and H. van Houten, *Physical Review Letters* **60**, 2406–2409 (1988).
26. *Quantized conductance of magnetoelectric subbands in ballistic point contacts*, B.J. van Wees, L.P. Kouwenhoven, H. van Houten, C.W.J. Beenakker, J.E. Mooij, C.T. Foxon, and J.J. Harris, *Physical Review B* **38**, 3625–3627 (1988).
27. *Boundary scattering and weak localization of electrons in a magnetic field*, C.W.J. Beenakker and H. van Houten, *Physical Review B* **38**, 3232–3240 (1988).
28. *Quantum ballistic electron transport in a constricted two-dimensional electron gas*, B.J. van Wees, H. van Houten, C.W.J. Beenakker, L.P. Kouwenhoven, J.G. Williamson, J.E. Mooij, C.T. Foxon, and J.J. Harris, in: *Proceedings 19th International Conference on the Physics of Semiconductors*, Vol. 1, edited by W. Zawadzki (Warsaw, 1988): pp. 39–46.
29. *Mode interference effect in coherent electron focusing*, C.W.J. Beenakker, H. van Houten, and B.J. van Wees, *Europhysics Letters* **7**, 359–364 (1988).
30. *Van kogelbaan tot hinkelbaan: elektronen als interfererende kaatsballen*, H. van Houten, B.J. van Wees, and C.W.J. Beenakker, *Nederlands Tijdschrift voor Natuurkunde A* **54**, 121–125 (1988).
31. *Aharonov-Bohm effect in a singly connected point contact*, P.H.M. van Loosdrecht, C.W.J. Beenakker, H. van Houten, J.G. Williamson, B.J. van Wees, J.E. Mooij, C.T. Foxon, and J.J. Harris, *Physical Review B* **38**, 10162–10165 (1988).
32. *Magnetoresistance of narrow GaAs-(Al,Ga)As heterostructures in the quasi-ballistic regime*, H. van Houten, C.W.J. Beenakker, M.E.I. Broekaart, M.G.H.J. Heijman, B.J. van Wees, J.E. Mooij, and J.-P. André, *Acta Electronica* **28**, 27–38 (1988).
33. *Skipping orbits, traversing trajectories, and quantum ballistic transport in microstructures*, C.W.J. Beenakker, H. van Houten, and B.J. van Wees, *Superlattices and Microstructures* **5**, 127–132 (1989).
34. *Anomalous integer quantum Hall effect in the ballistic regime with quantum point contacts*, B.J. van Wees, E.M.M. Willems, C.J.P.M. Harmans, C.W.J. Beenakker, H. van Houten, J.G. Williamson, C.T. Foxon, and J.J. Harris, *Physical Review Letters* **62**, 1181–1184 (1989).
35. *Nonlinear conductance of quantum point contacts*, L.P. Kouwenhoven, B.J. van Wees, C.J.P.M. Harmans, J.G. Williamson, H. van Houten, C.W.J. Beenakker, C.T. Foxon, and J.J. Harris, *Physical Review B* **39**, 8040–8043 (1989).
36. *Coherent electron focusing with quantum point contacts in a two-dimensional electron gas*, H. van Houten, C.W.J. Beenakker, J.G. Williamson, M.E.I. Broekaart, P.H.M. van Loosdrecht, B.J. van Wees, J.E. Mooij, C.T. Foxon, and J.J. Harris,

- Physical Review B **39**, 8556–8575 (1989).
37. *Reply to comment of G. Kirczenow on the theories of the quenching of the Hall effect*, C.W.J. Beenakker and H. van Houten, Physical Review Letters **62**, 1921 (1989).
 38. *Guiding-center-drift resonance in a periodically modulated two-dimensional electron gas*, C.W.J. Beenakker, Physical Review Letters **62**, 2020–2023 (1989).
 39. *Magnetotransport and nonadditivity of point-contact resistances in series*, C.W.J. Beenakker and H. van Houten, Physical Review B **39**, 10445–10448 (1989).
 40. *Coherent electron focusing*, C.W.J. Beenakker, H. van Houten, and B.J. van Wees, in: Festkörperprobleme/Advances in Solid State Physics, Vol. 29, edited by U. Rößler (Vieweg, Braunschweig, 1989): pp. 299–316.
 41. *Electron beams and waveguide modes: aspects of quantum ballistic transport*, H. van Houten and C.W.J. Beenakker, in: Nanostructure Physics and Fabrication, edited by M.A. Reed and W.P. Kirk (Academic Press, New York, 1989): pp. 347–359.
 42. *Billiard model of a ballistic multiprobe conductor*, C.W.J. Beenakker and H. van Houten, Physical Review Letters **63**, 1857–1860 (1989).
 43. *Comment on “Conductance oscillations periodic in the density of a one-dimensional electron gas”*, H. van Houten and C.W.J. Beenakker, Physical Review Letters **63**, 1893 (1989).
 44. *Edge channels for the fractional quantum Hall effect*, C.W.J. Beenakker, Physical Review Letters **64**, 216–219 (1990).
 45. *Hot-electron spectrometry with quantum point contacts*, J.G. Williamson, H. van Houten, C.W.J. Beenakker, M.E.I. Broekaart, L.I.A. Spendeler, B.J. van Wees, and C.T. Foxon, Physical Review B **41**, 1207–1210 (1990).
 46. *Electron-beam collimation with a quantum point contact*, L.W. Molenkamp, A.A.M. Staring, C.W.J. Beenakker, R. Eppenga, C.E. Timmering, J.G. Williamson, C.J.P.M. Harmans, and C.T. Foxon, Physical Review B **41**, 1274–1277 (1990).
 47. *Magnetoconductance of two point contacts in series*, A.A.M. Staring, L.W. Molenkamp, C.W.J. Beenakker, L.P. Kouwenhoven, and C.T. Foxon, Physical Review B **41**, 8461–8464 (1990).
 48. *Quantum oscillations in the transverse voltage of a channel in the non-linear transport regime*, L.W. Molenkamp, H. van Houten, C.W.J. Beenakker, R. Eppenga, and C.T. Foxon, Physical Review Letters **65**, 1052–1055 (1990).
 49. *Semi-classical theory of magnetoresistance anomalies in ballistic multi-probe conductors*, C.W.J. Beenakker and H. van Houten, in: Electronic Properties of Multilayers and Low-Dimensional Semiconductor Structures, edited by J.M. Chamberlain, L. Eaves, and J.C. Portal, NATO ASI Series B231 (Plenum, New York, 1990): pp. 75–94.
 50. *Quantum point contacts and coherent electron focusing*, H. van Houten and C.W.J. Beenakker, in: Analogies in Optics and Micro Electronics, edited by W. van Haeringen and D. Lenstra (Kluwer, Dordrecht, 1990): pp. 203–225.
 51. *Quantum ballistic and adiabatic electron transport studied with quantum point contacts*, B.J. van Wees, L.P. Kouwenhoven, E.M.M. Willems, C.J.P.M. Harmans, J.E. Mooij, H. van Houten, C.W.J. Beenakker, J.G. Williamson, and C.T. Foxon, Physical Review B **43**, 12431–12453 (1991).
 52. *Injection of ballistic hot electrons and cool holes in a two-dimensional electron gas*, J.G. Williamson, H. van Houten, C.W.J. Beenakker, M.E.I. Broekaart, L.I.A. Spendeler, B.J. van Wees, and C.T. Foxon, Surface Science **229**, 303–306 (1990).
 53. *Quantum point contacts*, H. van Houten, C.W.J. Beenakker, and B.J. van Wees, in: Semiconductors and Semimetals, Vol. 35, edited by M.A. Reed (Academic Press, New York, 1992): pp. 9–112.
 54. *Quantum transport in semiconductor nanostructures*, C.W.J. Beenakker and H. van Houten, in: Solid State Physics, Vol. 44, edited by H. Ehrenreich and D. Turnbull (Academic Press, New York, 1991): pp. 1–228.
 55. *Spatial potential distribution in $\text{GaAs}/\text{Al}_x\text{Ga}_{1-x}\text{As}$ heterostructures under quantum Hall conditions studied with the linear electro-optic effect*, P.F. Fontein, J.A. Kleinen, P. Hendriks, F.A.P. Blom, J.H. Wolter, H.G.M. Lochs, F.A.J.M. Driessen, L.J. Giling, and C.W.J. Beenakker, Physical Review B **43**, 12090–12093 (1991).
 56. *Coulomb blockade of the Aharonov-Bohm effect*, C.W.J. Beenakker, H. van Houten, and A.A.M. Staring, in: Granular Nanoelectronics, edited by D.K. Ferry, J.R. Barker, and C. Jacoboni, NATO ASI Series B251 (Plenum, New York, 1991): pp. 359–370.
 57. *Oscillating transverse voltage in a channel with quantum point contact voltage probes*, L.W. Molenkamp, H. van Houten, C.W.J. Beenakker, R. Eppenga, and C.T. Foxon, in: Condensed Systems of Low Dimensionality, edited by J.L. Beeby, P.K. Bhattacharya, P.Ch. Gravelle, F. Koch, and D.J. Lockwood, NATO ASI Series B253 (Plenum, New York, 1991): pp. 335–345.
 58. *Adiabatic transport in the fractional quantum Hall effect regime*, C.W.J. Beenakker, in: Quantum Coherence in Mesoscopic Systems, edited by B. Kramer, NATO ASI Series B254 (Plenum, New York, 1991): pp. 177–193.
 59. *Limits on deviations from Onsager-Casimir symmetry in the resistance of $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$* , M.A.M. Gijs, A.M. Gerrits, and C.W.J. Beenakker, Physical Review B **42**, 10789–10791 (1990).
 60. *Coulomb-regulated conductance oscillations in a disordered quantum wire*, A.A.M. Staring, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, in: High Magnetic Fields in Semiconductor Physics III, edited by G. Landwehr (Springer, Berlin, 1992): pp. 301–312.
 61. *Spatially resolved potential measurements under quantum Hall conditions by application of the linear electro-optic effect*, P.F. Fontein, J.A. Kleinen, P. Hendriks, F.A.P. Blom, J.H. Wolter, H.G.M. Lochs, F.A.J.M. Driessen, L.J. Giling, and C.W.J. Beenakker, in: Proceedings 20th International Conference on the Physics of Semiconductors, Vol. 2, edited by E.M. Anastassakis and J.D. Joannopoulos (World Scientific, Singapore, 1991): pp. 833–836.
 62. *Oscillatory thermopower of a quantum point contact*, L.W. Molenkamp, H. van Houten, C.W.J. Beenakker, R. Eppenga, M.F.H. Schuurmans, and C.T. Foxon, in: Proceedings 20th International Conference on the Physics of Semiconductors,

- Vol. 3, edited by E.M. Anastassakis and J.D. Joannopoulos (World Scientific, Singapore, 1991): pp. 2347–2350.
63. *Theory of Coulomb-blockade oscillations in the conductance of a quantum dot*, C.W.J. Beenakker, *Physical Review B* **44**, 1646–1656 (1991).
 64. *Influence of Coulomb repulsion on the Aharonov-Bohm effect in a quantum dot*, C.W.J. Beenakker, H. van Houten, and A.A.M. Staring, *Physical Review B* **44**, 1657–1662 (1991).
 65. *Observation of the optical analogue of quantized conductance of a point contact*, E.A. Montie, E.C. Cosman, G.W. 't Hooft, M.B. van der Mark, and C.W.J. Beenakker, *Nature* **350**, 594–595 (1991).
 66. *Superconductivity in the mean-field anyon gas*, B. Rejsei and C.W.J. Beenakker, *Physical Review B* **43**, 11392–11395 (1991).
 67. *Biljarten met elektronen*, C.W.J. Beenakker, Oratie, Universiteit Leiden (1991).
 68. *Semiclassical theory of shot noise and its suppression in a conductor with deterministic scattering*, C.W.J. Beenakker and H. van Houten, *Physical Review B* **43**, 12066–12069 (1991).
 69. *Voltage-probe-controlled breakdown of the quantum Hall effect*, L.W. Molenkamp, M.J.P. Brugmans, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, *Physical Review B* **43**, 12118–12121 (1991).
 70. *Schakelen met elektronen in nanostructuren*, C.W.J. Beenakker and H. van Houten, *Polytechnisch Tijdschrift*, **46**(4), 50–53 (1991).
 71. *Josephson current through a superconducting quantum point contact shorter than the coherence length*, C.W.J. Beenakker and H. van Houten, *Physical Review Letters* **66**, 3056–3059 (1991).
 72. *Coulomb-blockade oscillations in semiconductor nanostructures*, H. van Houten, C.W.J. Beenakker, and A.A.M. Staring, in: *Single Charge Tunneling*, edited by H. Grabert and M.H. Devoret, NATO ASI Series B294 (Plenum, New York, 1992): pp. 167–216.
 73. *Observation of the optical analogue of the quantised conductance of a point contact*, E.A. Montie, E.C. Cosman, G.W. 't Hooft, M.B. van der Mark, and C.W.J. Beenakker, *Physica B* **175**, 149–152 (1991).
 74. *Andreev reflection and the Josephson effect in a quantum point contact: An analogy with phase-conjugating resonators*, H. van Houten and C.W.J. Beenakker, *Physica B* **175**, 187–197 (1991).
 75. *Coulomb-blockade oscillations in a quantum dot*, A.A.M. Staring, J.G. Williamson, H. van Houten, C.W.J. Beenakker, L.P. Kouwenhoven, and C.T. Foxon, *Physica B* **175**, 226–230 (1991).
 76. *Lateral electron transport through a quantum dot: Coulomb blockade and quantum transport*, J.G. Williamson, A.A.M. Staring, L.P. Kouwenhoven, H. van Houten, C.W.J. Beenakker, C.E. Timmering, M. Mabesoone, and C.T. Foxon, in: *Nanostructures and Mesoscopic Systems*, edited by W.P. Kirk and M.A. Reed (Academic, New York, 1992): pp. 255–266.
 77. *The superconducting quantum point contact*, C.W.J. Beenakker and H. van Houten, in: *Nanostructures and Mesoscopic Systems*, edited by W.P. Kirk and M.A. Reed (Academic, New York, 1992): pp. 481–497.
 78. *Coulomb-blockade oscillations in disordered quantum wires*, A.A.M. Staring, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, *Physical Review B* **45**, 9222–9236 (1992).
 79. *Thermo-electric properties of quantum point contacts*, H. van Houten, L.W. Molenkamp, C.W.J. Beenakker, and C.T. Foxon, *Semiconductor Science and Technology* **7**, B215–B221 (1992).
 80. *Resonant Josephson current through a quantum dot*, C.W.J. Beenakker and H. van Houten, in: *Single-Electron Tunneling and Mesoscopic Devices*, edited by H. Koch and H. Lübbig (Springer, Berlin, 1992): pp. 175–179.
 81. *Coulomb-blockade oscillations in quantum wires and dots*, H. van Houten, C.W.J. Beenakker, and A.A.M. Staring, in: *Single-Electron Tunneling and Mesoscopic Devices*, edited by H. Koch and H. Lübbig (Springer, Berlin, 1992): pp. 159–169.
 82. *Selective backscattering and the breakdown of the quantum Hall effect*, L.W. Molenkamp, M.J.P. Brugmans, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, *Surface Science* **263**, 288–292 (1992).
 83. *Spatial potential distribution in GaAs/Al_xGa_{1-x}As heterostructures under quantum Hall conditions studied with the linear electro-optic effect*, P.F. Fontein, P. Hendriks, F.A.P. Blom, J.H. Wolter, L.J. Giling, and C.W.J. Beenakker, *Surface Science* **263**, 91–96 (1992).
 84. *Observation of excess conductance of a constricted electron gas in the fractional quantum Hall regime*, B.W. Alphenaar, J.G. Williamson, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, *Physical Review B* **45**, 3890–3893 (1992).
 85. *Thermal and thermo-electric transport properties of quantum point contacts*, L.W. Molenkamp, H. van Houten, C.W.J. Beenakker, and C.T. Foxon, in: *Semiconductor Superlattices and Interfaces*, edited by A. Stella and L. Miglio (North-Holland, Amsterdam, 1993): pp. 365–378.
 86. *Universal limit of critical-current fluctuations in mesoscopic Josephson junctions*, C.W.J. Beenakker, *Physical Review Letters* **67**, 3836–3839 (1991); **68**, 1442(E) (1992).
 87. *Three “universal” mesoscopic Josephson effects*, C.W.J. Beenakker, in: *Transport Phenomena in Mesoscopic Systems*, edited by H. Fukuyama and T. Ando (Springer, Berlin, 1992): pp. 235–253.
 88. *Suppression of shot noise in metallic diffusive conductors*, C.W.J. Beenakker and M. Büttiker, *Physical Review B* **46**, 1889–1892 (1992).
 89. *Theory of the thermopower of a quantum dot*, C.W.J. Beenakker and A.A.M. Staring, *Physical Review B* **46**, 9667–9676 (1992).
 90. *Coulomb-blockade oscillations in the thermopower of a quantum dot*, A.A.M. Staring, L.W. Molenkamp, B.W. Alphenaar, H. van Houten, O.J.A. Buyk, M.A.A. Mabesoone, C.W.J. Beenakker, and C.T. Foxon, *Europhysics Letters* **22**, 57–62 (1993).

91. *Quantum transport in semiconductor–superconductor microjunctions*, C.W.J. Beenakker, Physical Review B **46**, 12841–12844 (1992).
92. *Vector-mean-field theory of the fractional quantum Hall effect*, B. Rejaei and C.W.J. Beenakker, Physical Review B **46**, 15566–15569 (1992).
93. *Mesoscopic fluctuations in the shot-noise power of metals*, M.J.M. de Jong and C.W.J. Beenakker, Physical Review B **46**, 13400–13406 (1992).
94. *Activated transport through a quantum dot with extended edge channels*, I.K. Marmorkos and C.W.J. Beenakker, Physical Review B **46**, 15562–15565 (1992).
95. *Single-electron tunneling in the fractional quantum Hall effect regime*, C.W.J. Beenakker and B. Rejaei, Physica B **189**, 147–156 (1993).
96. *Polarization charge relaxation and the Coulomb staircase in ultra-small double-barrier tunnel junctions*, C. Schönenberger, H. van Houten, and C.W.J. Beenakker, Physica B **189**, 218–224 (1993).
97. *Conductance and supercurrent discontinuities in atomic size point contacts*, C.J. Muller, J.M. van Ruitenbeek, C.W.J. Beenakker, and R. de Bruyn Ouboter, Physica B **189**, 225–234 (1993).
98. *Coulomb charging of a quantum dot in the presence of adiabatically transmitted edge channels*, B.W. Alphenaar, A.A.M. Staring, H. van Houten, I.K. Marmorkos, C.W.J. Beenakker, and C.T. Foxon, Physica B **189**, 80–87 (1993).
99. *Computation of quantum-transport properties by random-matrix theory*, C.W.J. Beenakker, in: Computations for the Nano-Scale, edited by P.E. Blöchl, C. Joachim, and A.J. Fisher, NATO ASI Series E240 (Kluwer, Dordrecht, 1993): pp. 233–243.
100. *Universality in the random-matrix theory of quantum transport*, C.W.J. Beenakker, Physical Review Letters **70**, 1155–1158 (1993).
101. *Random-matrix theory of mesoscopic fluctuations in conductors and superconductors*, C.W.J. Beenakker, Physical Review B **47**, 15763–15775 (1993).
102. *Three signatures of phase-coherent Andreev reflection*, I.K. Marmorkos, C.W.J. Beenakker, and R.A. Jalabert, Physical Review B **48**, 2811–2814 (1993).
103. *Long-range energy level interaction in small metallic particles*, R.A. Jalabert, J.-L. Pichard, and C.W.J. Beenakker, Europhysics Letters **24**, 1–6 (1993).
104. *Brownian-motion model for parametric correlations in the spectra of disordered metals*, C.W.J. Beenakker, Physical Review Letters **70**, 4126–4129 (1993).
105. *Quantum effects in thermal and thermo-electric transport in semiconductor nanostructures*, L.W. Molenkamp, H. van Houten, A.A.M. Staring, and C.W.J. Beenakker, Physica Scripta **T49**, 441–445 (1993).
106. *Random-matrix theory of parametric correlations in the spectra of disordered metals and chaotic billiards*, C.W.J. Beenakker and B. Rejaei, Physica A **203**, 61–90 (1994).
107. *Nonlogarithmic repulsion of transmission eigenvalues in a disordered wire*, C.W.J. Beenakker and B. Rejaei, Physical Review Letters **71**, 3689–3692 (1993).
108. *Principles of solid state electron optics*, H. van Houten and C.W.J. Beenakker, in: Confined Electrons and Photons: New Physics and Applications, edited by E. Burstein and C. Weisbuch, NATO ASI Series B340 (Plenum, New York, 1995): pp. 269–303.
109. *Sawtooth-like thermopower oscillations of a quantum dot in the Coulomb blockade regime*, L.W. Molenkamp, A.A.M. Staring, B.W. Alphenaar, H. van Houten, and C.W.J. Beenakker, Semiconductor Science and Technology **9**, 903–906 (1994).
110. *Universality of weak localization in disordered wires*, C.W.J. Beenakker, Physical Review B **49**, 2205–2207 (1994).
111. *Universality of Brézin and Zee’s spectral correlator*, C.W.J. Beenakker, Nuclear Physics B **422**, 515–520 (1994).
112. *Exact solution for the distribution of transmission eigenvalues in a disordered wire and comparison with random-matrix theory*, C.W.J. Beenakker and B. Rejaei, Physical Review B **49**, 7499–7510 (1994).
113. *Scaling theory of conduction through a normal–superconductor microbridge*, C.W.J. Beenakker, B. Rejaei, and J.A. Melsen, Physical Review Letters **72**, 2470–2473 (1994).
114. *Doubled shot noise in disordered normal-metal–superconductor junctions*, M.J.M. de Jong and C.W.J. Beenakker, Physical Review B **49**, 16070–16073 (1994).
115. *Exactly solvable scaling theory of conduction in disordered wires*, C.W.J. Beenakker, Modern Physics Letters B **8**, 469–478 (1994).
116. *Conductance fluctuations, weak localization, and shot noise for a ballistic constriction in a disordered wire*, C.W.J. Beenakker and J.A. Melsen, Physical Review B **50**, 2450–2457 (1994).
117. *Universal quantum signatures of chaos in ballistic transport*, R.A. Jalabert, J.-L. Pichard, and C.W.J. Beenakker, Europhysics Letters **27**, 255–260 (1994).
118. *Sub-Poissonian shot noise in a diffusive conductor*, M.J.M. de Jong and C.W.J. Beenakker, in: Coulomb and Interference Effects in Small Electronic Structures, edited by D.C. Glatzli, M. Sanquer, and J. Trần Thanh Vân (Editions Frontières, 1994): pp. 427–435.
119. *Random-matrix theory of quantum size effects on nuclear magnetic resonance in metal particles*, C.W.J. Beenakker, Physical Review B **50**, 15170–15173 (1994).
120. *Reflectionless tunneling through a double-barrier NS junction*, J.A. Melsen and C.W.J. Beenakker, Physica B **203**, 219–225

(1994).

121. *Conductance distribution of a quantum dot with nonideal single-channel leads*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **50**, 11263–11266 (1994).
122. *Quantum transport in semiconductor–superconductor microjunctions*, C.W.J. Beenakker, in: *Mesoscopic Quantum Physics*, edited by E. Akkermans, G. Montambaux, J.-L. Pichard, and J. Zinn-Justin (North-Holland, Amsterdam, 1995): pp. 279–324.
123. *Andreev reflection in ferromagnet–superconductor junctions*, M.J.M. de Jong and C.W.J. Beenakker, *Physical Review Letters* **74**, 1657–1660 (1995).
124. *Effect of a voltage probe on the phase-coherent conductance of a ballistic chaotic cavity*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **51**, 7739–7743 (1995).
125. *Semiclassical theory of shot-noise suppression*, M.J.M. de Jong and C.W.J. Beenakker, *Physical Review B* **51**, 16867–16870 (1995).
126. *Giant backscattering peak in angle-resolved Andreev reflection*, C.W.J. Beenakker, J.A. Melsen, and P.W. Brouwer, *Physical Review B* **51**, 13883–13886 (1995).
127. *Conductance fluctuations in a disordered double-barrier junction*, J.A. Melsen and C.W.J. Beenakker, *Physical Review B* **51**, 14483–14489 (1995).
128. *Insensitivity to time-reversal symmetry breaking of universal conductance fluctuations with Andreev reflection*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **52**, 16772–16775 (1995).
129. *Weak localization coexisting with a magnetic field in a normal-metal–superconductor microbridge*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **52**, R3868–R3871 (1995).
130. *Accuracy of the diffusion equation with extrapolated-boundary condition for transmittance of light through a turbid medium*, J.C.J. Paasschens, M.J.M. de Jong, and C.W.J. Beenakker, arXiv:0807.1623.
131. *Non-perturbative calculation of the probability distribution of plane-wave transmission through a disordered waveguide*, S.A. van Langen, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review E* **53**, R1344–R1347 (1996).
132. *Probability of reflection by a random laser*, C.W.J. Beenakker, J.C.J. Paasschens, and P.W. Brouwer, *Physical Review Letters* **76**, 1368–1371 (1996).
133. *Effect of the coupling to a superconductor on the level statistics of a metal grain in a magnetic field*, K.M. Frahm, P.W. Brouwer, J.A. Melsen, and C.W.J. Beenakker, *Physical Review Letters* **76**, 2981–2984 (1996).
134. *Semiclassical theory of shot noise in mesoscopic conductors*, M.J.M. de Jong and C.W.J. Beenakker, *Physica A* **230**, 219–248 (1996).
135. *Localization of light: Dual symmetry between absorption and amplification*, J.C.J. Paasschens, T.Sh. Misirpashaev, and C.W.J. Beenakker, *Physical Review B* **54**, 11887–11890 (1996).
136. *Induced superconductivity distinguishes chaotic from integrable billiards*, J.A. Melsen, P.W. Brouwer, K.M. Frahm, and C.W.J. Beenakker, *Europhysics Letters* **35**, 7–12 (1996).
137. *Quantum point contacts*, H. van Houten and C.W.J. Beenakker, *Physics Today*, **49** (7), 22–27 (1996).
138. *Diagrammatic method of integration over the unitary group, with applications to quantum transport in mesoscopic systems*, P.W. Brouwer and C.W.J. Beenakker, *Journal of Mathematical Physics* **37**, 4904–4934 (1996).
139. *Random-matrix theory of quantum transport*, C.W.J. Beenakker, *Reviews of Modern Physics* **69**, 731–808 (1997).
140. *Superconductor-proximity effect in chaotic and integrable billiards*, J.A. Melsen, P.W. Brouwer, K.M. Frahm, and C.W.J. Beenakker, *Physica Scripta* **T69**, 223–225 (1997).
141. *Localization in a disordered multi-mode waveguide with absorption or amplification*, T.Sh. Misirpashaev, J.C.J. Paasschens, and C.W.J. Beenakker, *Physica A* **236**, 189–201 (1997).
142. *Phase-dependent magnetoconductance fluctuations in a chaotic Josephson junction*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **54**, R12705–R12708 (1996).
143. *Reflectance fluctuations in an absorbing random waveguide*, T.Sh. Misirpashaev and C.W.J. Beenakker, *Pis'ma v Zhurnal Éksperimental'noi i Teoreticheskoi Fiziki* **64**, 289–293 (1996) [*JETP Letters* **64**, 319–324 (1996)].
144. *Brightness of a phase-conjugating mirror behind a random medium*, J.C.J. Paasschens, P.W. Brouwer, and C.W.J. Beenakker, *Europhysics Letters* **38**, 651–656 (1997).
145. *Fluctuating phase rigidity for a quantum chaotic system with partially broken time-reversal symmetry*, S.A. van Langen, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review E* **55**, R1–R4 (1997).
146. *Voltage-probe and imaginary potential models for dephasing in a chaotic quantum dot*, P.W. Brouwer and C.W.J. Beenakker, *Physical Review B* **55**, 4695–4702 (1997); **66**, 209901(E) (2002).
147. *Shot noise in mesoscopic systems*, M.J.M. de Jong and C.W.J. Beenakker, in: *Mesoscopic Electron Transport*, edited by L.L. Sohn, L.P. Kouwenhoven, and G. Schön, NATO ASI Series E345 (Kluwer, Dordrecht, 1997): pp. 225–258.
148. *Anomalous temperature dependence of the supercurrent through a chaotic Josephson junction*, P.W. Brouwer and C.W.J. Beenakker, *Chaos, Solitons & Fractals* **8**, 1249–1260 (1997).
149. *Lasing threshold and mode competition in chaotic cavities*, T.Sh. Misirpashaev and C.W.J. Beenakker, *Physical Review A* **57**, 2041–2045 (1998).
150. *Distribution of parametric conductance derivatives of a quantum dot*, P.W. Brouwer, S.A. van Langen, K.M. Frahm, M. Büttiker, and C.W.J. Beenakker, *Physical Review Letters* **79**, 913–916 (1997).
151. *Quantum mechanical time-delay matrix in chaotic scattering*, P.W. Brouwer, K.M. Frahm, and C.W.J. Beenakker, *Physical*

- Review Letters **78**, 4737–4740 (1997).
152. *Reflection of light from a disordered medium backed by a phase-conjugating mirror*, J.C.J. Paasschens, M.J.M. de Jong, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review A* **56**, 4216–4228 (1997).
 153. *Theory of directed localization in one dimension*, P.W. Brouwer, P.G. Silvestrov, and C.W.J. Beenakker, *Physical Review B* **56**, R4333–R4335 (1997).
 154. *Spontaneous emission in chaotic cavities*, T.Sh. Misirpashaev, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review Letters* **79**, 1841–1844 (1997).
 155. *Thermopower of single-channel disordered and chaotic conductors*, S.A. van Langen, P.G. Silvestrov, and C.W.J. Beenakker, *Superlattices and Microstructures* **23**, 691–698 (1998).
 156. *Thermal radiation and amplified spontaneous emission from a random medium*, C.W.J. Beenakker, *Physical Review Letters* **81**, 1829–1832 (1998).
 157. *Berry phase and adiabaticity of a spin diffusing in a nonuniform magnetic field*, S.A. van Langen, H.P.A. Knops, J.C.J. Paasschens, and C.W.J. Beenakker, *Physical Review B*, **59**, 2102–2110 (1999).
 158. *Photon statistics of a random laser*, C.W.J. Beenakker, in: *Diffuse Waves in Complex Media*, edited by J.-P. Fouque, NATO Science Series C531 (Kluwer, Dordrecht, 1999): pp. 137–164.
 159. *Distribution of the quantum mechanical time-delay matrix for a chaotic cavity*, P.W. Brouwer, K.M. Frahm, and C.W.J. Beenakker, *Waves in Random Media*, **9**, 91–104 (1999).
 160. *Long-range correlation of thermal radiation*, M. Patra and C.W.J. Beenakker, *Physical Review A*, **59**, R43–R46 (1999).
 161. *Sub-Poissonian shot noise in nondegenerate diffusive conductors*, C.W.J. Beenakker, *Physical Review Letters* **82**, 2761–2763 (1999).
 162. *Excitation spectrum of Andreev billiards with a mixed phase space*, H. Schomerus and C.W.J. Beenakker, *Physical Review Letters* **82**, 2951–2954 (1999).
 163. *Non-Cayley-tree model for quasiparticle decay in a quantum dot*, X. Leyronas, J. Tworzydło, and C.W.J. Beenakker, *Physical Review Letters* **82**, 4894–4897 (1999).
 164. *Kinetic theory of shot noise in nondegenerate diffusive conductors*, H. Schomerus, E.G. Mishchenko, and C.W.J. Beenakker, *Physical Review B* **60**, 5839–5850 (1999).
 165. *Excess noise for coherent radiation propagating through amplifying random media*, M. Patra and C.W.J. Beenakker, *Physical Review A* **60**, 4059–4066 (1999).
 166. *Photon shot noise*, C.W.J. Beenakker and M. Patra, *Modern Physics Letters B* **13**, 337–347 (1999).
 167. *Quantum-limited linewidth of a chaotic laser cavity*, M. Patra, H. Schomerus, and C.W.J. Beenakker, *Physical Review A* **61**, 023810 (2000).
 168. *Shot-noise in non-degenerate semiconductors with energy-dependent elastic scattering*, H. Schomerus, E.G. Mishchenko, and C.W.J. Beenakker, *Lecture Notes in Physics* **547**, 96–104 (2000).
 169. *Radiative transfer theory for vacuum fluctuations*, E.G. Mishchenko and C.W.J. Beenakker, *Physical Review Letters* **83**, 5475–5478 (1999).
 170. *Distribution of the reflection eigenvalues of a weakly absorbing chaotic cavity*, C.W.J. Beenakker and P.W. Brouwer, *Physica E* **9**, 463–466 (2001).
 171. *Large Petermann factor in chaotic cavities with many scattering channels*, K.M. Frahm, H. Schomerus, M. Patra, and C.W.J. Beenakker, *Europhysics Letters* **49**, 48–54 (2000).
 172. *High-frequency dynamics of wave localization*, C.W.J. Beenakker, K.J.H. van Bommel, and P.W. Brouwer, *Physical Review E* **60**, R6313–R6315 (1999).
 173. *Why does a metal–superconductor junction have a resistance?*, C.W.J. Beenakker, in: *Quantum Mesoscopic Phenomena and Mesoscopic Devices in Microelectronics*, edited by I.O. Kulik and R. Ellialtıoglu, NATO Science Series C559 (Kluwer, Dordrecht, 2000): pp. 51–60.
 174. *Effect of dephasing on charge-counting statistics in chaotic cavities*, Ya.M. Blanter, H. Schomerus, and C.W.J. Beenakker, *Physica E* **11**, 1–7 (2001).
 175. *Propagation of squeezed radiation through amplifying or absorbing random media*, M. Patra and C.W.J. Beenakker, *Physical Review A* **61**, 063805 (2000).
 176. *Quantum limit of the laser line width in chaotic cavities and statistics of residues of scattering matrix poles*, H. Schomerus, K.M. Frahm, M. Patra, and C.W.J. Beenakker, *Physica A* **278**, 469–496 (2000).
 177. *Search for two-scale localization in disordered wires in a magnetic field*, H. Schomerus and C.W.J. Beenakker, *Physical Review Letters* **84**, 3927–3929 (2000).
 178. *Hierarchical model for the scale-dependent velocity of waves in random media*, J. Tworzydło and C.W.J. Beenakker, *Physical Review Letters* **85**, 674–676 (2000).
 179. *Scaling at the chaos threshold for interacting electrons in a quantum dot*, X. Leyronas, P.G. Silvestrov, and C.W.J. Beenakker, *Physical Review Letters* **84**, 3414–3417 (2000).
 180. *Photonic excess noise and wave localization*, C.W.J. Beenakker, M. Patra, and P.W. Brouwer, *Physical Review A* **61**, 051801(R) (2000).
 181. *Frequency dependence of the photonic noise spectrum in an absorbing or amplifying diffusive medium*, E.G. Mishchenko, M. Patra, and C.W.J. Beenakker, *European Physical Journal D* **13**, 289–297 (2001).
 182. *Coherent backscattering effect on wave dynamics in a random medium*, H. Schomerus, K.J.H. van Bommel, and C.W.J.

- Beenakker, Europhysics Letters **52**, 518–524 (2000).
183. *Signature of wave localization in the time dependence of a reflected pulse*, M. Titov and C.W.J. Beenakker, Physical Review Letters **85**, 3388–3391 (2000).
 184. *Universal gap fluctuations in the superconductor proximity effect*, M.G. Vavilov, P.W. Brouwer, V. Ambegaokar, and C.W.J. Beenakker, Physical Review Letters, **86**, 874–877 (2001).
 185. *Counting statistics of photons produced by electronic shot noise*, C.W.J. Beenakker and H. Schomerus, Physical Review Letters **86**, 700–703 (2001).
 186. *Localization-induced coherent backscattering effect in wave dynamics*, H. Schomerus, K.J.H. van Bommel, and C.W.J. Beenakker, Physical Review E **63**, 026605 (2001).
 187. *Single-mode delay time statistics for scattering by a chaotic cavity*, K.J.H. van Bommel, H. Schomerus, and C.W.J. Beenakker, Physica Scripta **T90**, 278–282 (2001).
 188. *Dynamics of localization in a waveguide*, C.W.J. Beenakker, in: Photonic Crystals and Light Localization in the 21st Century, edited by C.M. Soukoulis, NATO Science Series C563 (Kluwer, Dordrecht, 2001): pp. 489–508.
 189. *Effect of inelastic scattering on the average Coulomb-blockade peak height in quantum dots*, C.W.J. Beenakker, H. Schomerus, and P.G. Silvestrov, Physical Review B **64**, 033307 (2001).
 190. *Limits to error correction in quantum chaos*, P.G. Silvestrov, H. Schomerus, and C.W.J. Beenakker, Physical Review Letters **86**, 5192–5195 (2001).
 191. *Andreev levels in a single-channel conductor*, M. Titov, N.A. Mortensen, H. Schomerus, and C.W.J. Beenakker, Physical Review B **64**, 134206 (2001).
 192. *Multiple-path interferometer with a single quantum obstacle*, H. Schomerus, Y. Noat, J. Dalibard, and C.W.J. Beenakker, Europhysics Letters **57**, 651–657 (2002).
 193. *Negative superfluid density: Mesoscopic fluctuations and reverse of the supercurrent through a disordered Josephson junction*, M. Titov, Ph. Jacquod, and C.W.J. Beenakker, Physical Review B **65**, 012504 (2002).
 194. *Manipulation of photon statistics of highly degenerate incoherent radiation*, M. Kindermann, Yu.V. Nazarov, and C.W.J. Beenakker, Physical Review Letters **88**, 063601 (2002).
 195. *Microscopic versus mesoscopic local density of states in one-dimensional localization*, H. Schomerus, M. Titov, P.W. Brouwer, and C.W.J. Beenakker, Physical Review B **65**, 121101(R) (2002).
 196. *Golden rule decay versus Lyapunov decay of the quantum Loschmidt echo*, Ph. Jacquod, P.G. Silvestrov, and C.W.J. Beenakker, Physical Review E **64**, 055203(R) (2001).
 197. *Dynamic effect of phase conjugation on wave localization*, K.J.H. van Bommel, M. Titov, and C.W.J. Beenakker, Physical Review B **65**, 174203 (2002).
 198. *Electromechanical noise in a diffusive conductor*, A.V. Shytov, L.S. Levitov, and C.W.J. Beenakker, Physical Review Letters **88**, 228303 (2002).
 199. *Ehrenfest times for classically chaotic systems*, P.G. Silvestrov and C.W.J. Beenakker, Physical Review E **65**, 035208(R) (2002).
 200. *Ehrenfest-time-dependent excitation gap in a chaotic Andreev billiard*, I. Adagideli and C.W.J. Beenakker, Physical Review Letters **89**, 237002 (2002).
 201. *Quantum optical communication rates through an amplifying random medium*, J. Tworzydło and C.W.J. Beenakker, Physical Review Letters **89**, 043902 (2002).
 202. *Decay of the Loschmidt Echo for quantum states with sub-Planck scale structures*, Ph. Jacquod, I. Adagideli, and C.W.J. Beenakker, Physical Review Letters **89**, 154103 (2002).
 203. *Anomalous power law of quantum reversibility for classically regular dynamics*, Ph. Jacquod, I. Adagideli, and C.W.J. Beenakker, Europhysics Letters **61**, 729–735 (2003).
 204. *Momentum noise in a quantum point contact*, A. Tajic, M. Kindermann, and C.W.J. Beenakker, Physical Review B **66**, 241301(R) (2002).
 205. *Quantum theory of electromechanical noise and momentum transfer statistics*, M. Kindermann and C.W.J. Beenakker, Physical Review B **66**, 224106 (2002).
 206. *Hypersensitivity to perturbations of quantum-chaotic wave-packet dynamics*, P.G. Silvestrov, J. Tworzydło, and C.W.J. Beenakker, Physical Review E **67**, 025204(R) (2003).
 207. *Crossover from weak localization to weak antilocalization in a disordered microbridge*, M.G.A. Crawford, P.W. Brouwer, and C.W.J. Beenakker, Physical Review B **67**, 115313 (2003).
 208. *Adiabatic quantization of Andreev quantum billiard levels*, P.G. Silvestrov, M.C. Goorden, and C.W.J. Beenakker, Physical Review Letters **90**, 116801 (2003).
 209. *Distribution of voltage fluctuations in a current-biased conductor*, M. Kindermann, Yu.V. Nazarov, and C.W.J. Beenakker, Physical Review Letters **90**, 246805 (2003).
 210. *Quantum shot noise*, C.W.J. Beenakker and C. Schönberger, Physics Today, **56** (5), 37–42 (2003); Japanese translation in: Parity, **19** (2), 14–23 (2004).
 211. *Scattering theory of plasmon-assisted entanglement transfer and distillation*, J.L. van Velsen, J. Tworzydło, and C.W.J. Beenakker, Physical Review A **68**, 043807 (2003).
 212. *Quantum Andreev map: A paradigm of quantum chaos in superconductivity*, Ph. Jacquod, H. Schomerus, and C.W.J. Beenakker, Physical Review Letters **90**, 207004 (2003).

213. *Temperature-dependent third cumulant of tunneling noise*, C.W.J. Beenakker, M. Kindermann, and Yu.V. Nazarov, *Physical Review Letters* **90**, 176802 (2003).
214. *Noiseless scattering states in a chaotic cavity*, P.G. Silvestrov, M.C. Goorden, and C.W.J. Beenakker, *Physical Review B* **67**, 241301(R) (2003).
215. *Dynamical model for the quantum-to-classical crossover of shot noise*, J. Tworzydło, A. Tajic, H. Schomerus, and C.W.J. Beenakker, *Physical Review B* **68**, 115313 (2003).
216. *Reply to comment of S. Tomsovic and E.J. Heller on "Ehrenfest times for classically chaotic systems"*, P.G. Silvestrov and C.W.J. Beenakker, *Physical Review E* **68**, 038202 (2003).
217. *Proposal for production and detection of entangled electron-hole pairs in a degenerate electron gas*, C.W.J. Beenakker, C. Emary, M. Kindermann, and J.L. van Velsen, *Physical Review Letters* **91**, 147901 (2003).
218. *Feedback of the electromagnetic environment on current and voltage fluctuations out of equilibrium*, M. Kindermann, Yu.V. Nazarov, and C.W.J. Beenakker, *Physical Review B* **69**, 035336 (2004).
219. *Quasiclassical fluctuations of the superconductor proximity gap in a chaotic system*, M.C. Goorden, Ph. Jacquod, and C.W.J. Beenakker, *Physical Review B* **68**, 220501(R) (2003).
220. *Quantum teleportation by particle-hole annihilation in the Fermi sea*, C.W.J. Beenakker and M. Kindermann, *Physical Review Letters* **92**, 056801 (2004).
221. *Dephasing of entangled electron-hole pairs in a degenerate electron gas*, J.L. van Velsen, M. Kindermann, and C.W.J. Beenakker, *Turkish Journal of Physics* **27**, 323–329 (2003).
222. *Entanglement production in a chaotic quantum dot*, C.W.J. Beenakker, M. Kindermann, C.M. Marcus, and A. Yacoby, in: *Fundamental Problems of Mesoscopic Physics: Interactions and Decoherence*, edited by I.V. Lerner, B.L. Altshuler, and Y. Gefen, NATO Science Series II. Vol. 154 (Kluwer, Dordrecht, 2004): pp. 167–177.
223. *Production and detection of three-qubit entanglement in the Fermi sea*, C.W.J. Beenakker, C. Emary, and M. Kindermann, *Physical Review B* **69**, 115320 (2004).
224. *Quantum-to-classical crossover of mesoscopic conductance fluctuations*, J. Tworzydło, A. Tajic, and C.W.J. Beenakker, *Physical Review B* **69**, 165318 (2004).
225. *Relation between entanglement measures and Bell inequalities for three qubits*, C. Emary and C.W.J. Beenakker, *Physical Review A* **69**, 032317 (2004).
226. *Entanglement in mesoscopic structures: Role of projection*, A.V. Lebedev, G. Blatter, C.W.J. Beenakker, and G.B. Lesovik, *Physical Review B* **69**, 235312 (2004).
227. *Charge detection enables free-electron quantum computation*, C.W.J. Beenakker, D.P. DiVincenzo, C. Emary, and M. Kindermann, *Physical Review Letters* **93**, 020501 (2004).
228. *Teleportatie van elektriciteit*, C.W.J. Beenakker, *Nederlands Tijdschrift voor Natuurkunde*, **70**, 112–113 (2004).
229. *Transition from pure-state to mixed-state entanglement by random scattering*, J.L. van Velsen and C.W.J. Beenakker, *Physical Review A* **70**, 032325 (2004).
230. *Antibunched photons emitted by a quantum point contact out of equilibrium*, C.W.J. Beenakker and H. Schomerus, *Physical Review Letters* **93**, 096801 (2004).
231. *Weak localization of the open kicked rotator*, J. Tworzydło, A. Tajic, and C.W.J. Beenakker, *Physical Review B* **70**, 205324 (2004).
232. *Andreev billiards*, C.W.J. Beenakker, *Lecture Notes in Physics* **667**, 131–174 (2005).
233. *Exponential sensitivity to dephasing of electrical conduction through a quantum dot*, J. Tworzydło, A. Tajic, H. Schomerus, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review Letters* **93**, 186806 (2004).
234. *Optimal spin-entangled electron-hole pair pump*, C.W.J. Beenakker, M. Titov, and B. Trauzettel, *Physical Review Letters* **94**, 186804 (2005).
235. *Emission of polarization-entangled microwave photons from a pair of quantum dots*, C. Emary, B. Trauzettel, and C.W.J. Beenakker, *Physical Review Letters* **95**, 127401 (2005).
236. *Stub model for dephasing in a quantum dot*, C.W.J. Beenakker and B. Michaelis, *Journal of Physics A* **38**, 10639–10646 (2005).
237. *Transfer of entanglement from electrons to photons by optical selection rules*, M. Titov, B. Trauzettel, B. Michaelis, and C.W.J. Beenakker, *New Journal of Physics* **7**, 186 (2005).
238. *Quantum-to-classical crossover for Andreev billiards in a magnetic field*, M.C. Goorden, Ph. Jacquod, and C.W.J. Beenakker, *Physical Review B* **72**, 064526 (2005).
239. *All-electronic coherent population trapping in quantum dots*, B. Michaelis, C. Emary, and C.W.J. Beenakker, *Europhysics Letters* **73**, 677–683 (2006).
240. *Stroboscopic model of transport through a quantum dot with spin-orbit scattering*, J.H. Bardarson, J. Tworzydło, and C.W.J. Beenakker, *Physical Review B* **72**, 235305 (2005).
241. *Electron-hole entanglement in the Fermi sea*, C.W.J. Beenakker, in: *International School of Physics Enrico Fermi, Vol. 162, Quantum Computers, Algorithms and Chaos*, edited by G. Casati, D.L. Shepelyansky, P. Zoller, and G. Benenti (IOS Press, Amsterdam, 2006): pp. 307–347.
242. *Voltage probe model of spin decay in a chaotic quantum dot with applications to spin-flip noise and entanglement production*, B. Michaelis and C.W.J. Beenakker, *Physical Review B* **73**, 115329 (2006).
243. *Excess conductance of a spin-filtering quantum dot*, C.W.J. Beenakker, *Physical Review B* **73**, 201304(R) (2006).

244. *Deterministic quantum state transfer from an electronic charge qubit to a photonic polarization qubit*, L.J.P. Ament and C.W.J. Beenakker, *Physical Review B* **73**, 121307(R) (2006).
245. *Parity meter for charge qubits: An efficient quantum entangler*, B. Trauzettel, A.N. Jordan, C.W.J. Beenakker, and M. Büttiker, *Physical Review B* **73**, 235331 (2006).
246. *Sub-Poissonian shot noise in graphene*, J. Tworzydło, B. Trauzettel, M. Titov, A. Rycerz, and C.W.J. Beenakker, *Physical Review Letters* **96**, 246802 (2006).
247. *How spin-orbit interaction can cause electronic shot noise*, A. Ossipov, J.H. Bardarson, J. Tworzydło, M. Titov, and C.W.J. Beenakker, *Europhysics Letters* **76**, 115–120 (2006).
248. *Specular Andreev reflection in graphene*, C.W.J. Beenakker, *Physical Review Letters* **97**, 067007 (2006).
249. *Josephson effect in ballistic graphene*, M. Titov and C.W.J. Beenakker, *Physical Review B* **74**, 041401(R) (2006).
250. *Counting statistics of coherent population trapping in quantum dots*, C.W. Groth, B. Michaelis, and C.W.J. Beenakker, *Physical Review B* **74**, 125315 (2006).
251. *Degradation of electron-hole entanglement by spin-orbit coupling*, J.H. Bardarson and C.W.J. Beenakker, *Physical Review B* **74**, 235307 (2006).
252. *Valley filter and valley valve in graphene*, A. Rycerz, J. Tworzydło, and C.W.J. Beenakker, *Nature Physics* **3**, 172–175 (2007).
253. *Ballistic transmission through a graphene bilayer*, I. Snyman and C.W.J. Beenakker, *Physical Review B* **75**, 045322 (2007).
254. *Excitation gap of a graphene channel with superconducting boundaries*, M. Titov, A. Ossipov, and C.W.J. Beenakker, *Physical Review B* **75**, 045417 (2007).
255. *Pseudodiffusive conduction at the Dirac point of a normal-superconductor junction in graphene*, A.R. Akhmerov and C.W.J. Beenakker, *Physical Review B* **75**, 045426 (2007).
256. *Anomalously large conductance fluctuations in weakly disordered graphene*, A. Rycerz, J. Tworzydło, and C.W.J. Beenakker, *Europhysics Letters* **79**, 57003 (2007).
257. *Effect of spin-orbit coupling on the excitation spectrum of Andreev billiards*, B. Béri, J.H. Bardarson, and C.W.J. Beenakker, *Physical Review B* **75**, 165307 (2007).
258. *Detection of valley polarization in graphene by a superconducting contact*, A.R. Akhmerov and C.W.J. Beenakker, *Physical Review Letters* **98**, 157003 (2007).
259. *Hempel's dilemma and the physics of computation*, C.W.J. Beenakker, in: *Knowledge in Ferment: Dilemmas in Science, Scholarship and Society*, edited by A. in 't Groen, H.J. de Jonge, E. Klasen, H. Papma and P. van Slooten (Leiden University Press, Leiden, 2007): pp. 65–70.
260. *Extremal transmission at the Dirac point of a photonic band structure*, R.A. Sepkhanov, Ya.B. Bazaliy, and C.W.J. Beenakker, *Physical Review A* **75**, 063813 (2007).
261. *Reentrance effect in a graphene n-p-n junction coupled to a superconductor*, A. Ossipov, M. Titov, and C.W.J. Beenakker, *Physical Review B* **75**, 241401(R) (2007).
262. *Demonstration of one-parameter scaling at the Dirac point in graphene*, J. Bardarson, J. Tworzydło, P.W. Brouwer, and C.W.J. Beenakker, *Physical Review Letters* **99**, 106801 (2007).
263. *Valley-isospin dependence of the quantum Hall effect in a graphene p-n junction*, J. Tworzydło, I. Snyman, A.R. Akhmerov, and C.W.J. Beenakker, *Physical Review B* **76**, 035411 (2007).
264. *Aharonov-Bohm effect and broken valley-degeneracy in a graphene ring*, P. Recher, B. Trauzettel, A. Rycerz, Ya.M. Blanter, C.W.J. Beenakker, and A.F. Morpurgo, *Physical Review B* **76**, 235404 (2007).
265. *Splitting of Andreev levels in a Josephson junction by spin-orbit coupling*, B. Béri, J.H. Bardarson, and C.W.J. Beenakker, *Physical Review B* **77**, 045311 (2008).
266. *Aharonov-Bohm effect for a valley-polarized current in graphene*, A. Rycerz and C.W.J. Beenakker, arXiv:0709.3397.
267. *Correspondence between Andreev reflection and Klein tunneling in bipolar graphene*, C.W.J. Beenakker, A.R. Akhmerov, P. Recher, and J. Tworzydło, *Physical Review B* **77**, 075409 (2008).
268. *Andreev reflection and Klein tunneling in graphene*, C.W.J. Beenakker, *Reviews of Modern Physics* **80**, 1337 (2008).
269. *Boundary conditions for Dirac fermions on a terminated honeycomb lattice*, A.R. Akhmerov and C.W.J. Beenakker, *Physical Review B* **77**, 085423 (2008).
270. *Numerical test of the theory of pseudo-diffusive transmission at the Dirac point of a photonic band structure*, R.A. Sepkhanov and C.W.J. Beenakker, *Optics Communications* **281**, 5267 (2008).
271. *Theory of the valley-valve effect in graphene nanoribbons*, A.R. Akhmerov, J.H. Bardarson, A. Rycerz, and C.W.J. Beenakker, *Physical Review B* **77**, 205416 (2008).
272. *Electronic shot noise in fractal conductors*, C.W. Groth, J. Tworzydło, and C.W.J. Beenakker, *Physical Review Letters* **100**, 176804 (2008).
273. *Proposed method for detection of the pseudospin-1/2 Berry phase in a photonic crystal with a Dirac spectrum*, R.A. Sepkhanov, J. Nilsson, and C.W.J. Beenakker, *Physical Review B* **78**, 045122 (2008).
274. *Calculation of the conductance of a graphene sheet using the Chalker-Coddington network model*, I. Snyman, J. Tworzydło, and C.W.J. Beenakker, *Physical Review B* **78**, 045118 (2008).
275. *Splitting of a Cooper pair by a pair of Majorana bound states*, J. Nilsson, A.R. Akhmerov, and C.W.J. Beenakker, *Physical Review Letters* **101**, 120403 (2008).
276. *Extinction of coherent backscattering by a disordered photonic crystal with a Dirac spectrum*, R.A. Sepkhanov, A. Ossipov,

- and C.W.J. Beenakker, *Europhysics Letters* **85**, 14005 (2009).
277. *Finite difference method for transport properties of massless Dirac fermions*, J. Tworzydło, C.W. Groth, and C.W.J. Beenakker, *Physical Review B* **78**, 235438 (2008).
 278. *Nonalgebraic length dependence of transmission through a chain of barriers with a Lévy spacing distribution*, C.W.J. Beenakker, C.W. Groth, and A.R. Akhmerov, *Physical Review B* **79**, 024204 (2009).
 279. *Quantum limit of the triplet proximity effect in half-metal–superconductor junctions*, B. Béri, J.N. Kupferschmidt, C.W.J. Beenakker, and P.W. Brouwer, *Physical Review B* **79**, 024517 (2009).
 280. *Quantum Goos-Hänchen effect in graphene*, C.W.J. Beenakker, R.A. Sepkhanov, A.R. Akhmerov, and J. Tworzydło, *Physical Review Letters* **102**, 146804 (2009).
 281. *Two-photon speckle as a probe of multi-dimensional entanglement*, C.W.J. Beenakker, J.W.F. Venderbos, and M.P. van Exter, *Physical Review Letters* **102**, 193601 (2009).
 282. *Electrically detected interferometry of Majorana fermions in a topological insulator*, A.R. Akhmerov, J. Nilsson, and C.W.J. Beenakker, *Physical Review Letters* **102**, 216404 (2009).
 283. *Applications of random matrix theory to condensed matter and optical physics*, C.W.J. Beenakker, in: *The Oxford Handbook of Random Matrix Theory*, edited by G. Akemann, J. Baik, and P. Di Francesco (Oxford University Press, Oxford, to be published).
 284. *Switching of electrical current by spin precession in the first Landau level of an inverted-gap semiconductor*, A.R. Akhmerov, C.W. Groth, J. Tworzydło, and C.W.J. Beenakker, *Physical Review B* **80**, 195320 (2009).
 285. *Theory of the topological Anderson insulator*, C.W. Groth, M. Wimmer, A.R. Akhmerov, J. Tworzydło, and C.W.J. Beenakker, *Physical Review Letters* **103**, 196805 (2009).
 286. *Pseudodiffusive transmission of nodal Dirac fermions through a clean d-wave superconductor*, J.K. Åsboth, A.R. Akhmerov, A.C. Berceanu, and C.W.J. Beenakker, *Physical Review B* **80**, 224517 (2009).
 287. *Hartman effect and spin precession in graphene*, R.A. Sepkhanov, M.V. Medvedyeva, and C.W.J. Beenakker, *Physical Review B* **80**, 245433 (2009).
 288. *Domain wall in a chiral p-wave superconductor: A pathway for electrical current*, I. Serban, B. Béri, A.R. Akhmerov, and C.W.J. Beenakker, *Physical Review Letters* **104**, 147001 (2010).
 289. *Nonzero temperature effects on antibunched photons emitted by a quantum point contact out of equilibrium*, I.C. Fulga, F. Hassler, and C.W.J. Beenakker, *Physical Review B* **81**, 115331 (2010).
 290. *Absence of a metallic phase in charge-neutral graphene with a random gap*, J.H. Bardarson, M.V. Medvedyeva, J. Tworzydło, A.R. Akhmerov, and C.W.J. Beenakker, *Physical Review B* **81**, 121414(R) (2010).
 291. *Majorana bound states without vortices in topological superconductors with electrostatic defects*, M. Wimmer, A.R. Akhmerov, M.V. Medvedyeva, J. Tworzydło, and C.W.J. Beenakker, *Physical Review Letters* **105**, 046803 (2010).
 292. *Effective mass and tricritical point for lattice fermions localized by a random mass*, M.V. Medvedyeva, J. Tworzydło, and C.W.J. Beenakker, to be published in *Physical Review B*.
 293. *Random-matrix theory of thermal conduction in superconducting quantum dots*, J.P. Dahlhaus, B. Béri, and C.W.J. Beenakker, to be published in *Physical Review B*.
 294. *Anyonic interferometry without anyons: How a flux qubit can read out a topological qubit*, F. Hassler, A.R. Akhmerov, C.-Y. Hou, and C.W.J. Beenakker, submitted to *Nature Physics*.
 295. *Flat-lens focusing of electrons on the surface of a topological insulator*, F. Hassler, A.R. Akhmerov, and C.W.J. Beenakker, submitted to *Physical Review B*.
 296. *Geodesic scattering by surface deformations of a topological insulator*, J.P. Dahlhaus, C.-Y. Hou, A.R. Akhmerov, and C.W.J. Beenakker, to be published in *Physical Review B*.