

## LIST OF PUBLICATIONS OF FRANK DEN HOLLANDER

(update: 01 September 2017)

- (1) *Random walks with ‘spontaneous emission’ on lattices with periodically distributed imperfect traps*, Physica 112 A (1982) 523–543  
(with P.W. Kasteleyn).
- (2) *Random walks on lattices with points of two colours I*, Physica 117 A (1983) 179–188  
(with P.W. Kasteleyn).
- (3) *Random walks on inhomogeneous lattices*, J. Stat. Phys. 30 (1983) 363–372  
(with P.W. Kasteleyn).  
\* In proceedings of ‘Symposium on Random Walks’, July 1982, Gaithersburg, Maryland, USA.
- (4) *Trapping, loss and annihilation of excitations in a photosynthetic system I*, Biochim. Biophys. Acta 725 (1983) 492–507  
(with J.G.C. Bakker and R. van Grondelle).
- (5) *Trapping, loss and annihilation of excitations in a photosynthetic system II*, Biochim. Biophys. Acta 725 (1983) 508–518  
(with J.G.C. Bakker and R. van Grondelle).
- (6) *Random walks on lattices with randomly distributed traps*, J. Stat. Phys. 37 (1984) 331–367.
- (7) *Random walks on lattices with points of two colours II*, J. Stat. Phys. 39 (1985) 15–52  
(with P.W. Kasteleyn).
- (8) *Comment on a paper by G.H. Weiss, S. Havlin and A. Bunde*, J. Stat. Phys. 40 (1985) 201–204.
- (9) *A random walk calculation of the quantum yield of photosynthetic processes as a function of molecular excitation parameters*, Physiol. Veg. 23 (1985) 523–534  
(with L.N.M. Duysens).  
\* Dedicated to D.I. Arnon on the occasion of his 75-th birthday.
- (10) *Random walks on random lattices*, thesis University of Leiden (1985).
- (11) *Inequalities of FKG type*, Physica 138A (1986) 167–182  
(with M.S. Keane).  
\* Invited paper in a Festschrift in honour of P.W. Kasteleyn on the occasion of his retirement from the University of Leiden.
- (12) *Ergodic properties of color records*, Physica 138A (1986) 183–193  
(with M.S. Keane).  
\* Same as in (11).
- (13) *Mixing properties for random walk in random scenery*, Ann. Prob. 16 (1988) 1788–1802.

- (14) *On the range of a constrained random walk*, J. Appl. Prob. 25 (1988) 451–463  
(with G.H. Weiss).
- (15) *A note on configurational properties of constrained random walks*, J. Phys. A21 (1988) 2405–2415  
(with G.H. Weiss).
- (16) *Mark Kac seminar on probability and physics, Syllabus 1985-1987* (eds. F. den Hollander and H. Maassen), CWI Syllabus 17 (1988).
- (17) *Tail triviality for sums of stationary random variables*, Ann. Probab. 17 (1989) 1635–1645  
(with H.C.P. Berbee).
- (18) *A stochastic model for the membrane potential of a stimulated neuron*, J. Math. Biol. 27 (1989) 681–692  
(with A. Frigessi).
- (19) *Population growth in random media. I. Variational formula and phase diagram*, J. Stat. Phys. 65 (1991) 1123–1146  
(with A. Greven).  
\* In proceedings of ‘Conference on Models of Non-Classical Reaction Rates’, March 1991, Bethesda, Maryland, USA.
- (20) *Population growth in random media. II. Wave front propagation*, J. Stat. Phys. 65 (1991) 1147–1154  
(with A. Greven).  
\* Same as in (19).
- (21) *Strong law and central limit theorem for a process between maxima and sums*, Probab. Theory Relat. Fields 90 (1991) 37–55  
(with G. Hooghiemstra, M. Keane and J. Resing).
- (22) *Branching random walk in random environment: phase transitions for local and global growth rates*, Probab. Theory Relat. Fields 91 (1992) 195–249  
(with A. Greven).
- (23) *A long-time tail for random walk in random scenery*, J. Stat. Phys. 66 (1992) 1527–1555  
(with J. Naudts and P. Scheunders).
- (24) *Invariance principle for the stochastic Lorentz lattice gas*, J. Stat. Phys. 66 (1992) 1583–1598  
(with J. Naudts and F. Redig).
- (25) *Random walks in a random field of decaying traps*, J. Stat. Phys. 67 (1992) 13–31  
(with K.E. Shuler).
- (26) *Long time tails in a random diffusion model*, J. Stat. Phys. 69 (1992) 731–762  
(with J. Naudts and F. Redig).
- (27) *Mark Kac seminar on probability and physics, Syllabus 1987-1992* (eds. F. den Hollander and H. Maassen), CWI Syllabus 32 (1992).

- (28) *A variational approach to branching random walk in random environment*, Ann. Probab. 21 (1993) 290–317  
(with J.-B. Baillon, Ph. Clément and A. Greven).
- (29) *Large deviations and random media*, Bull. Int. Stat. Inst. (1993), Vol. 55, Book 3, pp. 67–84.  
\* Invited paper in the session ‘Selected Topics in Probability’ of the 49th Session of the International Statistical Institute, August 1993, Florence, Italy.
- (30) *A variational characterization of the speed of a one-dimensional self-repellent random walk*, Ann. Appl. Probab. 3 (1993) 1067–1099  
(with A. Greven).
- (31) *Shift-coupling and a zero-one law for random walk in random environment*, Acta Appl. Math. 34 (1994) 37–50  
(with H. Thorisson).  
\* Invited paper in a special issue entitled ‘Applications of Coupling and Regeneration’ (eds. V. Kalashnikov and H. Thorisson).
- (32) *Survival asymptotics for Brownian motion in a Poisson field of decaying traps*, Ann. Probab. 22 (1994) 160–176  
(with E. Bolthausen).
- (33) *A dynamical phase transition in a caricature of a spin glass*, J. Stat. Phys. 75 (1994) 585–625  
(with A. Frigessi).
- (34) *Trapping in transport processes*, In: ‘Contemporary Problems in Statistical Physics’ (ed. G.H. Weiss), Society for Industrial and Applied Mathematics (SIAM), Philadelphia, 1994, pp. 147–203  
(with G.H. Weiss).
- (35) *On three conjectures by K.E. Shuler*, J. Stat. Phys. 75 (1994) 891–918  
\* Dedicated to Professor K.E. Shuler on the occasion of his 70th birthday.
- (36) *Long time tails in physics and mathematics*, In: ‘Probability and Phase Transition’ (ed. G. Grimmett), NATO ASI Series C: Mathematical and Physical Sciences, Vol. 420, Kluwer, Dordrecht, 1994, pp. 123–137.  
\* In proceedings of the NATO Symposium on ‘Probability Theory of Spatial Disorder and Phase Transition’, July 1993, Cambridge, Great Britain.
- (37) *Dynamic structure factor in a random diffusion model*, J. Stat. Phys. 76 (1994) 1267–1285  
(with J. Naudts and F. Redig).
- (38) *On a variational problem for an infinite particle system in a random medium, Part I: The global growth rate*, J. reine angew. Math. 454 (1994) 181–217  
(with J.-B. Baillon, Ph. Clément, A. Greven).
- (39) *On a variational problem for an infinite particle system in a random medium, Part II: The local growth rate*, Probab. Theory Relat. Fields 100 (1994) 301–328  
(with A. Greven).

- (40) *Large deviations for a random walk in random environment*, Ann. Probab. 22 (1994) 1381–1428  
(with A. Greven).
- (41) *Random Media*, Inaugural Address, University of Nijmegen, January 27, 1995.
- (42) *Scaling for a random polymer*, Commun. Math. Phys. 169 (1995) 397–440  
(with R. van der Hofstad).
- (43) *On the attracting orbit of a non-linear transformation arising from renormalization of hierarchically interacting diffusions, Part I: The compact case*, Can. J. Math. 47 (1995) 3–27  
(with J.-B. Baillon, Ph. Clément, A. Greven).
- (44) *Two problems about random walk in a random field of traps*, Markov Processes Relat. Fields 1 (1995) 185–202  
(with M.V. Menshikov and S.E. Volkov).
- (45) *Probabilistic aspects of physics*, Nieuw Archief voor Wiskunde 14 (1996) 81–92.  
\* Invited paper presented at the 31st Dutch Mathematical Congress, April 1995, Groningen.
- (46) *Random polymers*, Statistica Neerlandica 50 (1996) 136–145.  
\* Invited paper in a special issue of Statistica Neerlandica celebrating the 50-th anniversary of the Dutch Society for Statistics and Operations Research.
- (47) *McKean-Vlasov limit for interacting random processes in random media*, J. Stat. Phys. 84 (1996) 735–772  
(with P. Dai Pra).
- (48) *Pieter Willem Kasteleyn: October 12, 1924 – January 16, 1996*, J. Stat. Phys. 85 (1996) 801–805.
- (49) *On  $K$ -automorphisms, Bernoulli shifts and Markov random fields*, Ergod. Theory and Dynam. Sys. 17 (1997) 405–415  
(with J.E. Steif).
- (50) *Central limit theorem for a weakly interacting random polymer*, Markov Processes and Relat. Fields 3 (1997) 1–62  
(with R. van der Hofstad and W. König).
- (51) *Central limit theorem for the Edwards model*, Ann. Probab. 25 (1997) 573–597  
(with R. van der Hofstad and W. König).
- (52) *On the attracting orbit of a non-linear transformation arising from renormalization of hierarchically interacting diffusions, Part II: The non-compact case*, J. Funct. Anal. 146 (1997) 236–298  
(with J.-B. Baillon, Ph. Clément, A. Greven).
- (53) *Localization transition for a polymer near an interface*, Ann. Probab. 25 (1997) 1334–1366  
(with E. Bolthausen).

- (54) *Mixing properties of the generalized  $T, T^{-1}$ -process*, J. d' Analyse Math. 72 (1997) 165–202  
(with J.E. Steif).
- (55) *A new inductive approach to the lace expansion for self-avoiding random walks*, Probab. Theory Relat. Fields 111 (1998) 253–286  
(with R. van der Hofstad and G. Slade).
- (56) *Renormalization of hierarchically interacting isotropic diffusions*, J. Stat. Phys. 93 (1998) 243–291  
(with J. Swart).
- (57) *Der Zufall in der Chemie: Polymere*, Nova Acta Leopoldina NF79, Nr. 308 (1999) 69–77.  
\* Invited paper presented at the meeting 'Der Zufall', Deutsche Akademie der Naturforscher Leopoldina, April 1998, Halle, Gemany.
- (58) *Correlation structure of intermittency in the parabolic Anderson model*, Probab. Theory Relat. Fields 114 (1999) 1–54  
(with J. Gärtner).
- (59) *Asymptotics for the heat content of a planar region with a fractal polygonal boundary*, Proc. London Math. Soc. 78 (1999) 627–661  
(with M. van den Berg).
- (60) *A note on transience vs. recurrence for a branching random walk in random environment*, J. Stat. Phys. 95 (1999) 587–614  
(with M.V. Menshikov and S.Yu. Popov).
- (61) *A heteropolymer near a linear interface*, Ann. Appl. Probab. 9 (1999) 668–687  
(with M. Biskup).
- (62) *Large Deviations (monograph)*, Fields Institute Monographs 14, American Mathematical Society, Providence RI, 2000, x + 143 pp., ISBN 0–8218–1989–5.
- (63) *On the equivalence of certain ergodic properties for Gibbs states*, Ergod. Theory and Dynam. Sys. 20 (2000) 231–239  
(with J.E. Steif).
- (64) *Metastability and nucleation for conservative dynamics*, J. Math. Phys. 41 (2000) 1424–1498  
(with E. Olivieri and E. Scoppola).  
\* Invited paper in a special issue entitled 'Probabilistic Techniques in Equilibrium and Nonequilibrium Statistical Physics'.
- (65) *Nucleation in fluids: some rigorous results*, Physica A 279 (2000) 110–122  
(with E. Olivieri and E. Scoppola).  
\* Invited paper in a special issue dedicated to Professor J.L. Lebowitz on the occasion of his 70th birthday.

- (66) *Infinite-Dimensional Stochastic Analysis*, Royal Dutch Academy of Sciences, Proceedings of the Colloquium, Amsterdam, 11–12/02/1999 (eds. Ph. Clément, F. den Hollander, J. van Neerven and B. de Pagter), Amsterdam, 2000.  
\* Proceedings of a special colloquium hosted by the Royal Dutch Academy of Sciences.
- (67) *Renormalization of interacting diffusions*, in: *Complex Stochastic Systems* (eds. O.E. Barndorff-Nielsen, D.R. Cox and C. Klüppelberg), Monographs on Statistics and Applied Probability 87, Chapman & Hall ICRC, Boca Raton, FL, 2001, pp. 219–233.  
\* Invited paper presented at the 4th meeting of the ‘Séminaires Européens des Statistiques’ on ‘Complex Stochastic Systems’, March 1999, EURANDOM, Eindhoven, The Netherlands.
- (68) *Metastability and nucleation for conservative dynamics*, Markov Processes Relat. Fields 7 (2001) 51–53  
\* Proceedings of the conference on ‘Inhomogeneous Random Systems’, January 2000, Cergy-Pontoise, France.
- (69) *Moderate deviations for the volume of the Wiener sausage*, Ann. Math. 153 (2001) 355–406  
(with M. van den Berg and E. Bolthausen).
- (70) *Possible loss and recovery of Gibbsianness during the stochastic evolution of Gibbs measures*, Commun. Math. Phys. 226 (2002) 101–130  
(with A. van Enter, R. Fernández and F. Redig).
- (71) *Construction of the incipient infinite cluster for spread-out oriented percolation above  $4+1$  dimensions*, Commun. Math. Phys. 231 (2002) 435–461  
(with R. van der Hofstad and G. Slade).
- (72) *Localization of a random walk with random potential*, in: Collection Papers of Zhou Xianyin, Vols. I+II, Beijing Normal University Modern Mathematics Series, Beijing Normal University Press, Beijing, 2002, pp. 811–840 + 841–842  
(with S. Albeverio and X. Zhou).  
\* Memorial volume for Dr. X. Zhou.
- (73) *Droplet growth for three-dimensional Kawasaki dynamics*, Probab. Theory Relat. Fields 125 (2003) 153–194  
(with F.R. Nardi, E. Olivieri and E. Scoppola).
- (74) *Laudatio for Michael Aizenman*, Nieuw Archief voor Wiskunde 5 (2003) 107–108  
(with A. van Enter)  
\* Laudatio for the winner of the 2002 Brouwer Medal, presented at the 38th Dutch Mathematical Congress, 4–5/04/2002, Eindhoven, The Netherlands.
- (75) *Relative entropy for random motion in a random medium*, in: *Entropy*, Princeton Series in Applied Mathematics, Princeton University Press, Princeton, 2003, pp. 217–234.  
\* Invited paper presented at the ‘International Symposium on Entropy’, June 2000, Max Planck Institute for Physics of Disordered Systems, Dresden, Germany.
- (76) *Large deviations for the one-dimensional Edwards model*, Ann. Probab. 31 (2003) 2003–2039  
(with R. van der Hofstad and W. König).

- (77) *Survival asymptotics for branching Brownian motion in a Poissonian trap field*, Markov Processes Relat. Fields 9 (2003) 363–389  
(with J. Engländer).
- (78) *Weak interaction limits for one-dimensional random polymers*, Probab. Theory Relat. Fields 125 (2003) 483–521  
(with R. van der Hofstad and W. König).
- (79) *Weak Bernoullicity for random walk in random scenery*, Japan J. Math. 29 (2003) 389–406  
(with M.S. Keane, J. Serafin and J.E. Steif).
- (80) *Diffusion of a heteropolymer in a multi-interface medium*, J. Stat. Phys. 114 (2004) 849–889  
(with M. Wüthrich).
- (81) *On the volume of the intersection of two Wiener sausages*, Ann. Math. 159 (2004) 741–782  
(with M. van den Berg and E. Bolthausen).
- (82) *Gibbs under stochastic dynamics?*, Markov Processes Relat. Fields 10 (2004) 507–516.  
\* Proceedings of the conference ‘Gibbs versus non-Gibbs in Statistical Mechanics and Related Fields’, December 2003, EURANDOM, Eindhoven, The Netherlands.
- (83) *Metastability under stochastic dynamics*, Stoch. Proc. Appl. 114 (2004) 1–26.  
\* Invited paper presented as the Lévy Lecture at the 29th Conference on Stochastic Processes and Applications, August 2003, Rio de Janeiro, Brazil.
- (84) *Spin glasses: A mystery about to be solved*, Nieuw Archief voor Wiskunde 5/5 (2004) 274–278  
(with F.L. Toninelli).  
\* Also appeared as a feature article in the Newsletter of the European Mathematical Society, Issue 56 (June 2005), pp. 13–17, and as a translated article in Mathematical Advance in Translation, Chinese Academy of Sciences, 2009.
- (85) *Brownian survival among Poissonian traps with random shapes at critical intensity*, Probab. Theory Relat. Fields 132 (2005) 163–202  
(with M. van den Berg and E. Bolthausen).
- (86) *Random Dynamics in Spatially Extended Systems*, in: Proceedings of the 4th European Congress of Mathematics, Stockholm, Sweden (ed. A. Laptev), European Mathematical Society Publishing House, Zürich, 2005, pp. 561–572.  
\* Invited European Network Lecture at the 4th European Congress of Mathematics, June 2004, Stockholm, Sweden.
- (87) *Bad configurations for random walk in random scenery and related subshifts*, Stoch. Proc. Appl. 115 (2005) 1209–1232  
(with J.E. Steif and P. van der Wal).
- (88) *Sharp asymptotics for Kawasaki dynamics on a finite box with open boundary*, Probab. Theory Relat. Fields 135 (2006) 265–310  
(with A. Bovier and F.R. Nardi).

- (89) *Diffusion in an annihilating environment*, *Nonlinear Analysis, Real World Applications* 7 (2006) 25–64  
(with J. Gärtner and S.A. Molchanov).
- (90) *Random walk in random scenery: A survey of some recent results*, in: *IMS Lecture Notes – Monograph Series, Vol. 48, Dynamics & Stochastics* (eds. D. Denteneer, F. den Hollander and E. Verbitskiy), *IMS, Beachwood Ohio, US, 2006*, pp. 53–65  
(with J.E. Steif).  
\* Invited paper in a Festschrift in honour of M.S. Keane on the occasion of his 65-th birthday.
- (91) *Renormalization of interacting diffusions: a program and four examples*, in: *Operator Theory, Advances and Applications, Vol. 168, Partial Differential Equations and Functional Analysis: The Philippe Clément Festschrift*, *Birkhäuser, Basel, 2006*, pp. 123–136.  
\* Invited paper in a Festschrift in honour of Ph. Clément on the occasion of his retirement from Delft Technical University.
- (92) *Localization transition for a copolymer in an emulsion*, *Theor. Prob. Appl.* 51 (2006) 193–240  
(with S.G. Whittington).  
\* Invited paper in a special issue of *Theory of Probability and its Applications* in honour of Ya.G. Sinai on the occasion of his 70-th birthday.
- (93) *Mathematical Statistical Physics*, *Proceedings of the ESF/RDSES Summer School at the Ecole Physique in Les Houches, France, July 2005* (eds. A. Bovier, J. Dalibard, F. Dunlop, A. van Enter and F. den Hollander), *Elsevier, Amsterdam, 2006*, XXXI + 816 pp.
- (94) *Toeval in Focus*, *Inaugural Address, University of Leiden, October 27, 2006*.
- (95) *Intermittency in a catalytic random medium*, *Ann. Probab.* 34 (2006) 2219–2287  
(with J. Gärtner).
- (96) *The survival probability of critical spread-out oriented percolation above 4+1 dimensions. I. Induction*, *Probab. Theory Relat. Fields* 138 (2007) 363–389  
(with R. van der Hofstad and G. Slade).
- (97) *Phase transitions for the long-time behaviour of interacting diffusions*, *Ann. Probab.* 35 (2007) 1250–1306  
(with A. Greven).
- (98) *Intermittency on catalysts: symmetric exclusion*, *Electronic J. Probab.* 12 (2007), Paper no. 18, pp. 516–573  
(with J. Gärtner and G. Maillard).
- (99) *The survival probability of critical spread-out oriented percolation above 4+1 dimensions. II. Expansion*, *Ann. I. Henri Poincaré, Probabilités et Statistiques* 43 (2007) 509–570  
(with R. van der Hofstad and G. Slade).
- (100) *Invasion percolation on regular trees*, *Ann. Probab.* 36 (2008) 420–466  
(with O. Angel, J. Goodman and G. Slade).



- (101) *EURANDOM: A decade of European stochastics*, in: *EURANDOM 1998–2008: A random tour through a decade of research* (eds. I. Adan, A. Di Bucchianico and R. van der Hofstad), *Statistica Neerlandica* 62 (2008) 256–265  
(with W.J.M. Senden and W.R. van Zwet).
- (102) *Abelprijs 2007: S.R. Srinivasa Varadhan*, *Nieuw Archief voor Wiskunde* 9 (2008) 192–197.
- (103) *The renormalization transformation for two-type branching models*, *Ann. I. Henri Poincaré, Probabilités et Statistiques* 44 (2008) 1038–1077  
(with D.A. Dawson, A. Greven, R. Sun and J. Swart).
- (104) *How T-cells use large deviations to recognize foreign antigens*, *J. Math. Biol.* 57 (2008) 841–861  
(with E. Baake and N. Zint).
- (105) *Intermittency on catalysts*, in: *Trends in Stochastic Analysis* (eds. J. Blath, P. Mörters and M. Scheutzow), *London Mathematical Society Lecture Note Series* 353, Cambridge University Press, Cambridge, 2009, pp. 235–248  
(with J. Gärtner and G. Maillard).  
\* Invited paper in a Festschrift in honour of H. von Weizsäcker on the occasion of his 60-th birthday.
- (106) *Three lectures on metastability under stochastic dynamics*, in: *Methods of Contemporary Mathematical Statistical Physics* (ed. R. Kotecký), *Lecture Notes in Mathematics* 1970, Springer, Berlin, 2009, pp. 223–246.  
\* Invited lecture series at the 4th Summer School on Mathematical Statistical Mechanics, Prague, Czech Republic, 10–23 September 2006.
- (107) *Ideal gas approximation for a two-dimensional rarified gas under Kawasaki dynamics*, *Stoch. Proc. Appl.* 119 (2009) 737–774  
(with A. Gaudillière, F.R. Nardi, E. Olivieri and E. Scoppola).
- (108) *Random Polymers (monograph)*, *Lecture Notes in Mathematics* 1974, Springer, Berlin, 2009, xiii + 258 pp., ISBN 978-3-642-00332-5.  
\* Based on a mini-course presented at the 37th International Probability Summer School in Saint-Flour, France, 8–21 July 2007.
- (109) *On the localized phase of a copolymer in an emulsion: supercritical percolation regime*, *Commun. Math. Phys.* 285 (2009) 825–871  
(with N. Pétrélis).
- (110) *On the localized phase of a copolymer in an emulsion: subcritical percolation regime*, *J. Stat. Phys.* 134 (2009) 209–241  
(with N. Pétrélis).
- (111) *Intermittency on catalysts: three-dimensional simple symmetric exclusion*, *Electronic J. Prob.* 14 (2009) 2091–2129  
(with J. Gärtner and G. Maillard).
- (112) *A mathematical model for a copolymer in an emulsion*, *J. Math. Chem.* 48 (2010) 83–94  
(with N. Pétrélis).

- \* Invited paper in honour of R. Kapral and S.G. Whittington on the occasion of their 65-th birthdays.
- (113) *Quenched large deviation principle for words in a letter sequence*, Probab. Theory Relat. Fields 148 (2010) 403–456  
(with M. Birkner and A. Greven).
- (114) *Homogeneous nucleation for Glauber and Kawasaki dynamics in large volumes at low temperatures*, Ann. Probab. 38 (2010) 661–713  
(with A. Bovier and C. Spitoni).
- (115) *Intermittency on catalysts: voter model*, Ann. Probab. 38 (2010) 2066–2102  
(with J. Gärtner and G. Maillard).
- (116) *Large deviation principle for one-dimensional random walk in dynamic random environment: attractive spin-flips and simple symmetric exclusion*, Markov Proc. Relat. Fields 16 (2010) 139–168  
(with L. Avena and F. Redig).  
\* Invited paper for the 15-th anniversary celebration issue of Markov Processes and Related Fields.
- (117) *A key large deviation principle for interacting stochastic systems*, Proceedings of the International Congress of Mathematicians, Hyderabad, India, August 19–27, 2010, Vol. IV, pp. 2258–2274, Hindustan Book Agency, New Delhi, 2010.  
\* Invited paper in the ICM section on Probability and Statistics.
- (118) *Oprichting Platform Wiskunde Nederland*, Nieuw Archief voor Wiskunde 5/11 (2010) 168–172.
- (119) *A large-deviation view on dynamical Gibbs-non-Gibbs transitions*, Moscow Math. J. 10 (2010) 687–711  
(with A.C.D. van Enter, R. Fernández and F. Redig).  
\* Invited paper in a special volume in memory of R.L. Dobrushin.
- (120) *Collision local time of transient random walks and intermediate phases in interacting stochastic systems*, Electronic J. Prob. 16 (2011) 552–586  
(with M. Birkner and A. Greven).
- (121) *Law of large numbers for a class of random walks in dynamic random environments*, Electronic J. Prob. 16 (2011) 587–617  
(with L. Avena and F. Redig).
- (122) *A crossover for the bad configurations of random walk in random scenery*, Ann. Probab. 39 (2011) 2018–2041  
(with S. Blachère and J.E. Steif).  
\* Invited paper in a special volume in memory of O. Schramm.
- (123) *Kawasaki dynamics with two types of particles: stable/metastable configurations and communication heights*, J. Stat. Phys. 145 (2011) 1423–1457  
(with F.R. Nardi and A. Troiani).

- (124) *The mathematical work of Jürgen Gärtner*, in: Probability in Complex Physical Systems. In honour of Erwin Bolthausen and Jürgen Gärtner (eds. J.-D. Deuschel, B. Gentz, W. König, M.-K. van Renesse, M. Scheutzow, U. Schmock), Springer Proceedings in Mathematics 11, Springer, 2012, Berlin, pp. 1–10.  
\* Invited paper in a Festschrift on the occasion of the 60-th birthday of Jürgen Gärtner and the 65-th birthday of Erwin Bolthausen.
- (125) *Quenched Lyapunov exponent for the parabolic Anderson model in a dynamic random environment*, in the same volume as reference (124), pp. 159–193  
(with J. Gärtner and G. Maillard).
- (126) *Metastability for Kawasaki dynamics at low temperature with two types of particles*, Electronic J. Prob. 17 (2012) 1–26  
(with F.R. Nardi and A. Troiani).
- (127) *Lectures on random polymers*, Clay Mathematics Proceedings, Vol. 15 (2012), pp. 319–393  
(with F. Caravenna and N. Pétrélis).  
\* Invited paper in the Proceedings of the Clay Mathematics Institute summer school, July-August 2010, Búzios, Brazil.
- (128) *Random Polymers*, in: *Random Media at Saint-Flour*, Probability at Saint-Flour series, Springer, Heidelberg, 2012, pp. 295–558.  
\* Reprint of (108).
- (129) *Law of large numbers for non-elliptic random walks in dynamic random environments*, Stoch. Proc. Appl. 123 (2012) 156–190  
(with R. dos Santos and V. Sidoravicius).
- (130) *Kawasaki dynamics with two types of particles: critical droplets*, J. Stat. Phys. 149 (2012) 1013–1057  
(with F.R. Nardi and A. Troiani).
- (131) *Variational description of Gibbs-non-Gibbs dynamical transitions for the Curie-Weiss model*, Commun. Math. Phys. 319 (2013) 703–730  
(with R. Fernández and J. Martínez).
- (132) *Variational characterization of the critical curve for pinning of random polymers*, Ann. Probab. 41 (2013) 1767–1805  
(with D. Cheliotis).
- (133) *Copolymer with pinning: variational characterization of the phase diagram*, J. Stat. Phys. 152 (2013) 846–893  
(with A.A. Opoku).
- (134) *A general smoothing inequality for disordered polymers*, Electron. Commun. Probab. 18 (2013), Paper no. 76, 1–15  
(with F. Caravenna).
- (135) *Large deviation principles for words drawn from correlated letter sequences*, Electron. Commun. Probab. 19 (2014), Paper no. 12, 1–16  
(with J. Poisat).

- (136) *Renormalisation of hierarchically interacting Carrings processes*, ALEA, Lat. Am. J. Probab. Math. Stat. 11 (2014) 43–140  
(with A. Greven, S. Kliem and A. Klimovsky).
- (137) *Random walk in a high density dynamic random environment*, Indag. Mathem. 25 (2014) 785–799  
(with H. Kesten and V. Sidoravicius).  
\* Invited paper in a special issue on Probability and Numbers.
- (138) *Heat content and inradius for regions with a Brownian boundary*, Potential Anal. 41 (2014) 501–515  
(with M. van den Berg and E. Bolthausen).
- (139) *The parabolic Anderson model in a dynamic random environment: basic properties of the quenched Lyapunov exponent*, Ann. Inst. H. Poincaré Probab. Statist. 50 (2014) 1231–1275  
(with D. Erhard and G. Maillard).
- (140) *Scaling of a random walk on a supercritical contact process*, Ann. Inst. H. Poincaré Probab. Statist. 50 (2014) 1276–1300  
(with R. dos Santos).
- (141) *Variational description of Gibbs-non-Gibbs dynamical transitions for spin-flip systems with a Kac-type interaction*, J. Stat. Phys. 156 (2014) 203–220  
(with R. Fernández and J. Martínez).
- (142) *Extremal geometry for a Brownian porous medium*, Probab. Theory Relat. Fields 160 (2014) 127–174  
(with J. Goodman).
- (143) *Gibbs-non-Gibbs dynamical transitions for mean-field interacting Brownian motions*, Stoch. Proc. Appl. 125 (2015) 371–400  
(with F. Redig and W. van Zuijlen).
- (144) *A copolymer near a linear interface: variational characterization of the free energy*, Ann. Probab. 43 (2015) 875–933  
(with E. Bolthausen and A.A. Opoku).
- (145) *The parabolic Anderson model in a dynamic random environment: space-time ergodicity for the quenched Lyapunov exponent*, Probab. Theory Relat. Fields 162 (2015) 1–46  
(with D. Erhard and G. Maillard).
- (146) *Random walk on random walks*, Electronic J. Prob. 20 (2015), Paper no. 95, 1–35  
(with M. Hilário, V. Sidoravicius, R. Soares dos Santos and A. Teixeira).
- (147) *Complexe netwerken vanuit fysisch perspectief*, Nieuw Archief voor Wiskunde 5/16 (2015) 207–209  
(with D. Garlaschelli and A. Roccaverde).  
\* Invited paper in a special issue devoted to Networks.

- (148) *Metastability – a Potential-Theoretic Approach (monograph)*, Grundlehren der mathematischen Wissenschaften 351, Springer, Berlin, 2015, xxi + 581 pp., ISBN 978-3-319-24775-5  
(with A. Bovier).
- (149) *Breaking of ensemble equivalence in networks*, Phys. Rev. Lett. 115 (2015) 268701  
(with D. Garlaschelli, J. de Mol and T. Squartini).
- (150) *Annealed scaling for a charged polymer*, Mathematical Physics, Analysis and Geometry 19 (2016), Article 2, 1–87  
(with F. Caravenna, N. Pétrélis and J. Poisat).
- (151) *Parabolic Anderson model in a dynamic random environment: random conductances*, Mathematical Physics, Analysis and Geometry 19 (2016), Article 5, 1–36  
(with D. Erhard and G. Maillard).
- (152) *Berman-Konsowa principle for reversible Markov jump processes*, Markov Proc. Relat. Fields 22 (2016) 409–442  
(with S. Jansen).  
\* Invited paper in a special issue devoted to Inhomogeneous Random Systems.
- (153) *Phase diagram for a copolymer in a micro-emulsion*, ALEA, Lat. Am. J. Probab. Math. Stat. 13 (2016) 1–97  
(with N. Pétrélis).
- (154) *Netwerken in de statistische fysica*, Nederlands Tijdschrift voor Natuurkunde, November (2016) 374–377.
- (155) *Multi-colony Wright-Fisher with seed-bank*, Indag. Matem. 28 (2017) 637–669  
(with G. Pederzani).
- (156) *Metastability for Glauber dynamics on random graphs*, Ann. Appl. Probab. 27 (2017) 2130–2158  
(with S. Dommers, O. Jovanovski and F.R. Nardi).
- (157) *Metastability on the hierarchical lattice*, J. Phys. A: Math. Theor. 50 (2017) 305001  
(with O. Jovanovski).
- (158) *Ensemble nonequivalence in random graphs with modular structure*, J. Phys. A: Math. Theor. 50 (2017) 015001  
(with D. Garlaschelli and A. Roccaverde).
- (159) *Torsional rigidity for regions with a Brownian boundary*, Potential Anal. DOI 10.1007/s11118-017-9640-z  
(with M. van den Berg and E. Bolthausen).

**To appear:**

- (160) *Mixing times for random walks on dynamic configuration models*, to appear in Ann. Appl. Probab.  
(with L. Avena, H. Guldás and R. van der Hofstad).

- (161) *Random walks in cooling random environments*,  
 (with L. Avena).  
 \* Invited paper in a Festschrift in honour of C. Newman on the occasion of his 70th birthday.
- (162) *Ensemble equivalence for dense graphs*, to appear in *Electronic J. Prob.*  
 (with M. Mandjes, A. Roccaverde and N.J. Starreveld).
- (163) *The hierarchical Cannings process in random environment*, to appear in *ALEA, Lat. Am. J. Probab. Math. Stat.*  
 (with A. Greven and A. Klimovsky).
- (164) *Annealed scaling for a charged polymer in dimensions two and higher*, to appear in *J. Phys. A: Math. Theor.*  
 (with Q. Berger and J. Poisat).  
 \* Invited paper in a Festschrift in honour of S. Whittington on the occasion of his 75th birthday.

**Submitted:**

- (165) *Expansion of percolation critical points for Hamming graphs*, submitted to *Comb. Probab. Comp.*  
 (with L. Federico, R. van der Hofstad and T. Hulshof).
- (166) *Torsional rigidity for cylinders with a Brownian fracture*, submitted to *Proc. London Math. Soc.*  
 (with M. van den Berg).
- (167) *Synchronization of phase oscillators on the hierarchical lattice*, submitted to *J. Stat. Phys.*  
 (with D. Garlaschelli, J. Meylahn and B. Zeegers).
- (168) *A quenched large deviation principle in a continuous scenario*, submitted to *Ann. Probab.*  
 (with M. Birkner).

**In preparation:**

- (169) *Covariance structure behind breaking of ensemble equivalence*  
 (with D. Garlaschelli and A. Roccaverde).
- (170) *Random walk in cooling random environment: strong law of large numbers and large deviation principle*  
 (with L. Avena, Y. Chino and C. Costa).
- (171) *The scaling limit for critical percolation on the Hamming graph*  
 (with L. Federico, R. van der Hofstad and T. Hulshof).
- (172) *Glauber dynamics on the Erdős-Rényi random graph*  
 (with O. Jovanovski).
- (173) *Large deviations for the capacity of the Wiener sausage*  
 (with M. van den Berg and E. Bolthausen).

- (174) *Metastability of hard-core dynamics on bipartite graphs*  
(with F.R. Nardi and S. Taati).
- (175) *Hitting-time asymptotics in bipartite hard-core interaction models with time-varying rates*  
(with S. Borst, F.R. Nardi and S. Taati).
- (176) *Transition time asymptotics of queue-based activation protocols in random-access networks*  
(with S. Borst, F.R. Nardi and M. Sfragara).
- (177) *Metastability at low temperature for continuum interacting particle systems*  
(with S. Jansen).
- (178) *Metastability for the Widom-Rowlinson model*  
(with S. Jansen, R. Kotecký and E. Pulvirenti).
- (179) *Spatial populations with seed-bank: well-posedness, equilibrium, cluster formation and finite-systems scheme*  
(with A. Greven and M. Oomen).
- (180) *Spatial populations with seed-bank: renormalisation on the hierarchical group*  
(with A. Greven and M. Oomen).
- (181) *Random walks on dynamic configuration models: a trichotomy*  
(with L. Avena, H. Guldás and R. van der Hofstad).
- (182) *Two interacting charged polymer chains*  
(with F. Caravenna).
- (183) *Self-interacting polymers with force: free energy and phase diagram*  
(with D. Ioffe).
- (184) *A variational view on the Brownian copolymer*  
(with M. Birkner).
- (185) *Scaling of the largest inradius for a two-dimensional Brownian porous medium*  
(with J. Goodman).
- (186) *Extreme-value approach to metastability for Kawasaki dynamics*  
(with A. Bovier and K. Bashiri).
- (187) *The continuum limit of the hierarchical Cannings process*  
(with A. Greven and R. Sun).
- (188) *The continuum limit of the hierarchical Cannings process: Renormalization analysis*  
(with A. Greven and R. Sun).
- (189) *The continuum limit of the hierarchical Cannings process: Genealogies*  
(with A. Greven and R. Sun).
- (190) *Droplet dynamics in a two-dimensional rarified gas under Kawasaki dynamics*  
(with A. Gaudillière, F.R. Nardi, E. Olivieri and E. Scoppola).

- (191) *Homogeneous nucleation for two-dimensional Kawasaki dynamics*  
(with A. Gaudillière, F.R. Nardi, E. Olivieri and E. Scoppola).
- (192) *On the volume of the intersection of two Wiener sausages: proof of a conjecture*  
(with M. van den Berg and E. Bolthausen).

- **Proceedings:** 3, 19–20, 29, 36, 45, 56, 66–68, 75, 82, 86, 93, 105–106, 117, 127.
- **Refereed journals:** 1–2, 4–9, 11–15, 17–18, 21–26, 28, 30–35, 37–40, 42–44, 46–47, 49–56, 58–61, 63–65, 69–71, 73, 76–81, 83, 85, 87–89, 92, 95–100, 103–104, 107, 109–111, 113–116, 119–123, 125–126, 129–146, 149–153, 155–160, 162–163.
- **Monographs:** 62, 108, 148.
- **Other:** 10, 16, 27, 41, 48, 72, 74, 84, 90–91, 94, 101–102, 112, 118, 124, 128, 147, 154, 161, 164.