

Curriculum Vitae Remco van der Hofstad

1 Personal details and work experience

1a. Personal details

Name	▷ Prof. dr. Remco W. van der Hofstad
Male/Female	▷ Male
Date and place of birth	▷ May 3, 1971, Eindhoven
Postal address	▷ Department of Mathematics and Computer Science, Eindhoven University of Technology, P.O. Box 513, 5600 MB Eindhoven, The Netherlands.
Telephone	▷ ++31-402472910.
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E-mail	▷ rhofstad@win.tue.nl
Web address	▷ http://www.win.tue.nl/~rhofstad/
Marital status	▷ married and the proud father of two sons
Languages	▷ Dutch, English, French and German
Nationality	▷ Dutch.

1b. Master's

1989-1993	▷ Master's in Mathematics at the University of Utrecht, The Netherlands.
1992-1993	▷ Master Class "Probability and Statistics": A special one year masters for Dutch and foreign students, organized by the Mathematical Research Institute.
Diplomas	▷ June 28, 1993: Master Class certificate August 30, 1993: Master's degree in Probability Theory, cum laude.
Master's Thesis	▷ Scaling for a random polymer.
Supervisor	▷ Frank den Hollander.

1c. Doctorate

1993-1997	▷ PhD-position at the University of Utrecht.
Supervisors:	▷ Frank den Hollander and Richard Gill.
Thesis defence date	▷ June 16, 1997.
Title of thesis	▷ One-dimensional random polymers.

1d. Work experience since graduation

1997-1998	▷ Post-doctoral fellow at McMaster University, Hamilton, Ontario, Canada.
January-June 1998	▷ Visiting Researcher, Theory Group, Microsoft Research, Redmond, Washington State, USA.
1998-2002	▷ Assistant professor at Delft University of Technology, Delft, The Netherlands.
February 2002 -December 2004	▷ Associate Professor at Eindhoven University of Technology, The Netherlands.
2002-2004	▷ Senior research fellow at EURANDOM, Eindhoven, The Netherlands.
January 2004-now	▷ Scientific advisor of the 'Random Spatial Structures' programme at EURANDOM, Eindhoven, The Netherlands.
January 2005-now	▷ Full Professor in Probability at Eindhoven University of Technology.
April 2011-now	▷ Scientific director of EURANDOM.

1e. Prizes and awards

- September 2003 ▷ Laureate of ‘Innovative Research Grant: VIDI Scheme’ of Netherlands Organisation for Scientific Research (600,000 € in 2004-2009)
- December 2003 ▷ Henri Poincaré prize 2003, jointly with Gordon Slade.
2007 ▷ Rollo Davidson Prize 2007.
- December 2009 ▷ Laureate of ‘Innovative Research Grant: VICI Scheme’ of Netherlands Organisation for Scientific Research (1,250,000 € in 2009-2016).
- December 2013 ▷ Co-awarded Gravitation Grant NETWORKS by the Dutch Ministry of Education, Culture and Science (22+5 M.€ in 2014-2023).

1f. Other academic activities

- 1994-95 ▷ Marketing course (diploma NIMA A May 18 1995).
- 1996 ▷ Management course organized by the Center for Management at the University of Utrecht (diploma April 17 1996).
- 1997 ▷ Presentation course “Making formal presentations: Lecturing”, McMaster University, Hamilton, Canada.
- 1999-now ▷ Organizer of the Mark Kac Seminar, the Dutch seminar on Statistical Physics for an audience of probabilists and theoretical physicists.
- 1993-now ▷ Referee for Annals of Probability, Probability Theory and Related Fields, Communications in Mathematical Physics, Bernoulli, IEEE Transactions on Information Theory, Journal of Physics A.
- 2001 ▷ Statistical Analysis of Internet Data
NWO Grant in “NWO Networking” program jointly with G. Hooghiemstra (Principal Investigator) and P. Van Mieghem (Delft UT).
- 2003 ▷ Supervisor of Anne Fey, a ‘Teacher in Research’ (Leraar in Onderzoek).
- September 2003 ▷ NWO ‘Innovative research grant VIDI Scheme’ (600,000 euro).
- 2002-now ▷ Responsible for the probability teaching curriculum at Eindhoven University of Technology.
- 2003-now ▷ Organizing committee ‘Young European Probabilists’, a series of three workshops at EURANDOM directed at young probabilists.
- March 2004 ▷ Organisator of workshop ‘Conformal Invariance, Scaling Limits and Percolation’ (jointly with Nina Gantert) first in the series of YEP conferences.
- 2004 ▷ Member of the VENI selection committee.
- January 2006 ▷ Organisator of the ‘Study Group Mathematics and Industry at TU/e.
- September 2006 ▷ Organisator of ‘Spatial Random Processes and Statistical Mechanics’ conference in Oberwolfach.
- September 2006 ▷ Associate Editor of ‘Advances in Applied Probability’.
- March 2007 ▷ Organisator of YEP conference at EURANDOM on ‘Random Graphs and Complex Networks’.
- 2006-now ▷ Associate editor of Advances in Applied Probability.
- March 2007 ▷ Co-organisator of YEP conference at EURANDOM on ‘Random Graphs and Complex Networks’ (jointly with Mia Deijfen).
- 2006-2008 ▷ Member of the ARW-OOW Strategiecommissie.
- July 2007 ▷ Programme committee INFORMS Applied Probability Conference, EURANDOM.
- Sept. 2007-2011 ▷ Staff member ‘Honors Program’ TU/e.

- August 2008 ▷ Guest editor special issue *Statistica Neerlandica* for 10th anniversary EURANDOM.
- November 5, 2008 ▷ PhD ceremony Markus Heydenreich.
- December 2008 ▷ NWO ‘Innovative research grant VICI Scheme’ (1,250,000 euro).
- December 2008 ▷ NWO ‘Open Competition’ grant (182,495 euro).
- February 2009 ▷ Programme committee ‘Workshop on Algorithms and Models’ for the Web Graph 2009, Barcelona.
- August 2009 ▷ Co-organisor of second ‘Scaling Limits in Models of Statistical Mechanics’ conference in Oberwolfach.
- September 2009 ▷ NLP course.
- December 2009 Co-organisor of the workshop ‘Above the critical dimension’, Institut Henri Poincare, Paris.
- April 2011 ▷ Co-organisor of first ‘Stochastic Activity Month’ (SAM) on Stochastic Networks at EURANDOM.
- July 2011 ▷ Programme committee INFORMS Applied Probability Conference, KTH Stockholm.
- February 2012 ▷ Co-organisor of second ‘Stochastic Activity Month’ (SAM) on Scaling limits in Spatial Probability at EURANDOM.
- July 2012 ▷ One of main speakers at Cornell Summer School, Cornell University, Ithaca.
- September 2012 ▷ Co-organisor of third ‘Scaling Limits in Models of Statistical Mechanics’ conference in Oberwolfach.
- May 20-24, 2012 ▷ Co-organisor of Oberwolfach Seminar on Random Networks.
- 2014 ▷ Co-founder and member of the management team of the Gravitation Program NETWORKS.

1g. PhD students supervised

- 1998-2002 Marten Klok (co-supervisor, main supervisors Gerard Hooghiemstra, Michel Dekking)
- 2003-2007 Markus Heydenreich (main supervisor)
- 2006-2009 Isaac Corro-Ramos (co-supervisor, main supervisors Kees van Hee, Alessandro Di Bucchianico)
- 2008-2013 Robert Fitzner (main supervisor)
- 2009-2013 Sander Dommers (main supervisor, jointly with Cristian Giardinà)
- 2009-2013 Tim Hulshof (main supervisor, jointly with Markus Heydenreich)
- 2009-2013 Carlo Lancia (co-supervisor, main supervisors Benedetto Scoppola, Francesca Nardi)
- 2012-2016 Maria Luisa Prioriello (co-supervisor, jointly with Cristian Giardina, Claudio Giberti)
- 2012- Ervin Tanczos (co-supervisor, main supervisor Rui Castro)
- 2012- Enrico Baroni (main supervisor, jointly with Júlia Komjáthy)
- 2013- Gianmarco Bet (main supervisor, jointly with Johan van Leeuwen)
- 2013- Jorn van der Pol (co-supervisor, main supervisors Rudi Pendavingh, Nikhil Bansal)
- 2014- Souvik Dhara (main supervisor, jointly with Johan van Leeuwen)
- 2014- Lorenzo Federico (main supervisor, jointly with Tim Hulshof, Frank den Hollander)
- 2014- Alessandro Garavaglia (main supervisor, jointly with Gerhard Woeginger)
- 2015- Clara Stegehuis (main supervisor, jointly with Johan van Leeuwen)
- 2015- Hakan Guldás (Leiden University, co-supervisor, main supervisors Frank den Hollander, Luca Avena)

1h. Postdocs supervised

2003-2006	Dmitri Znamenski
2006	Mia Deijfen
2004-2006	Akira Sakai
2005-2006	Mark Holmes
2006-2007	Wouter Kager (jointly with Frank den Hollander)
2007-2008	Tobias Muller (jointly with Frank den Hollander)
2008-2010	Artem Sapozhnikov (jointly with Frank den Hollander)
2009-2011	Sandra Kliem (jointly with Frank den Hollander)
2010-2011	Jesse Goodman (jointly with Frank den Hollander)
2010-2011	Elie Aidekon
2013	Julia Komjathy
2014-	Sandor Kolumban (jointly with Rutger van Santen)
2015-	Sanchayan Sen
2015-	Robert Fitzner

1i. International activities

Lecture Series:

October 21-29, 2009	10 hour lecture series at Institut Henri Poincaré, Paris.
June 7-11, 2010	3 times 45 minutes lecture series at ‘Stochastic Processes in Communication Networks for Young Researchers’ at ICMS Edinburgh.
Sept. 30-Oct. 1, 2010	3 hour lecture series ‘Limit behavior of random graphs and related processes’, Universität Freiburg.
April 4-6, 2011	4.5 hour lecture series at ‘Workshop on Random Graphs’, Lille.
October 4-7, 2011	6 hour lecture series at Berlin Summer School, Berlin.
January 8-13, 2012	2012 NZMRI/NZIMA Summer Workshop: Random Media and Random Walk, Nelson New Zealand.
October 15-25, 2012	4 hour lecture series at the University of Modena, Italy.
July 16-27, 2012	Main speaker at 8th Cornell Probability Summer School (7 hours).
October 20-25, 2012	Lecture series on Random Graphs at Modena University (4 hours)
May 20-24, 2013	Oberwolfach Seminar on Random Networks (5 hours).
May 25-29, 2013	Summer School on Network Science, Interdisciplinary Mathematics Institute, University of South Carolina (5 hours).
December 20-22, 2014	Greek Stochastics ζ Networks: Theory, Methods and Applications Athens (3 hours).
June 15-July 11, 2015	Main speaker at CRM-PIMS Summer School in Probability, CRM Montreal (24 hours).
Februari 14, 2014	London Probability Seminar Random Graphs: Structure and Dynamics (3 hours).
August 24-28, 2015	First NETWORKS Training Week Woudschoten (15 hours).
November 1-12, 2015	Ashok Maitra Lecture Series in Probability, ISI Kolkata, New Delhi and Bangalore (6 hours).
November 23-27, 2015	Workshop ‘Random Graphs in the Brain’ Neuromat Sao Paulo (4.5 hours).
June 20-24, 2016	Lake Como School ‘From physiology to ecology, from interaction structures to collective behavior’ (3 hours).
July 2-14, 2017	Saint Flour lectures (12 hours).

Guest visits and sabbaticals:

▷ Technical University, Berlin, Germany	October 22–29, 1995.
▷ Technical University, Berlin, Germany	June 2–7, 1996.
▷ McMaster University, Hamilton, Canada	September 1996.
▷ Technical University, Berlin, Germany	January 12–18, 1997.
▷ Erlangen–Nürnberg University, Erlangen, Germany	February 11–16, 1997.
▷ Technical University, Berlin, Germany	July 5–12, 1997.
▷ Fields Institute, Toronto, Canada, for the program “Probability and its Applications”	September–November, 1998 and January 8–26, 1999.
▷ Theory Group, Microsoft Research, Redmond USA	July 20–August 23, 1999.
▷ Erlangen–Nürnberg University, Erlangen, Germany	January 5–12, 2000.
▷ Theory Group, Microsoft Research, Redmond USA	June–September 2001.
▷ UBC, Vancouver, Canada	October–December 2001.
▷ Budapest	March 8–15, 2003.
▷ Newton Institute, Cambridge, U.K.	August 10–17, 2003.
▷ Theory Group, Microsoft Research, USA	July 1–August 1, 2004.
▷ UBC, Vancouver, Canada	August 16–September 2, 2004.
▷ Mittag Leffler Institute, Djursholm, Sweden	November 14–28, 2004.
▷ IMPA, Rio de Janeiro, Brazil	January 10–21, 2005.
▷ Katholieke Universiteit Leuven, Belgium	January 8–11, 2007.
▷ Mittag Leffler Institute, Djursholm, Sweden	January 15–29, 2009.

2 Research

My research is focussed on the themes percolation, random graph models for complex networks and processes thereon, and applications of probability. I shall now describe these topics in more detail.

2a. Percolation

Percolation is one of the paradigm models in statistical physics, displaying extremely rich critical behavior. It is a model of a porous medium, where the materials consist of substance and holes. My main focus of research in the past period has been on the study of percolation models close to criticality for high-dimensional systems.

My research has primarily focussed on

1. the investigation of large high-dimensional critical percolation clusters, by proving that the scaling limit of large high-dimensional critical percolation clusters is a measure-valued diffusion called super-Brownian motion and that critical percolation in sufficiently high-dimensions has an incipient infinite cluster;
2. the characterization of the phase transition of percolation on large high-dimensional tori, and to prove that this phase transition is close to the one on the Erdős-Rényi random graph.

2b. Random graphs and complex networks

In the past decade, it has become clear that many real networks share fascinating features in being small worlds and scale-free. Such networks are typically modeled using *random graphs*. Random graphs are closely related to percolation, the difference being that random graphs tend to have finite size, while percolation systems tend to be infinite. The empirical findings on real networks have ignited research on various models for complex networks. The focus of the research of the group was the study of distances in models of complex networks where power-law degrees are observed.

My research focusses on studying distances in random graphs, as well as on other topological properties of them. The models include the configuration model, various versions of generalized random graphs, and preferential attachment models.

The goal is to show that there is different scaling in the distances when the exponent of the power laws in the random graphs changes. When this exponent is such that the degrees have finite variance, then the distances grow logarithmically with the size of the graph. When this exponent is such that the degrees have finite mean but infinite variance, then the distances grow doubly logarithmically with the size of the graph. When this exponent is such that the degrees have infinite mean, then the distances remain bounded when the size of the graph increases.

Other aspects that draw my attention is the size of the connected components and the related phase transitions, the number of multiple edges in configuration models with infinite variance degrees, power-law degree sequences and distances in preferential attachment models, and models including community structure. A key question in random graph theory is to what extent properties are *universal*, that is, to what extent models with similar structure show similar behavior.

2c. Stochastic processes on random graphs

While random graphs aim to model complex networks, the functionality of complex networks is modeled using stochastic processes acting on them. My research focuses on several such processes, including percolation (creating deep links to the high-dimensional percolation theme above), rumor spread and first passage percolation processes, competition processes, Ising models, and random walks. The aim is to understand the deep interrelations between the topology of the network (as discussed in more detail in the previous topic) and the behavior of processes on them.

2d. Applications of Probability

I have always been interested in applications of probability, particularly in electrical engineering, computer science and theoretical physics. With several researchers in electrical engineering, I have contributed to the analytical study of several multiuser detection systems, particularly using parallel interference in DS-CDMA systems (with Marten Klok, Gerard Hooghiemstra, Anne Fey, Franck Vermet and Matthias Löwe). Further, we studied the multicarrier interference properties of OFDM systems (with Tim Schenk, Erik Fledderus and Peter Smulders), as well as the properties of digital-to-analog (DAC) converters, using a reformulation in terms of Brownian bridges (With Georgi Radulov and Arthur van Roermond). Finally, we published a paper in Science on the exchange of molecules in one-dimensional fibers (with Lorenzo Albertazzi, Daan van der Zwaag, Janus Leenders, Robert Fitzner and Bert Meijer). I am open to other projects on applications of probability in related field.

3 List of publications

3a. International (refereed) journals

1. R. van der Hofstad and F. den Hollander, Scaling for a random polymer, *Communications in Mathematical Physics* **169**: 397-440 (1995).
2. R. van der Hofstad, F. den Hollander and W. König, Central limit theorem for the Edwards model, *Annals of Probability* **25**: 573-597 (1997).
3. R. van der Hofstad, F. den Hollander and W. König, Central limit theorem for a weakly interacting polymer, *Markov Processes and Related Fields* **3**: 1-63 (1997).
4. R. van der Hofstad, On the constants in the central limit theorem for the one-dimensional Edwards model, *Journal of Statistical Physics*, **90**, 5/6: 1295-1310 (1998).
5. R. van der Hofstad, F. den Hollander and G. Slade, An inductive approach to the lace expansion for self-avoiding walks, *Probability Theory and Related Fields*, **111**: 253-286 (1998).
6. C. Borgs, J. Chayes, R. van der Hofstad and G. Slade, Mean-field lattice trees, *Annals of Combinatorics*, **3**: 205-221 (1999).

7. R. van der Hofstad and A. Klenke, Self-attractive random polymers, *Annals of Applied Probability* **11**, no. 4: 1079–1115 (2001).
8. R. van der Hofstad, The lace expansion approach to ballistic behaviour for one-dimensional weakly self-avoiding walk, *Probability Theory and Related Fields* **119**: 311-349 (2001).
9. R. van der Hofstad and W. König, A survey of one-dimensional random polymers, *Journal of Statistical Physics* **103**, 5/6: 915-944 (2001).
10. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem, First passage percolation on the random graph, *Probability in the Engineering and Informational Sciences*, **15**, 225-237 (2001).
11. P. Van Mieghem, G. Hooghiemstra and R. van der Hofstad, On the efficiency of multicast, *IEEE Transactions on Networking*, **9** Nr. 6: 719-732 (2001).
12. R. van der Hofstad and G. Slade, A generalised inductive approach to the lace expansion, *Probability Theory Related Fields*, **122**:389–430, (2002).
13. R. van der Hofstad, A. Klenke and W. König, The critical attractive random polymer in dimension one, *Journal of Statistical Physics* **106**, no. 3-4: 477–520 (2002).
14. R. van der Hofstad, G. Hooghiemstra and M.J. Klok, Large deviations for code division multiple access systems, *SIAM Journal of Applied Mathematics* **62**, no. 3: 1044–1065 (2002).
15. M.J. Klok, R. van der Hofstad and G. Hooghiemstra, Analytical methods for CDMA systems with parallel interference cancellation: the large deviation approach, *Wireless Personal Communications*, **21**: 289-307 (2002).
16. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem, On the covariance of the level sizes in random recursive trees, *Random Structures and Algorithms*, **20**, no. 4: 519-539 (2002).
17. R. van der Hofstad, F. den Hollander and G. Slade, Construction of the incipient infinite cluster for spread-out oriented percolation above $4 + 1$ dimensions, *Communications in Mathematical Physics*, **231**: 435–461 (2002).
18. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem, The flooding time in random graphs, *Extremes* **5**: 111-129 (2002).
19. T. Hara, R. van der Hofstad and G. Slade, Critical two-point functions and the lace expansion for spread-out high-dimensional percolation and related models, *Annals of Probability* **31**: 349-408 (2003).
20. R. van der Hofstad and G. Slade, The lace expansion on a tree with application to networks of self-avoiding walks, *Advances in Applied Mathematics* **30**: 471-528 (2003).
21. R. van der Hofstad, F. den Hollander and W. König, Weak interaction limits for one-dimensional random polymers, *Probability Theory and Related Fields* **125**: 483-521 (2003).
22. R. van der Hofstad and G. Slade, Convergence of critical oriented percolation to super-Brownian motion above $4 + 1$ dimensions, *Annales de l'Institut Henri Poincaré: Probabilités et Statistiques* **39**: 413-485 (2003).
23. R. van der Hofstad, F. den Hollander and W. König, Large deviations for the one-dimensional Edwards model. *Annals of Probability* **31**: 2003-2039 (2003).
24. R. van der Hofstad and M.J. Klok, Performance for DS-CDMA Systems with Optimal Hard Decision Parallel Interference Cancellation. *IEEE Transactions on Information Theory* **49**, Nr 11: 2918-2940 (2003).
25. R. van der Hofstad and A.A. Járai, The incipient infinite cluster for high-dimensional unoriented percolation. *Journal of Statistical Physics* **114**:625–663 (2004).
26. R. van der Hofstad and A. Sakai, Gaussian scaling for the critical spread-out contact process above the upper critical dimension, *Electronic Journal of Probability* **9**: 710-769 (2004).
27. R. van der Hofstad and M.J. Klok, Improving the performance of 3G communication systems: the hard decision case. *Advances in Applied Probability* **36**: 1046-1084, (2004).
28. R. van der Hofstad and A. Sakai. Critical points for spread-out self-avoiding walk, percolation and the contact process above the upper critical dimension. *Probability Theory and Related Fields* **132**: 438-470, (2005).
29. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem. Random graphs with finite variance degrees. *Random Structures and Algorithms* **26**: 76-123, (2005).

30. R. van der Hofstad. Spread-out oriented percolation and related models above the upper critical dimension: Induction and Super-Processes, *Ensaaios Matematicos* **9**: 91–181, (2005).
31. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade and J. Spencer. Random subgraphs of finite graphs: I. The scaling window under the triangle condition. *Random Structures and Algorithms* **27**: 137-184, (2005).
32. R. van der Hofstad and G. Slade. Asymptotic expansion in n^{-1} for percolation critical values on the n -cube and \mathbb{Z}^n . *Random Structures and Algorithms* **27**: 331-357, (2005).
33. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade and J. Spencer. Random subgraphs of finite graphs: II. The lace expansion and the triangle condition. *Annals of Probability* **33**: 1886–1944, (2005).
34. N. Gantert, R. van der Hofstad and W. König. Deviations of a random walk in a random scenery with stretched exponential tails. *Stochastic Process. Appl.* **116**: 480–492, (2006).
35. R. van der Hofstad and F. Redig. Maximal clusters in non-critical percolation and related models. *Journal of Statistical Physics* **122** (4): 670-703, (2006).
36. H. van den Esker, R. van der Hofstad, G. Hooghiemstra and D. Znamenski. Distances in random graphs with infinite mean degrees. *Extremes* **8** (3): 111-141, (2006).
37. R. van der Hofstad, M. Löwe and F. Vermet. The effect of system load on the existence of bit-errors in CDMA with and without parallel interference cancelation. *IEEE Transactions on Information Theory Correspondence* **52**(10), 4733–4741, (2006).
38. R. van der Hofstad, W. König and P. Mörters. The universality classes in the parabolic Anderson model. *Comm. Math. Phys.* **267**(2), 307–353, (2006).
39. R. van der Hofstad and J. Spencer. Counting Connected Graphs Asymptotically. *European Journal on Combinatorics*, **26** (8): 1294–1320, (2006).
40. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade and J. Spencer. Random subgraphs of finite graphs: III. The phase transition for the n -cube. *Combinatorica* **26**(4): 395-410, (2006).
41. R. van der Hofstad. Infinite canonical super-Brownian motion and scaling limits. *Comm. Math. Phys.* **265**(3), 547–583, (2006).
42. R. van der Hofstad and G. Slade. Expansion in n^{-1} for percolation critical values on the n -cube and \mathbb{Z}^n : the first three terms. *Combinatorics, Probability and Computing* **15**: 695–713, (2006).
43. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem. Size and weight of shortest path trees with exponential link weights. *Combinatorics, Probability and Computing* **15**: 903–926, (2006).
44. M. Heydenreich and R. van der Hofstad. Random graph asymptotics on high-dimensional tori. *Communications in Mathematical Physics* **270** (2): 335–358, (2007).
45. G. Radulov, M. Heydenreich, R. van der Hofstad, J.A. Hegt and A.H.M. van Roermund. Brownian Bridge based statistical analysis of the DAC INL caused by current mismatch. *IEEE Transactions on Circuits and Systems II: Express Briefs* **54**(2): 146–150, (2007).
46. R. van der Hofstad. Random networking: between order and chaos. *Nieuw Archief voor Wiskunde*, **(5)8**(1): 18–24, (2007).
47. R. van der Hofstad, F. den Hollander and G. Slade. The survival probability for critical spread-out oriented percolation above 4+1 dimensions. I. Induction. *Probability Theory and Related Fields*, **138**(3-4): 363–389, (2007).
48. R. van der Hofstad, F. den Hollander and G. Slade. The survival probability for critical spread-out oriented percolation above 4+1 dimensions. II. Expansion. *Annales de l'Institut Henri Poincaré: Probabilités et Statistiques* **5**(5): 509–570, (2007).
49. T. Schenk, R. van der Hofstad, E. Fledderus and P. Smulders. Distribution of the ICI term in Phase Noise impaired OFDM systems. *IEEE Transactions on Wireless Communication* **6**(4): 1488–1500, (2007).
50. D. Brydges, R. van der Hofstad and W. König. Joint density for the local times of continuous-time Markov chains. *Annals of Probability* **35**(4): 1307-1332, (2007).
51. R. van der Hofstad, G. Hooghiemstra and D. Znamenski. Distances in random graphs with finite mean and infinite variance degrees. *Electronic Journal of Probability*. **12**: 703–766, (2007).

52. R. van der Hofstad, G. Hooghiemstra and P. Van Mieghem. The Weight of the Shortest Path Tree. *Random Structures and Algorithms* **30**(3): 359–379, (2007).
53. R. van der Hofstad. Random Networking: between order and chaos. *Nieuw Archief voor Wiskunde*. **5**(8): 18–24, (2007).
54. R. van der Hofstad and W. Kager. Pattern theorems, ratio limit theorems and Gumbel maximal clusters for random fields. *Journal of Statistical Physics* **130**(3): 503–522, (2008).
55. R. van der Hofstad and M. Keane. An elementary proof of the hitting time theorem. *American Mathematical Monthly* **115**(8): 753–756, (2008).
56. H. van den Esker, R. van der Hofstad and G. Hooghiemstra. Universality for the distance in finite variance random graphs. *Journal of Statistical Physics* **133**: 169–202, (2008).
57. R. van der Hofstad, M. Holmes and G. Slade. Extension of the generalised inductive approach to the lace expansion. *Electronic Communications in Probability* **13**: 291–301, (2008).
58. M. Heydenreich, R. van der Hofstad and A. Sakai. Mean-field behavior for long- and finite range Ising model, percolation and self-avoiding walk. *Journal of Statistical Physics* **132**(5): 1001–1049, (2008).
59. R. van der Hofstad and G. Hooghiemstra. Universality for distances in power-law random graphs. *Journal of Mathematical Physics* **49**: 125209, (2008).
60. A. Fey-den Boer, R. van der Hofstad and M.J. Klok. Large deviations for eigenvalues of sample covariance matrices. *Advanced in Applied Probability* **40**: 1048–1071, (2008).
61. R. van der Hofstad, P. Mörters and N. Sidorova. Weak and almost sure limits for the parabolic Anderson model with heavy tailed potentials. *Annals of Applied Probability* **18**(6): 2450–2494, (2008).
62. M. Deijfen, H. van den Esker, R. van der Hofstad and G. Hooghiemstra. A preferential attachment model with random initial degrees. *Arkiv för Matematik* **47**: 41–72, (2009).
63. R. van der Hofstad, G. Hooghiemstra and D. Znamenski. A phase transition for the diameter of the configuration model. *Internet Mathematics* **4**(1): 113–128, (2009).
64. R. van der Hofstad, W. Kager and T. Muller. A local limit theorem for the critical random graph. *Electronic Communications in Probability*. **14**: 122–131, (2009).
65. G. Radulov, M. Heydenreich and R. van der Hofstad. Functionals of Brownian bridges arising in the current mismatch in D/A-converters. *Probability in the Engineering and Informational Sciences* **23**: 149–172, (2009).
66. R. van der Hofstad and M.J. Luczak. Random subgraphs of the 2D Hamming graph: The supercritical phase. *Probability Theory and Related Fields* **147**(1-2) 1–41, (2010).
67. R. van der Hofstad and M. Holmes. Monotonicity for excited random walk in high dimensions. *Probability Theory and Related Fields* **147**(1-2) 333–348, (2010).
68. R. van der Hofstad, M.J. Luczak and J. Spencer. The second largest component in the supercritical 2D Hamming graph. *Random Structures and Algorithms* **36**(1) 80–89, (2010).
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