

CURRICULUM VITAE OF FRANK DEN HOLLANDER

(update: 28 January 2023)

Personal data:

Date of birth 1 December 1956.
Nationality Dutch.
Family status Married, 2 children.
Languages Dutch, English, French, German, Italian.
Work address Mathematical Institute, Leiden University,
P.O. Box 9512, 2300 RA Leiden, The Netherlands,
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Academic education and degrees:

Education 1975 – 1980 Undergraduate, Theoretical Physics, Leiden University.
1981 – 1985 Graduate, Mathematical Physics, Leiden University.
Degrees 18/11/1980 M.Sc. (cum laude).
25/06/1985 Ph.D. (cum laude).
Advisor: P.W. Kasteleyn.
Title thesis: *Random Walks on Random Lattices*.

Academic positions:

09/1985 – 04/1989 Postdoc with M.S. Keane, Delft Technical University.
05/1989 – 08/1991 Fellow of the Royal Netherlands Academy of Sciences,
Delft Technical University.
09/1991 – 08/1994 Associate Professor, Utrecht University.
09/1994 – 09/2000 Full Professor, Nijmegen University
(Chair of Probability and Statistics).
10/2000 – 09/2005 Full Professor, Eindhoven Technical University
(Chair of Probability)
& Scientific Director of EURANDOM.
 $\geq 10/2005$ Full Professor, Leiden University
(Chair of Probability).

Research interests:

Probability Theory, Statistical Physics, Ergodic Theory, Population Genetics, Complex Networks.

Monographs:

- (1) *Large Deviations*, Fields Institute Monographs 14, American Mathematical Society, Providence RI, 2000, x + 143 pp., ISBN 0-8218-1989-5. Second print in 2008. Over 2500 hard copies sold.

- (2) *Random Polymers*, Lecture Notes in Mathematics 1974, Springer, Berlin, 2009, xiii + 258 pp., ISBN 978-3-642-00332-5. Until 26 August 2020: 14162 downloads on SpringerLink.
- (3) *Metastability – a Potential-Theoretic Approach* (**co-author A. Bovier**), Grundlehren der mathematischen Wissenschaften 351, Springer, Berlin, 2015, xxi + 581 pp., ISBN 978-3-319-24775-5.

Junior awards:

- 1984 Royal Dutch Shell Travel Award.
- 1986 Stipendium Niels Stensen Foundation Amsterdam.
- 1989 Awarded 5-year fellowship by the Royal Netherlands Academy of Sciences.

Honours:

- 1998 Guest professor thematic program of the Fields Institute, Toronto.
- 2000 5-year directorship of EURANDOM.
- 2002 5-year chairmanship of Scientific Programme of the European Science Foundation.
- 2003 Lévy Lecture of the Bernoulli Society, Rio de Janeiro.
- 2004 Invited lecture at the European Congress of Mathematics, Stockholm.
- 2005 Elected to the Royal Netherlands Academy of Sciences.
- 2006 Distinguished Chair of the Pacific Institute for the Mathematical Sciences, Vancouver.
- 2007 Saint-Flour Probability Lectures.
- 2010 Invited lecture at the International Congress of Mathematicians, Hyderabad.
- 2010 Awarded 5-year Advanced Grant by the European Research Council.
- 2011 Bonn Research Chair at the Hausdorff Centre for Mathematics, Bonn.
- 2012 Elected inaugural fellow of the American Mathematical Society.
- 2013 Elected fellow of the Institute of Mathematical Statistics.
- 2013 Co-awarded 10-year Gravitation Grant NETWORKS by the Dutch Ministry of Education of Education Culture and Science.
- 2016 Mahalanobis Lectures, Indian Statistical Institute, Bangalore-Delhi-Kolkata.
- 2016 Promotor for the honorary doctorate conferred on Jennifer Chayes by Leiden University.
- 2016 Medaillon Lecture, World Congress of Probability and Statistics, Toronto.
- 2016 Knight in the Order of the Netherlands Lion.
- 2018 TOP-grant NWO.
- 2018 Humboldt Research Award.
- 2020 Co-awarded 5-year COFUND grant for doctoral students NETCO-PhD by the European Commission.
- 2021 Co-awarded 5-year COFUND grant for postdoctoral fellows NETCO-PD by the European Commission.

PhD students:

In the period 2000–2005 I was scientific director of EURANDOM and did not supervise PhD students.

• Promotor & supervised

1. 1995, B. Gerritse (The Netherlands),
Large Deviations.
(Senior Principal Statistician, Medtronic, Philips Nederland)
2. 1997, R. van der Hofstad (The Netherlands),
On One-Dimensional Random Polymers.
(Full Professor, TU Eindhoven, The Netherlands)
3. 1999, M. Biskup (Czech Republic),
On Three Techniques for Rigorous Proofs of First-Order Phase Transitions.
(Full Professor, University of California, Los Angeles)
4. 1999, J. Swart (The Netherlands),
Large Space-Time Scale Behavior of Linearly Interacting Diffusions.
(Research Fellow, Academy of Sciences, Prague, Czech Republic)
5. 2010, L. Avena (Italy),
Random Walks in Dynamic Random Environments.
(Associate Professor, Leiden University, The Netherlands)
6. 2012, A. Troiani (Italy),
Metastability of Low-Temperature Kawasaki Dynamics with Two Types of Particles.
(Postdoc, University of Rome, Italy)
7. 2012, R. dos Santos (Brazil),
Some Case Studies of Random Walks in Dynamic Random Environments.
(Assistant Professor, University of Belo Horizonte, Brazil)
8. 2014, J. Martinez (Argentina),
Dynamical Gibbs-non-Gibbs Transitions and Brownian Percolation.
(Assistant professor, University of Buenos Aires, Argentina)
9. 2014, D. Erhard (Germany),
The Parabolic Anderson Model and Long-Range Percolation.
(Assistant professor, Federal University of Bahia, Brazil)
10. 2016, W. van Zuijlen (The Netherlands),
Gibbs-non-Gibbs Transitions and Vector-Valued Integration.
(Postdoc, Humboldt University Berlin, Germany)
11. 2018, A. Roccaverde (Italy),
Breaking of Ensemble Equivalence for Complex Networks.
(Consultant ABN-AMRO Bank)
12. 2019, H. Gldař (Turkey),
Exploration on and of Networks.
(Consultant ABN-AMRO Bank)

13. 2019, J. Meylahn (South-Africa),
Stochastic Resetting and Hierarchical Synchronization.
(Postdoc, University of Amsterdam, The Netherlands)
14. 2020, M. Sfragara (Italy),
Wireless Random-Access Networks and Spectra of Random Graphs.
(Postdoc, Stockholm University, Sweden)
15. 2021, M. Oomen (The Netherlands), **cum laude**
Spatial Populations with Seed-bank.
(Data Scientist, Witteveen & Bos)
16. 2022, S. Floreani (Italy),
Advances in Stochastic Duality for Interacting Particle Systems: from many to few.
(Postdoc, Oxford University, United Kingdom)

• **Promotor & co-supervised**

1. 1995, T. van der Meer (The Netherlands),
Applications of Operators in Nearly Unstable Models.
2. 1996, J. van Leeuwen (The Netherlands),
On q -Deformed Probability Theory.
3. 2000, I. Alberink (The Netherlands),
Berry-Esseen Bounds for Arbitrary Statistics.
4. 2011, K. Vafayi (Iran),
Duality, Bosonic Particle Systems and Some Exactly Solvable Models of Non-Equilibrium.
5. 2012, F. Völlering (Germany),
Coupling, Concentration and Random Walks in Dynamic Random Environments.
6. 2012, F. Wang (China),
Dynamical Gibbs-non-Gibbs Transitions: A Study via Coupling and Large Deviations.
7. 2015, M. Göll (Austria),
Principal Algebraic Actions of the Discrete Heisenberg Group.
8. 2016, L. Smit (The Netherlands),
Steady State Analysis of Large-Scale Systems: The Successive Lumping Method.
9. 2016, H. Blok (The Netherlands),
Unbounded-rate Markov Decision Processes: Structural Properties via a Parametrisation Approach.
10. 2016, R. Kraaij (The Netherlands),
Semigroup Methods for Large Deviations of Markov Processes.
11. 2016, S. Bethuelsen (Norway),
Random Walks and the Contact Process.

12. 2019, N. Langeveld (The Netherlands),
Matching, Entropy, Holes and Expansions.
13. 2020, T. Bannink (The Netherlands),
Quantum and Stochastic Processes.
14. 2020, D. Ertiningsih (Indonesia),
Structural Properties of Single Server Queueing Systems: Efficient Methods via Lumping and Dynamic Programming.
15. 2020, L. Federico (Italy),
Phase Transitions and Connectivity in Random Graphs.
16. 2020, S. Berghout (The Netherlands),
Gibbs Processes and Applications.
17. 2021, M. Maggioni (Italy),
Measures and Matching for Number Systems.
18. 2021, E. Arzhakova (Russia),
Scaling Limits in Algebra, Geometry, and Probability.

• **Present supervision**

- ≥ 10/2018 S. Nandan (India).
- ≥ 10/2019 P. Dionigi (Italy).
- ≥ 10/2019 D. Wang (China).
- ≥ 02/2020 O. Nagý (Czech Republic).

Postdocs:

• **Past**

1. 10/1994-07/1995 & 10/1996-03/1997, W. König (Germany).
(Full Professor, Weierstrass Institut & TU Berlin, Germany)
2. 10/1998-07/1999 & 09/2000-03/2002, H. Matzinger (Switzerland).
(Associate Professor, Georgia Institute of Technology, Atlanta, USA)
3. 11/1998-10/2000, M. Löwe (Germany).
(Full Professor, Universität Münster, Germany)
4. 08/1999-07/2001, F. Merkl (Germany).
(Full Professor, Universität München, Germany)
5. 08/1999-08/2001, S. Volkov (Russia).
(Full Professor, Lund University, Sweden)
6. 09/1999-08/2000, M. Wüthrich (Switzerland).
(Full Professor, ETH Zurich, Switzerland)
7. 09/1999-06/2002, J. Engländer (Hungary).
(Associate Professor, University of Colorado, USA)

8. 12/2000-10/2002, F.R. Nardi (Italy).
(Associate Professor, University of Florence, Italy)
9. 08/2001-07/2003, A. LeNy (France).
(Full Professor, Université Paris-Est, France)
10. 09/2001-08/2003, B. Lemmens (The Netherlands).
(Senior Lecturer, University of Kent, United Kingdom)
11. 08/2002-07/2004, P. van der Wal (The Netherlands).
(Head of Market Risk Management, ING Nederland)
12. 01/2003-12/2004, A. Sakai (Japan).
(Associate Professor, Hokkaido University, Japan)
13. 03/2003-02/2004, F. Toninelli (Italy).
(Full Professor, Technical University of Vienna, Austria)
14. 04/2003-08/2005, F. Camia (Italy).
(Associate Professor, NYU Abu Dhabi)
15. 11/2003-10/2004, K. Netocný (Czech Republic).
(Research Fellow, Academy of Sciences, Prague, Czech Republic)
16. 02/2004-01/2006, G. Maillard (France).
(Associate Professor, Université Aix-Marseille, France)
17. 10/2004-08/2005, R.-J. Messikh (Switzerland).
(Senior Quantitative Analyst, Pictet Asset Management, Geneva)
18. 10/2004-09/2006, R. Sun (China).
(Associate Professor, National University of Singapore)
19. 11/2005-01/2008, N. Pétrélis (France).
(Associate Professor, Université de Nantes, France)
20. 09/2006-08/2008, S. Blachère (France).
(Senior Researcher, SKF, Nieuwegein, The Netherlands)
21. 11/2006-10/2008, C. Spitoni (Italy).
(Assistant Professor, University of Utrecht, The Netherlands)
22. 09/2007-08/2009, D. Cheliotis (Greece).
(Assistant Professor, University of Athens, Greece)
23. 10/2008-09/2010, L. Xu (China).
(Assistant Professor, University of Macau, China)
24. 11/2008-10/2010, A. Sapozhnikov (Russia).
(Group Leader, Max Planck Institut, Leipzig, Germany)
25. 10/2009-09/2011, S. Kliem (Germany).
(Assistant Professor, Universität Frankfurt, Germany)

26. 12/2009-11/2011, A. Klimovsky (Germany).
(Lecturer, Universität Duisburg-Essen, Germany)
27. 01/2010-12/2012, A. Opoku (Ghana).
(Assistant Professor, University of Sunyani, Ghana)
28. 01/2012-12/2013, J. Goodman (Canada).
(Lecturer, University of Auckland, New Zealand)
29. 09/2012-08/2014, J. Poisat (France).
(Maître de Conférences, Université Paris-Dauphine, France)
30. 09/2012-05/2013, S. Jansen (Germany).
(Associate Professor, University of Munich, Germany)
31. 05/2014-07/2016, S. Taati (Iran).
(Assistant Professor, American University of Beirut, Lebanon)
32. 10/2014-09/2016, E. Pulvirenti (Italy).
(Assistant Professor, Technical University of Delft, The Netherlands)
33. 09/2014-08/2017, O. Jovanovski (Canada).
(Risk Specialist, Bank of Montreal, Toronto, Canada)
34. 02/2017-01/2019, Y. Chino (Japan).
(Postdoc, National Center for Theoretical Sciences, Taiwan)
35. 07/2017-08/2019, C. da Costa (Brazil).
(Postdoc, University of Durham, United Kingdom)
36. 02/2020-01/2022, P. Braunsteins (Australia).
(Assistant Professor, University of Melbourne, Australia).
37. 09/2020-08/2022, S. Chakraborty (India).
(Postdoc, University of Uppsala, Sweden).
38. 09/2021 – 08/2022, M. Quattropiani (Italy).
(Assistant Professor, University of Rome, Italy).

• **Present supervision**

≥ 09/2023, A. Parvaneh (Iran).

Research group at Leiden University:

As of September 2022 the research group of *Probability Theory, Dynamical Systems and Operation Research* (POD) consists of 24 members:

- F. den Hollander, F. Spieksma (full professor).
- L. Avena, R. Hazra, C. Kalle, E. Verbitskiy (associate professor).
(E. Verbitskiy holds a part-time full professorship in Groningen.)

- O. Kanavetas, O. Lukina, D. Terhesiu (assistant professor).
- 2 postdocs and 13 PhD students.

Affiliated with the group are A. van Enter (Groningen), M. Keane (The Hague) and F. Redig (Delft).

Long-term visitors within the program of the ERC Advanced Grant of den Hollander (2011–2016): M. Birkner (Mainz), F. Caravenna (Milan), D. Cheliotis (Athens), A. Gaudillière (Marseille), G. Maillard (Marseille), N. Pétrélis (Nantes).

Sabbatical leaves hosted: G. Slade (Vancouver) 2013, M. Öz (Koc) 2014–2015, R. Sun (Singapore) 2015, M. Jara (Rio de Janeiro) 2015–2016, J. Goodman (Auckland) 2018, J. Peterson (Purdue) 2019, A. Greven (Erlangen) 2020, R. Kotecký (Warwick) 2020.

Bachelor courses taught:

- Classical analysis
- Mathematical statistics
- Measure theory
- Probability theory
- Random walks
- Statistical mechanics

Master courses taught:

- Complex networks
- Coupling theory
- Gibbs measures
- Interacting particle systems
- Large deviation theory
- Markov chains
- Queueing theory
- Percolation
- Poisson approximation
- Random polymers
- Random processes in random media
- Stochastic analysis

- Random matrices
- Stochastic models for genetic evolution

Invited lectures at international conferences, workshops, summer schools:

- (1) 28/06-01/07, 1982
Symposium on *Random Walks*, Gaithersburg, Maryland, USA.
- (2) 17-21/02, 1986
Workshop on *Disordered Systems*, Minneapolis, Minnesota, USA.
- (3) 27/06-01/07, 1988
17th Conference on Stochastic Processes and Their Applications, Rome, Italy.
- (4) 22-27/01, 1990
8th Winterschool on Stochastic Processes and Optimal Control, Georgenthal, Germany.
- (5) 25-27/03, 1991
Conference on *Models of Non-Classical Reaction Rates*, Bethesda, Maryland, USA.
- (6) 30/07-09/08, 1991
10th International Congress on Mathematical Physics, Leipzig, Germany.
- (7) 19-20/12, 1991
Conference on *Functional Analysis and Probability*, Lyon, France.
- (8) 13/07, 1992
Symposium in honour of K.E. Shuler, La Jolla, California, USA.
- (9) 22-29/08, 1992
Seminar on Coupling and Regeneration, Petrozavodsk, Russia.
- (10) 29/11-05/12, 1992
Meeting on *Large Deviations and Applications*, Oberwolfach, Germany.
- (11) 21-25/06, 1993
22nd Conference on Stochastic Processes and Their Applications, Amsterdam, The Netherlands.
- (12) 04-16/07, 1993
NATO Symposium on *Probability Theory of Spatial Disorder and Phase Transitions*, Isaac Newton Institute, Cambridge, United Kingdom.
- (13) 25/08-03/09, 1993
49th Session of the International Statistical Institute, Florence, Italy.
- (14) 08-09/02, 1994
Conference on *Stochastics and Physics*, Antwerpen, Belgium.
- (15) 06-12/03, 1994
Meeting on *Mathematical Stochastics*, Oberwolfach, Germany.

- (16) 11-14/05, 1994
Workshop on *Particle Systems, Random Media, and Large Deviations*, Berlin, Germany.
- (17) 15-21/05, 1994
Meeting on *Critical Phenomena in Spatial Stochastic Models*, Oberwolfach, Germany.
- (18) 20-21/04, 1994
Plenary Lecture, *31st Dutch Mathematical Congress*, Groningen, The Netherlands.
- (19) 02-06/10, 1995
Workshop on *Gibbs Random Fields and Phase Transitions*, Churanov, Czech Republic.
- (20) 17-22/12, 1995
Meeting on *Branching Processes*, Oberwolfach, Germany.
- (21) 08-19/01, 1996
Mini-course, *One-Dimensional Random Polymers*, Gothenburg, Sweden.
- (22) 26-29/03, 1996
Stochastik Tage, Freiberg, Germany.
- (23) 17-24/06, 1996
Workshop on *Interacting Particle Systems*, Haifa, Israel.
- (24) 26-31/08, 1996
4th World Congress of the Bernoulli Society, Vienna, Austria.
- (25) 16-20/09, 1996
Statistical Mechanics as a Branch of Probability Theory: conference dedicated to the memory of R.L. Dobrushin, Erwin Schrödinger Institute, Vienna, Austria.
- (26) 11-15/11, 1996
Workshop on *Statistical Mechanics*, Bielefeld, Germany.
- (27) 09-15/03, 1997
Meeting on *Mathematical Stochastics*, Oberwolfach, Germany.
- (28) 08-12/09, 1997
Workshop on *Stochastic Modelling of Physical Systems*, Isaac Newton Institute, Cambridge, United Kingdom.
- (29) 26-31/10, 1997
Workshop on *Percolation, Particle Systems and Ergodic Theory*, Gothenburg, Sweden.
- (30) 09-11/02, 1998
Schwerpunktcolloquium on *Interacting Particle Systems*, Berlin, Germany.
- (31) 17-18/04, 1998
Plenary Lecture, *Der Zufall*, Deutsche Akademie der Naturforscher Leopoldina, Halle, Germany.
- (32) 26-31/07, 1998
Meeting on *Spectral Theory and Stochastic Analysis*, Oberwolfach, Germany.

- (33) 13-15/12, 1998
Meeting of the Canadian Mathematical Society, Kingston, Canada.
- (34) 15-20/03, 1999
Complex Stochastic Systems, Séminaire Européens des Statistiques, EURANDOM, Eindhoven, The Netherlands.
- (35) 23-27/08, 1999
Workshop on *Probability and Physics of Disordered Systems*, Erdős Center of Research in Mathematics, Budapest, Hungary.
- (36) 31/10-06/11, 1999
Meeting on *Stochastic Analysis*, Oberwolfach, Germany.
- (37) 21-24/03, 2000
Stochastik Tage, Hamburg, Germany.
- (38) 25-28/06, 2000
Symposium on Entropy, Max-Planck Institute, Dresden, Germany.
- (39) 09-12/08, 2000
Workshop on *Statistical Mechanics*, Cambridge, United Kingdom.
- (40) 22-24/09, 2000
Meeting of the American Mathematical Society, Fields Institute, Toronto, Canada.
- (41) 19/02-02/03, 2001
Workshop on *Random Walks and Statistical Physics*, Erwin Schrödinger Institute, Vienna, Austria.
- (42) 11-17/03, 2001
Meeting on *Stochastics in the Sciences*, Oberwolfach, Germany.
- (43) 02-04/06, 2001
Meeting of the Canadian Mathematical Society, Saskatoon, Canada.
- (44) 13-17/08, 2001
Opening Lecture, *23rd European Congress of Statistics*, Funchal, Madeira, Portugal.
- (45) 22-25/08, 2001
Meeting in honour of D. Szász, Alfred Rényi Institute, Budapest, Hungary.
- (46) 14-19/09, 2002
Conference on *Dynamical Systems: Classical, Quantum and Stochastic*, Otranto, Italy.
- (47) 27/01-02/11, 2002
Meeting on *Stochastic Analysis*, Oberwolfach, Germany.
- (48) 18-21/12, 2002
Conference on *Ergodic Theory*, Tokyo, Japan.
- (49) 07-11/04, 2003
Schwerpunktcolloquium on *Interacting Stochastic Systems*, Berlin, Germany.

- (50) 10-15/05, 2003
Workshop on *Statistical Mechanics of Polymer Models*, Banff International Research Station, Banff, Canada.
- (51) 03-09/08, 2003
Lévy Lecture, *29th Conference on Stochastic Processes and Their Applications*, Rio de Janeiro, Brazil.
- (52) 18-22/08, 2003
Workshop on *Random Walks in Random Environment*, Isaac Newton Institute, Cambridge, United Kingdom.
- (53) 22-26/09, 2003
Workshop on *Statistical Mechanics of Random Copolymers*, CECAM, Lyon, France.
- (54) 27-31/10, 2003
Meeting on *Random Media*, Oberwolfach, Germany.
- (55) 08-10/12, 2003
Conference on *Gibbs versus non-Gibbs in Statistical Mechanics*, EURANDOM, Eindhoven, The Netherlands.
- (56) 26-29/04, 2004
Workshop on *Continuous and Discrete Random Spatial Processes*, Lorentz Center, Leiden, The Netherlands.
- (57) 21-25/06, 2004
Workshop on *Stochastic-Geometric and Combinatorial Ideas in Statistical Mechanics*, Gothenburg, Sweden.
- (58) 27/06-02/07, 2004
European Network Lecture, *4th European Congress of Mathematics*, Stockholm, Sweden.
- (59) 20-24/09, 2004
Workshop on *Nonlinear Dynamics, Ergodic Theory and Renormalization*, Lorentz Center, Leiden, The Netherlands.
- (60) 29/11-01/12, 2004
Plenary Lecture, Congress on *Partial Differential Equations and Functional Analysis*, Delft, The Netherlands.
- (61) 19-21/05, 2005
Workshop on *Metastability, Ageing and Anomalous Diffusion: Stochastic and Nonlinear Effects in Long Term Dynamics*, Max-Planck Institute, Leipzig, Germany.
- (62) 28/05-02/06, 2005
Workshop on *Critical Scaling for Polymers and Percolation*, Banff International Research Station, Banff, Canada.
- (63) 22-26/08, 2005
Workshop on *Large Scale Behaviour of Interacting Particle Systems: Fluctuations and Hydrodynamics*, Alfred Rényi Institute, Budapest, Hungary.

- (64) 03/02, 2006
Mini-course on *Random Polymers*, Rouen, France.
- (65) 23-25/03, 2006
Plenary Lecture, *Seminar on Stochastic Processes*, Princeton, USA.
- (66) 21-26/08, 2006
Workshop on *Randomness and Hyperbolicity in Dynamical Systems*, Alfred Rényi Institute, Budapest, Hungary.
- (67) 03-09/09, 2006
Meeting on *Spatial Random Processes and Statistical Mechanics*, Oberwolfach, Germany.
- (68) 10-23/09, 2006
Mini-course, Summer School on *Mathematical Statistical Mechanics*, Prague, Czech Republic.
- (69) 11-15/12, 2006
Mini-course, *School on Information and Randomness*, Center for Mathematical Modelling, Santiago, Chile.
- (70) 20-26/05, 2007
Meeting on *Non-Classical Interacting Random Walks*, Oberwolfach, Germany.
- (71) 02-05/04, 2007
Modern Perspectives in Real and Stochastic Analysis: workshop in honour of H. von Weizsäcker, Kaiserlautern, Germany
- (72) 31/05-02/06, 2007
Lattices and Trajectories: A Symposium of Mathematical Chemistry in honour of R. Kapral and S.G. Whittington, Fields Institute, Toronto, Canada.
- (73) 13-15/06, 2007
Symposium in honour of H. Kesten, Paris, France.
- (74) 08-21/07, 2007
Saint-Flour Probability Lectures, *37th International Probability Summer School*, Saint-Flour, France.
- (75) 26/11-12/12, 2007
Plenary Lecture, Conference on *Concepts of Entropy and Their Applications*, Australian Mathematical Sciences Institute, Melbourne, Australia.
- (76) 04-07/03, 2008
Plenary Lecture, *8th German Open Conference on Probability and Statistics*, Aachen, Germany.
- (77) 29-31/05, 2008
81th Rencontre entre Mathématiciens et Physiciens, Strasbourg, France.
- (78) 01-07/06, 2008
Meeting on *Stochastic Analysis*, Oberwolfach, Germany.

- (79) 28/07-01/08, 2008
18th National Symposium on Probability and Statistics, Estância de São Pedro, Brazil.
- (80) 03-09/08, 2008
12th Brazilian School of Probability, Ouro Preto, Brazil.
- (81) 02-03/10, 2008
Workshop on *Random Spatial Models in Physics and Biology*, Erwin Schrödinger Institute, Vienna, Austria.
- (82) 16-17/10, 2008
Plenary Lecture, *16th Annual Meeting of the Belgian Statistical Society*, Namur, Belgium.
- (83) 08-12/12, 2008
Workshop on *Statistical Mechanics*, Institut Henri Poincaré, Paris, France.
- (84) 01-03/06, 2009
Annual Meeting of the Canadian Mathematical Society, Vancouver, Canada.
- (85) 15-19/06, 2009
Workshop on *Random Walk in Random Environment*, Vancouver, Canada.
- (86) 05/07, 2009
Symposium in honour of D. Brydges and J. Feldman, Vancouver, Canada.
- (87) 17-21/08, 2009
Meeting on *Scaling Limits in Models of Statistical Mechanics*, Oberwolfach, Germany.
- (88) 07-10/09, 2009
Mini-course, *British Probability Meeting: New Random Geometries*, Bath, United Kingdom.
- (89) 11-12/09, 2009
Annual Conference of the Heilbronn Institute for Mathematical Research, Bristol, United Kingdom.
- (90) 07-11/12, 2009
Mini-course, Workshop on *Above the Critical Dimension*, Institut Henri Poincaré, Paris, France.
- (91) 08-10/04, 2010
Interacting Particle Systems in Random Media: workshop in honour of J. Gärtner, Berlin, Germany.
- (92) 07/06, 2010
Probability Day, Nantes, France.
- (93) 12/07-06/08, 2010
Mini-course, *Clay Mathematics Institute Summer School, Probability and Statistical Physics in Two and More Dimensions*, Buzios, Brazil.
- (94) 19-27/08, 2010
Sectional Lecture, *International Congress of Mathematicians*, Hyderabad, India.

- (95) 14-16/10, 2010
Interacting Particle Systems in Random Media: workshop in honour of E. Bolthausen, Berlin, Germany.
- (96) 06-10/12, 2010
Workshop on *Excess Self-Intersections and Related Topics*, CIRM, Luminy, France.
- (97) 03-06/08, 2011
Limit Theorems in Probability, Statistics and Number Theory: workshop in honour of F. Götze, ZiF, Bielefeld, Germany.
- (98) 08-13/01, 2012
Mini-course, Summer School on *Random Media and Random Walks*, Nelson, New Zealand.
- (99) 23-27/01, 2012
Meeting on *Interplay of Analysis and Probability in Physics*, Oberwolfach, Germany.
- (100) 14-17/02, 2012
Workshop on *The Expanding Art of Expansions*, EURANDOM, Eindhoven, The Netherlands.
- (101) 14-25/05, 2012
Mini-course, School and Workshop on *Random Polymers and Related Topics*, Institute for Mathematical Sciences, Singapore.
- (102) 25-29/06, 2012
Conference on *Disorder in Probability and Statistical Mechanics*, Modena, Italy.
- (103) 29-30/06, 2012
11th Probability Day Erlangen-München: workshop in honour of H. Spohn, München, Germany.
- (104) 27-31/08, 2012
Workshop on *Interacting Stochastic Systems*, Florence, Italy.
- (105) 10-14/09, 2012
Meeting on *Scaling Limits in Models of Statistical Mechanics*, Oberwolfach, Germany.
- (106) 10/10, 2012
Surprises in Non-Equilibrium Statistical Mechanics: workshop in honour of E. Presutti, EURANDOM, Eindhoven, The Netherlands.
- (107) 22-23/01, 2013
Workshop on *Inhomogeneous Random Systems*, Institut Henri Poincaré, Paris, France.
- (108) 02-04/04, 2013
Workshop on *Probability and Numbers*, Delft, The Netherlands.
- (109) 06-10/05, 2013
Workshop on *Random Combinatorial Structures and Statistical Mechanics*, Venice, Italy.
- (110) 19-25/05, 2013
Mini-course, Seminar on *Random Networks*, Oberwolfach, Germany.

- (111) 06-09/06, 2013
Plenary Lecture, *German-Polish Stochastics Conference*, Torun, Poland.
- (112) 17-21/06, 2013
Mini-course, Summer school on *Emergent Dynamics of Discrete and Stochastic Multi-scale Systems*, Advanced Study Center, Eindhoven, The Netherlands.
- (113) 28/10-01/11, 2013
Meeting on *Large Scale Stochastic Dynamics*, Oberwolfach, Germany.
- (114) 27-28/02, 2014
From Interacting Particles Systems to Population Genetics: workshop in honour of A. Greven, Erlangen, Germany.
- (115) 02-06/06, 2014
Workshop on *Recent Models in Random Media*, CIRM, Luminy, France.
- (116) 23-27/06, 2014
Workshop on *Random Motions in Random Environments*, Bath, United Kingdom.
- (117) 06-10/10, 2014
Mini-course, *German-Polish Summer School in Probability*, Bedlewo, Poland.
- (118) 03-08/11, 2014
Workshop on *Large Deviations in Statistical Physics*, Stellenbosch, South-Africa.
- (119) 17-21/11, 2014
Workshop on *What is Complexity and How Do You Measure It?* Lorentz Center, Leiden, The Netherlands.
- (120) 26/11, 2014
Cleveringa Lecture, *Akademiegenuootschap Eindhoven*, The Netherlands.
- (121) 28/11, 2014
Public Lecture, Mini-symposium on *Networks*, Royal Netherlands Academy of Sciences, Amsterdam, The Netherlands.
- (122) 16-20/02, 2015
Spin Glasses, Random Graphs, and Percolation, Institut Henri Poincaré, Paris, France.
- (123) 09-13/03, 2015
Public Lecture, Workshop on *Interacting Particle Systems and Non-Equilibrium Dynamics*, Institut Henri Poincaré, Paris, France.
- (124) 04-15/05, 2015
Ng Kong Beng Public Lecture, National Library of Singapore, Workshop on *Stochastic Processes in Random Media*, Institute for Mathematical Sciences, Singapore.
- (125) 15-19/06, 2015
Dynamics and Geometry: workshop in honour of H. Broer, Lorentz Center, Leiden, The Netherlands.

- (126) 21-24/07, 2015
Stochastics and Interactions: workshop in honour of B. Tóth, Alfred Rényi Institute, Bupapest, Hungary.
- (127) 31/08-04/09, 2015
Meeting on *Scaling Limits in Models of Statistical Mechanics*, Oberwolfach, Germany.
- (128) 07-11/09, 2015
Key Note Lecture, Conference on *Geometry and Physics of Spatial Random Systems*, Bad Herrenalb, Germany.
- (129) 28/09-02/10, 2015
Minerva Lectures, Columbia University, New York, USA.
- (130) 23-24/11, 2015
Workshop on *Gradient Flows, Large Deviations and Applications*, EURANDOM, Eindhoven, The Netherlands.
- (131) 04-23/01, 2016
Mahalanobis Lectures, Indian Statistical Institute, Bangalore-Delhi-Kolkata, India.
- (132) 26-27/01, 2016
Workshop on *Inhomogeneous Random Systems*, Institut Henri Poincaré, Paris, France.
- (133) 29/03-02/04, 2016
Workshop on *Probabilistic Models - from Discrete to Continuous*, Warwick, United Kingdom.
- (134) 18-22/04, 2016
Workshop on *Metastability and Related Phenomena*, EURANDOM, Eindhoven, The Netherlands.
- (135) 03-06/05, 2016
Workshop on *Trends in Mathematical Crystallisation*, Warwick, United Kingdom.
- (136) 23-24/05, 2016
Statistical Physics: workshop in honour of E. Olivieri, Rome, Italy.
- (137) 30/05-03/06, 2016
Mini-course, NETWORKS Training Week on *Large Deviations and Quantum Computing*, Woudschoten, The Netherlands.
- (138) 11-15/07, 2016
Medaillon Lecture, *9th World Congress of Probability and Statistics*, Bernoulli Society and Institute of Mathematical Statistics, Fields Institute, Toronto, Canada.
- (139) 15-16/09, 2016
Stochastic Processes: workshop in honour of E. Bolthausen, Zurich, Switzerland.
- (140) 19-22/09, 2016
Conference on Complex Systems, Amsterdam, The Netherlands.
- (141) 26/11, 2016
Cleveringa Lecture, Koninklijk Nederlands Instituut, Rome, Italy.

- (142) 11-13/01, 2017
New Results and Challenges with Random Walk in Dynamic Random Environment, Heilbronn Institute, Bristol, United Kingdom.
- (143) 20/02-27/03, 2017
Complex Networks: Challenges and Perspectives, Studium Generale, Leiden University.
- (144) 29/05-02/06, 2017
Random Walks with Memory, CIRM, Luminy, France.
- (145) 12-16/06, 2017
Stochastic Dynamics Out of Equilibrium, Institut Henri Poincaré, Paris, France.
- (146) 03-07/07, 2017
Laplacians, Walks, Condensation, Bristol University, United Kingdom.
- (147) 24-28/07, 2017
39th Conference on Stochastic Processes and their Applications, Moscow, Russia.
- (148) 26-29/09, 2017
Modern Perspectives of Branching in Probability, Münster, Germany.
- (149) 29/01-02/02, 2018
ISI-NETWORKS Conference in Probability, Indian Statistical Institute, Kolkata, India.
- (150) 12-13/04, 2018
Workshop on *Random Graphs*, Nijmegen, The Netherlands.
- (151) 28/05-01/06, 2018
Franco-Dutch YEP Workshop, EURANDOM, Eindhoven, The Netherlands.
- (152) 18-22/06, 2018
Workshop on *Critical and Collective Effects in Graphs and Networks*, EURANDOM, Eindhoven, The Netherlands.
- (153) 25-27/06, 2018
Random Processes in Random Media: workshop in honour of J.-D. Deuschel, Berlin, Germany.
- (154) 13-17/08, 2018
Correlated and Dynamical Random Walk in Random Environment, Texas A&M University, College Station, USA.
- (155) 27-31/08, 2018,
Advances in Statistical Mechanics: workshop in honour of A. Bovier, Luminy, France.
- (156) 10-14/09, 2018
Meeting on *Scaling Limits in Models of Statistical Mechanics*, Oberwolfach, Germany.
- (157) 24-28/09, 2018
Workshop on *High-dimensional Phenomena in Probability*, Bochum, Germany.
- (158) 04-05/10, 2018
Schwerpunkt Kolloquium *Probabilistic Structures in Evolution*, Frankfurt, Germany.

- (159) 08-12/10, 2018
Workshop on *Mathematical Biology*, Mittag-Leffler Institute, Stockholm, Sweden.
- (160) 25-27/03, 2019
Workshop on *Spatial Population Models*, Erlangen, Germany.
- (161) 01-03/04, 2019
Workshop on *Population Dynamics and Statistical Physics in Synergy*, Centro di Ricerca Matematica Ennio De Giorgi, Pisa, Italy.
- (162) 21-24/04, 2019
Invited session *Thermodynamics on Networks*, 15th Joint European Thermodynamics Conference, Barcelona, Spain.
- (163) 19-21/06, 2019
Mini-course on *Complex Networks*, Higher School of Economics, Moscow, Russia.
- (164) 24–28/06, 2019
Conference on *Probability Theory and Mathematical Physics*, Skoltech, Moscow, Russia.
- (165) 08-12/07, 2019
Mini-symposium on *Hamilton-Jacobi in Probability*, Equadiff 2019, Leiden, The Netherlands.
- (166) 31/07-09/08, 2019
Mini-course on *Complex Networks: Structure and Functionality*, 12th Mathematical Society of Japan – Seasonal Institute, Fukuoka, Japan.
- (167) 02-03/09, 2019
Workshop on *Universality in Interacting Particle Systems*, University of Cologne, Germany.
- (168) 16-18/09, 2019
Workshop on *Evolutionary Consequences of Dormancy*, Technical University Berlin, Germany.
- (169) 26-27/09, 2019
Schwerpunkt Kolloquium *Probabilistic Structures in Evolution*, Bielefeld, Germany.
- (170) 12-13/12, 2019
Workshop on *Geographic Spaces for Evolution: from Lattices to Graphs to Continuum*, Erlangen, Germany.
- (171) 06-10/01, 2020
Workshop on *Stochastic Analysis, Geometry and Random Fields*, Indian Statistical Institute, Bangalore, India.
- (172) 31/01, 2020
Corcoran Memorial Lecture, Department of Statistics, Oxford University.
- (173) 02-06/03, 2020
Mini-course on *Dense Random Graphs*, Spring School in Probability, Darmstadt, Germany.

- (174) 01-26/06, 2020
 Long course on *Metastability for Interacting Particle Systems*, PIMS Summer School in Probability, Vancouver, Canada.
 * Postponed to 30/05-24/06, 2022. Mini-course for the Online Open Probability School, 22-25/06, 2020, jointly with Elena Pulvirenti.
- (175) 13-16/09, 2020
 Mini-course on *Graphon Dynamics*: workshop on *Graph Limits and Random Walks*, Kloster Benediktbeuern, Germany.
- (176) 11-15/01, 2021
 Bilateral Japan-Netherlands workshop on *Probabilistic Methods of Statistical Mechanics of Random Media and Random Fields*, Kyushu University, Fukuoka, Japan.
 * Postponed to 09-14/01, 2023.
- (177) 19-23/07, 2021
 Conference on *70 Years of Percolation*, Cambridge University, United Kingdom.
 * Postponed to 23-28/07, 2023.
- (178) 06-10/09, 2021
 Mini-course on *Large Deviations for the Wiener Sausage*, workshop on *Directed Polymers and Folding*, CIRM, Marseille, France.
- (179) 16-17/09, 2021
 Workshop on *Analysis of Population Models with Interaction: New Trends and Developments*, Bielefeld, Germany.
- (180) 21-24/02, 2022
 Workshop in memory of Dima Ioffe, Technion, Haifa, Israel.
 * Postponed to 05-09/09, 2022.
- (181) 20-24/06, 2022
 Workshop to celebrate the *75th birthday of Herbert Spohn*, Münster, Germany (online).
- (182) 18-22/07, 2022
 Workshop in memory of Francesca Nardi, University of Florence, Italy.
- (183) 12-14/09, 2022
 Dutch-French conference on *Stochastic Models in Life Sciences*, EURANDOM, Eindhoven, The Netherlands.
- (184) 13/09-14/10, 2022
 Semester program on *Graph Limits and Processes on Networks: From Epidemics to Misinformation*, Simons Institute for the Theory of Computing, Berkeley, USA.
- (185) 26-30/09, 2022
 Workshop on *Graph Limits, Non-Parametric Models and Estimation*, Simons Institute for the Theory of Computing, Berkeley, USA.
- (186) 24-25/01, 2023
 Meeting on *Inhomogeneous Random Systems*, Institut Henri Poincaré, Paris, France.

- (187) 03-07/04, 2023
Workshop on *Metastability of Stochastic Processes*, CIRM, Marseille, France.
- (188) 05-10/06, 2023
Workshop on *Random Walks*, Bath, United Kingdom.

Highlights invited lectures:

- **Conferences:** Opening Lecture, 23rd European Congress of Statistics, Funchal, Madeira, Portugal (2001); Lévy Lecture, Bernoulli Society, Rio de Janeiro, Brazil (2003); European Network Lecture, European Congress of Mathematics, Stockholm, Sweden (2004); Sectional Lecture, International Congress of Mathematicians, Hyderabad, India (2010); Medaillon Lecture, World Congress of Probability and Statistics, Toronto, Canada (2016).
- **Mini-courses:** Saint-Flour Probability Lectures, Saint-Flour, France (2007); Clay Mathematics Institute summer school, Búzios, Brazil (2010); Oberwolfach Seminar, Oberwolfach (2013); Minerva Lectures, New York, USA (2015); Mahalanobis Lectures, Indian Statistical Institute, Bangalore-Delhi-Kolkata, India (2016); Large Deviations, National Institute for Theoretical Physics, Stellenbosch University, South-Africa (2017); Random Walk in Cooling Random Environment, Texas University, USA (2018); Complex Networks, Higher School of Economics, Moscow, Russia (2019); Random Walks on Random Graphs, Kuyushu University, Fukuoka, Japan (2019); Plücker Lectures, Hausdorff Center for Mathematics, Bonn, Germany (2019); Metastability for Interacting Particle Systems, University of British Columbia, Vancouver, Canada (2020, postponed to 2022).

Colloquium talks:

- **Europe:** Antwerpen, l'Aquila, Bath, Berlin, Bielefeld, Bochum, Bologna, Bonn, Bristol, Budapest, Bures-sur-Yvette, Cambridge, Diepenbeek, Erlangen, Florence, Frankfurt, Gothenburg, Göttingen, Halle, Heidelberg, Jena, Kaiserslautern, Lausanne, Leipzig, Leuven, London, Lund, Lyon, Mainz, Marseille, Milan, Moscow, München, Münster, Oldenburg, Osnabrück, Orleans, Oxford, Padova, Paris, Prague, Rome, Stockholm, Torun, Warwick, Wrocław, Zürich.
- **North-America:** Bethesda, Hamilton, Ithaca, La Jolla, Minneapolis, Murray Hill, New Brunswick, New York, Pittsburg, Princeton, Rochester, Seattle, Syracuse, Toronto, Troy, Vancouver.
- **Other:** Auckland, Bangalore, Beijing, Campinas, Delhi, Haifa, Kolkata, Kyoto, Melbourne, Mumbai, Nagoya, Rio de Janeiro, São Paulo, Shanghai, Singapore, Stellenbosch, Tel Aviv, Tokyo.

Sabbatical leaves:

Since 1985, invited guest for periods of one month or longer at 30 international institutions. Among these, sabbatical leaves and guest professorships at:

- February–April 1986:
Institute for Mathematics and its Applications, University of Minnesota, Minneapolis, Minnesota, USA.
- October–December 1986:
Mathematics Department, Cornell University, Ithaca, New York, USA.
- April–July 1989:
Institut für Angewandte Mathematik, Universität Heidelberg, Heidelberg, Germany.
- January–February 1991:
Department of Mathematics, Rutgers University, New Brunswick, New Jersey, USA.
- May–July 1991 and January–February 1993:
Institut für Mathematische Stochastik, Universität Göttingen, Göttingen, Germany.
- August 1998 – January 1999:
Fields Institute for Research in Mathematical Sciences, Toronto, Canada.
- January–August 2006 and June–July 2009:
Pacific Institute for the Mathematical Sciences, Vancouver, Canada.
- January–August 2011:
Hausdorff Centre for Mathematics, University of Bonn, Germany.
- September–October 2019 and 2020:
Institute for Applied Mathematics, University of Bonn, Germany.
- November–December 2019 and 2020:
Department of Mathematics, University of Erlangen-Nürnberg, Germany.
- September–October 2022:
Simons Institute, Berkeley, USA.

Co-organization (programmes):

- *Mark Kac seminar on Probability and Physics*
(national seminar, 1985–1999).
- *Master Class of the Mathematical Research Institute*
(national master program, 1992–1994).
- Series of 1-day meetings on *Probabilistic Algorithms and Algorithmic Probability*, with U. Faigle and R.D. Gill
(national exchange program, 1995–1996).
- Steering committee of the scientific program on *Random Dynamics in Spatially Extended Systems* of the European Science Foundation (13 participating countries)
(2002–2006 chair).
- *Dutch Stochastics Meeting*, with M.-C. van Lieshout and A. van der Vaart
(annual meeting for probabilists and statisticians, ≥ 2011).

Co-organization of conferences, summer schools and workshops (national):

1. 28/08-01/09, 1995, with H. Maassen,
Workshop on *Probability and Physics*, Renkum.
2. 11-12/02, 1999, with Ph. Clément, J. van Neerven and B. de Pagter,
Colloquium on *Infinite-Dimensional Stochastic Analysis*, Royal Netherlands Academy
of Sciences, Amsterdam.
3. 19-24/04, 1999, with A. Bovier, J.-D. Deuschel and H. Spohn,
Workshop on *Stochastic Models from Statistical Physics*, EURANDOM, Eindhoven.
4. 08-11/01, 2001, with A. Greven, R. Manthey, M. Röckner and T. Sturm,
Workshop on *Stochastic Analysis: Geometric Aspects and Applications*, EURANDOM,
Eindhoven.
5. 21-23/05, 2001, with E. Bolthausen,
Workshop on *Spin Glasses*, EURANDOM, Eindhoven.
6. 07-11/10, 2002, with A. Bovier and J.-D. Deuschel,
Workshop on *Stochastic Models from Statistical Physics*, EURANDOM, Eindhoven.
7. 03-07/01, 2005, with D. Denteneer and E. Verbitskiy,
Workshop on *Dynamical Systems, Probability Theory and Statistical Mechanics: A con-
ference in honour of M.S. Keane*, EURANDOM, Eindhoven.
8. 18–22/06, 2007, with S.G. Whittington,
Workshop on *Random Polymers*, EURANDOM, Eindhoven.
9. 09-11/01, 2008, with A. Bovier and F.R. Nardi,
Workshop on *Metastability*, EURANDOM, Eindhoven.
10. 14-18/12, 2009, with V. Sidoravicius,
Workshop on *Dynamics Random Environments*, EURANDOM, Eindhoven.
11. 04-08/07, 2011, with Y. Fyoderov, S. Nechaev, H. Rootzen and S. Shlosman,
Workshop on *Extreme Value Statistics in Mathematics, Physics and Beyond*, Lorentz
Center, Leiden.
12. 19-23/12, 2011, with A. van Enter, R. Fernández and F. Redig,
Workshop on *Dynamical Gibbs-non-Gibbs Transitions*, EURANDOM, Eindhoven.
13. 10-18/01, 2013, with V. Sidoravicius and S.G. Whittington,
School and Workshop on *Random Polymers*, EURANDOM, Eindhoven.
14. 22-29/08, 2014, with C. Giardinà and A. Greven,
Workshop on *Population Dynamics and Statistical Physics in Synergy*, EURANDOM,
Eindhoven.
15. 28/11, 2014, with M. Mandjes,
Mini-symposium on *Networks*, Royal Netherlands Academy of Sciences, Amsterdam,
The Netherlands.

16. 08-12/09, 2014, with M. Heydenreich and S. Jansen,
Workshop on *Mathematical Facets of Crystallization*, Lorentz Center, Leiden.
17. 07-11/12, 2015, with H. Buhrmann,
Workshop on *Quantum Random Walks and Quantum Algorithms*, Lorentz Center, Leiden.
18. March 2016, with A. Muntean,
Stochastic Activity Month on *Probability and Analysis*, EURANDOM, Eindhoven.
19. 11-15/04, 2016, with H. Broer, H. Bruin, R. Fokkink and A.J. Homburg,
Workshop on *Taking the Measure of One-Dimensional Dynamics*, Lorentz Center, Leiden.
20. 10-14/10, 2016, with H. Broer, F. Redig and W. Ruszel,
Workshop on *Transformations in Statistical Mechanics: Pathologies and Remedies*, Lorentz Center, Leiden.
21. 29-31/03, 2017, with E. Baake,
Workshop on *Multi-Scale Features of Selection in Population Genetics*, EURANDOM, Eindhoven.
22. 07-09/06/2017, with M. Mandjes and M. Kranenburg,
NETWORKS 2017, CWI, Amsterdam.
23. 16/10, 2018, with M. Mandjes,
Mini-symposium on *Networks*, Royal Netherlands Academy of Sciences, Amsterdam.
24. 18/02, 2019, with W. Schilders,
Mini-symposium on *The Era of Mathematics*, Royal Netherlands Academy of Sciences, Amsterdam.
25. 27-31/05, 2019, with T. Shirai and E. Verbitskiy,
Bilateral Japan-Netherlands workshop on *Probabilistic Methods of Statistical Mechanics of Random Media and Random Fields*, Lorentz Center, Leiden.
26. 11-14/06, 2019, with A. van Enter,
50 Years of Random Cluster Model, Lorentz Center, Leiden.
27. 20-22/01, 2020, with I. Lindner,
NETWORKS Matchmaking Event: Social Science meets Mathematics,
Kaap Doorn, Doorn.
28. 06-10/04, 2020, with C. Borgs, J. Chayes, S. Dhara, R. van der Hofstad, V. Patel,
Graph Limits, EURANDOM, Eindhoven.
* Postponed to 26-30/09, 2022 (Simons Institute, Berkeley, USA).
29. 12-16/12, 2022, with S. Floreani, C. Giardinà, F. Redig, S. Nandan,
Recent Developments in Stochastic Duality, EURANDOM, Eindhoven.
30. 19-23/12, 2022, with L. Avena, D. Terhesiu,
The Lorentz Gas, Lorentz Center, Leiden.

Co-organization of conferences, summer schools and workshops (international):

1. 20-25/06, 1994,
Organiser of a session at the *3rd World Congress of the Bernoulli Society*, Chapel Hill, North Carolina, USA.
2. 14-20/12, 1997, with A. Greven,
Meeting on *Probability and Analysis*, Oberwolfach, Germany.
3. 12-18/08, 1998,
Organiser of a session at the *22nd European Meeting for Statisticians* and the *7th Vilnius Conference on Probability Theory and Mathematical Statistics*, Vilnius, Lithuania.
4. 18-28/08, 1998, with J. Cardy, G. Slade and S.G. Whittington, Workshop on *Mathematical Physics of Polymers and Percolation*, Fields Institute, Toronto, Canada.
5. 21-27/05, 2000, with E. Bolthausen and D. Brydges,
Meeting on *Self-Interacting Random Processes*, Oberwolfach, Germany.
6. 18-24/06, 2000, with F. Martinelli, E. Olivieri and R. Schonmann,
Summer school on *Probability, Computational Geometry and Phase Transitions*, Cortona, Italy.
7. 23-29/06, 2002,
Organiser of a session at the *8th Vilnius Conference on Probability Theory and Mathematical Statistics*, Vilnius, Lithuania.
8. 01-05/07, 2002,
Member of the program committee of the *28th Conference on Stochastic Processes and Their Applications*, Melbourne, Australia.
9. 23-27/06, 2003, with B. Tóth,
Workshop on *Randomness in Space and Time*, Alfred Rényi Institute, Budapest, Hungary.
10. 26-31/07, 2004,
Organiser of a session at the *6th World Congress of the Bernoulli Society*, Barcelona, Spain.
11. July 2005, with A. Bovier, F. Dunlop and A. van Enter,
Summer School on *Mathematical Statistical Physics*, Ecole Physique, Les Houches, France.
12. 18-21/09, 2006,
Member of the program committee of the conference on *The Mathematics of Complex Systems*, Warwick, United Kingdom.
13. September-December 2008,
Member of the advisory committee of the program on *Interacting Particle Systems, Statistical Mechanics and Probability Theory*, Institut Henri Poincaré, Paris, France.
14. 18-24/01, 2009, with E. Baake, D. Dawson and A. Greven,
Meeting on *Random Trees*, Oberwolfach, Germany.

15. April-June 2009,
Member of the advisory committee of the *CRM-PIMS Thematic Program on Challenges and Perspectives in Probability*, Montreal and Vancouver, Canada.
16. 15-20/11, 2009, with A. Bovier, P. Contucci and C. Giardinà,
Workshop on *Statistical Mechanics on Random Structures*, Banff International Research Station, Banff, Canada.
17. 09-13/08, 2010,
Organiser of a session at the *73rd Annual Meeting of the Institute of Mathematical Statistics*, Göteborg, Sweden.
18. 14-25/05, 2012, with R. Sun,
School and Workshop on *Random Polymers and Related Topics*, Institute for Mathematical Sciences, Singapore.
19. 19-25/05, 2013, with S. Bhamidi, A. Nachmias and R. van der Hofstad,
Seminar on *Random Networks*, Oberwolfach, Germany.
20. 28/07-01/08, 2014,
Member of the program committee of the *37th Conference of Stochastic Processes and Their Applications*, Buenos Aires, Argentina.
21. 03-06/05, 2016, with S. Adams, M. Heydenreich and S. Jansen,
Workshop on *Trends in Mathematical Crystallisation*, Warwick, United Kingdom.
22. 27/06-01/07, 2016, with D. Brydges,
Random Structures in High Dimensions: workshop in honour of G. Slade, Oaxaca, Mexico.
23. 11-13/01, 2017, with L. Avena, M. Balász, F. Redig and B. Tóth,
Random Walk in Dynamic Random Environment, Heilbronn Institute, Bristol, United Kingdom.
24. 14/08-13/10, 2017, with A. Ayyer, A. Dhar, J.P. Garrahan, C. Jarzynski, M. Krishnapur, T. Lelièvre, S. Sabhapandit, H. Touchette,
Large Deviation Theory in Statistical Physics: Recent Advances and Future Challenges, International Centre for Theoretical Sciences, Bangalore, India.
25. 3-7/07, 2017, with B. Tóth,
Laplacians, Walks, Condensation: workshop in honour of M. van den Berg, Bristol, United Kingdom.
26. 10-16/12, 2017, with L. Addario-Berry, S. Bhamidi, R. van der Hofstad,
Network Models: Structure and Function, Oberwolfach, Germany.
27. 29/01-02/02, 2018, with S. Athreya, N. Bansal, A. Bose, R. van der Hofstad, M. Mandjes, K. Maulik, A. Sarkar,
ISI-NETWORKS Conference in Probability, Indian Statistical Institute, Kolkata, India.
28. 27-31/08, 2018, with L.-P. Arguin, G. Ben Arous, E. Bolthausen, V. Gayrard, D. Ioffe, N. Kistler, I. Kourkova, C. Newman,

Advances in Statistical Mechanics: workshop in honour of A. Bovier, Centre International de Rencontres Mathématiques, Luminy, France.

29. 21-24/04, 2019,
Invited session *Thermodynamics on Networks* at the 15th Joint European Thermodynamics Conference, Barcelona, Spain.
30. 12-13/12, 2019, with A. Depperschmidt, A. Greven,
Geographic Spaces for Evolution: from Lattices to Graphs to Continuum, Erlangen, Germany.
31. 11-15/01, 2021, with T. Shirai and E. Verbitskiy,
Bilateral Japan-Netherlands workshop on *Probabilistic Methods of Statistical Mechanics of Random Media and Random Fields*, Kyushu University, Fukuoka, Japan.
* Postponed to 09-14/01, 2023. Online meeting held 11-12/01, 2022.
32. 06-12/03, 2022, with A. Sturm, A. Winter,
Population Dynamics and Statistical Physics in Synergy, Oberwolfach, Germany.
33. 29/01-02/02, 2024, with S. Athreya, A. Chakrabarty, R.S. Hazra,
Challenges in Networks, International Centre for Theoretical Science, Bangalore, India.

Administration:

- **Netherlands Organisation for Scientific Research:**

- Board of the *Priority Program Mathematical Physics* (1992–2000; 1996–2000 chair).
- Advisory Board for Mathematics (1999–2004).
- Scientific committee reviewing the Centre for Mathematics and Computer Science in Amsterdam (2005 chair).
- Four strategic committees advising the Minister of Education, Culture and Science, the Netherlands Organisation for Scientific Research, and the rectors and the deans of Dutch Universities on the future of Dutch mathematics (2007–2008; report *Masterplan Toekomst Wiskunde*) (2010–2011; report *Masterplan Toekomst Wiskunde 2.0*) (2014–2015; report *Een Deltaplan voor de Nederlandse Wiskunde*) (2016; Wiskunderaad).
- Panel for the mid-term evaluation of the Gravitation Programme *Quantum Software Consortium* (2020).

- **Royal Netherlands Academy of Sciences:**

- Committee advising on the future of Dutch mathematics (1998–1999; report: *Toekomst Wiskunde Onderzoek Nederland*).
- Committee advising on the future of Dutch biomathematics (2005–2008; report: *Biomathematics: A Vision for Success*).

- Board of the Advisory Council for Mathematics (2002–2009; 2007–2009 chair).
 - Board of the Advisory Council for the Natural and Technical Sciences (TWINS: 2008–2016, 2011–2016 chair).
 - Board of the Advisory Council for the Natural and Technical Sciences (RNTW: 2017–2020 chair).
 - Committee advising on the Dutch research portfolio (2012–2015; report: *Ruimte voor Ongebonden Onderzoek; Signalen uit de Nederlandse Wetenschap*).
 - Member of the jury selecting scientific questions for the Dutch Science Agenda (2015; *Nationale Wetenschapsagenda*).
 - Committee advising on the competitiveness of The Netherlands in attracting international top researchers (2016–2017; report: *De Aantrekkelijkheid van Nederland als Onderzoekslaan*).
 - Committee advising on the intertwining of teaching and research at Dutch universities (2018 chair; position paper: *Spagaat of Duet? Verwevenheid van Onderwijs en Onderzoek aan Nederlandse Universiteiten*).
 - Committee advising on storage and availability of data for research (2019–2021 chair; *Opslag en Beschikbaarheid van Data voor Onderzoek*).
 - Member of the jury electing new members in the Natural and Technical Sciences (2022–2025).
 - Committee advising on the membership election of the Royal Netherlands Academy of Sciences. (2023).
 - Co-organisation of public symposia on a variety of themes, including mathematics in society, complex networks, covid-19, Abel Prize, mathematics at high schools (≥ 2010).
- **Dutch Mathematical Society**
 - Member of the program committee for the yearly Dutch Mathematical Congress (2014–2018 + 2023).
 - Co-organisation of the parallel session at the Dutch Mathematical Congress for the Gravitation Program NETWORKS (2015–2020).
 - **EURANDOM:**
 - Coordinator of the research program *Interacting Stochastic Systems* (1998–2004 with M. Keane).
 - Coordinator of the research program *Random Spatial Structures* (2004–2021 with R. van der Hofstad).
 - Scientific Director (2000–2005).

- **NETWORKS:**

- Member of the Management Team of the Gravitation programme NETWORKS (2014–2024).

- **Dutch research institutes:**

- Board of the Mathematical Research Institute: Research School of Groningen, Nijmegen, Utrecht, Twente (1996–2000; 1996–1999 chair).
- Program committee of the *National Mathematics Days* of the Freudenthal Institute in Utrecht (1998–2003).
- Advisory Council for Mathematics of the Lorentz Center in Leiden (2002–2007; 2002–2005 chair).
- Board of the consortium of Dutch Research Schools in Mathematics (2005–2009 chair).
- Scientific Council of the Korteweg de Vries Institute of the University of Amsterdam (2005–2012).
- Board of the Thomas Stieltjes Institute for Mathematics: Research School of Amsterdam, Delft, Eindhoven, Leiden (2006–2011; 2008–2011 director).
- Board of the Centre for Mathematics and Computer Science in Amsterdam (2007–2016).
- Admission Committee for foreign master students at the Mathematical Institute of Leiden University (2011–2020).
- Science Committee of the Faculty of Sciences of Leiden University (2011–2018; chair 2018–2021).
- Advisory Council of the Lorentz Center in Leiden (≥ 2015).
- Scientific Council of the Johan Bernoulli Institute of Groningen University (≥ 2017).
- Steering Group for recognition and appreciation of academic staff (“Erkennen en Waarderen”), Leiden University (2020–2022).
- Selection Committee for the directorship of the Centre for Mathematics and Computer Science in Amsterdam (2020).
- Member of the Managing Board at the Mathematical Institute of Leiden University (≥ 2020).
- Several outreach activities in the framework of Leiden City of Science 2022 (2022).

- **International research institutes:**

- Selection committee of the Priority Program *Interacting Stochastic Systems of High Complexity* of the German National Science Foundation (1997–2003).
 - Review panel of the Engineering and Physical Sciences Research Council evaluating the Isaac Newton Institute in Cambridge, United Kingdom (2002–2003).
 - Advisory council of the Weierstrass Institute for Applied Analysis and Stochastics, Berlin, Germany (2005–2012).
 - Review panel of the Department of Mathematics of the University of Rome 3, Italy (2007).
 - Referee of the Center for Mathematical Modeling, Santiago, Chile (2008).
 - Review panel of the International Max Planck Research School of the Max Planck Institute for Mathematics in the Sciences, Leipzig, Germany (2015).
 - Scientific Advisory Board of Bonn University, Germany (≥ 2019).
 - Scientific Advisory Board of the Excellence Cluster *Mathematics Münster: Dynamics – Geometry – Structure*, Münster, Germany (≥ 2019).
 - Selection Committee of the Priority Program *Random Geometric Systems* of the German National Science Foundation (≥ 2020).
- **Societies:**
 - European Regional Committee of the Bernoulli Society (1996–2000).
 - Council of the Bernoulli Society (2003–2007).
 - Committee of Stochastic Sciences Institutes of the Bernoulli Society (2004–2006 chair).
 - Council of the Institute of Mathematical Statistics (2006–2009).
 - Publications Committee of the Bernoulli Society (2011–2014).
 - Mathematics Science Council of Elsevier (2012–2017).
 - Fellows Committee of the Institute of Mathematical Statistics (2017–2019).
 - **Founding activities:**

- Founding board of the national platform for Dutch mathematics *Platform Wiskunde Nederland* (2009–2010 chair).
 - Co-founder and member of the management team of the national mathematics cluster *Stochastics: Theoretical and Applied Research* (2009–2013; 2014–2015 chair).
 - Co-founder and member of the management team of the Gravitation Program *NETWORKS* (2014–2024).
- **International prize committees:**
 - Chair of the committee awarding the *Brouwer Medal* of the Dutch Mathematical Society, 2002; recipient: M. Aizenman.
 - Member of the committee awarding the *Carl Friedrich Gauss prize* at the International Congress of Mathematicians, Madrid, 2006; recipient: K. Itô.
 - Chair of the committee awarding the *Brouwer Medal* of the Dutch Mathematical Society, 2020; recipient: D. Aldous.
- **International refereeing:**
 - In the past 25 years I refereed international projects for national research councils in Australia, Belgium, Canada, Chile, France, Germany, Israel, Italy, New Zealand, Sweden, Switzerland, United Kingdom, USA, and for the European Science Foundation and the European Research Council.

Editorial board:

Journal of Statistical Physics	1994–1996.
Markov Processes and Related Fields	≥ 1995 .
Bernoulli	2001–2003.
Journal of Applied Mathematics	2001–2005.
Annals of Probability	2003–2008.
Annales Henri Poincaré	2004–2007.
Indagationes Mathematicae	2005–2018.
Electronic Journal of Probability	2006–2009.
Electronic Communications in Probability	2006–2008.
Stochastic Processes and Applications	2006–2009.
Springer series Grundlehren der mathematischen Wissenschaften	≥ 2020 .

In the past 15 years I declined invitations to editorships and editorial boards. This grew out of a deep sense of frustration with the refereeing process, which in my view has become increasingly more erratic and idiosyncratic. The fault is with the refereeing system, not with the researchers. I continue to referee papers, as a service to the scientific community.

Special proceedings:

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., ISBN 978-0-444-52813-1.

Special issues:

Co-editor of a special issue in 2018 of Journal of Statistical Physics on *Complex Networks*, with D. Garlaschelli, R. van der Hofstad and M. Mandjes.

Grants:

- **National:**

- **Netherlands Organisation for Scientific Research:**

- * *Computationally Intensive Methods in Stochastics*, support for workshops (1993–1997, jointly with several Dutch colleagues in probability and statistics).
 - * *Renormalization of Interacting Diffusions*, 1 PhD-position (1995–1999).
 - * *Polymers*, 1 PD-position (1999–2000).
 - * *Droplet Growth in Fluids*, 1 PD-position (2000–2002).
 - * *Stochastic Analysis*, 3 PhD-positions (2001–2003, three projects jointly with Ph. Clément and S. Verduyn Lunel).
 - * *Gibbs Measures under Random Dynamics*, 1 PD-position (2003–2004, jointly with A. van Enter and F. Redig).

- * *Intermittency in a Catalytic Random Medium*, 1 PD-position (2004–2005).
- * *Random Copolymers in Random Emulsions*, 1 PD-position (2005–2006).
- * *Wulff shape of critical droplets under stochastic dynamics*, 1 PD-position (2006–2007).
- * *Random walks on high-dimensional incipient infinite clusters*, 1 PD-position (2009–2010, jointly with R. van der Hofstad).
- * *Variational characterization of copolymers near selective interfaces*, 1 PhD-position (2010–2012, jointly with V. Sidoravicius).
- * *Dynamical Gibbs-non-Gibbs transitions*, 1 PhD-position (2013–2015, jointly with F. Redig).
- * *Gibbs Processes and Applications*, 1 PhD-position (2014–2016, jointly with E. Verbitskiy).
- * *Duality for Interacting Particle Systems*, 2 PhD-positions (2018–2022, jointly with C. Giardinà and F. Redig).

TOP Grant of 450 kEuro

– **Ministry of Education, Culture and Science:**

- * *NETWORKS*, within the NWO Gravitation Program (2014–2023, jointly with 10 colleagues from Amsterdam and Eindhoven).

Consortium grant of 23+5 MEuro

• **International:**

- NATO collaborative research grant (1993–1998, jointly with J.-B. Baillon, Ph. Clément and A. Greven).
- Two collaborative research grants by the Netherlands Organisation for Scientific Research and the British Council (1995–1996 and 1997–1998, jointly with M. van den Berg).
- Participation in the program *Mathematical and Theoretical Physics*, grant by the Flemish National Science Foundation (1995–1999 and 2000–2004).
- Grant within a covenant between Leuven University and Nijmegen University for a project on *Metastability and Gibbs Theory* (1999–2000, jointly with C. Maes).
- Grant by the Dutch and the Hungarian National Science Foundations for bilateral research collaboration on *Large-Scale Behaviour of Multi-Component Stochastic Systems* (2001–2003, jointly with J. van den Berg, M. Keane, B. Tóth and D. Szász).
- Chair of the Scientific Programme of the European Science Foundation on *Random Dynamics in Spatially Extended Systems*, with 13 participating European countries (2002–2007).
- Grant by the Dutch and the German National Science Foundations for a Dutch-German Bilateral Research Group on *Mathematics of Random Spatial Models from*

Physics and Biology

(2003–2009, jointly with E. Baake, A. Bovier, F. Götze, A. Greven and A. Wakolbinger).

- Advanced Grant by the European Research Council, *Variational Approach to Interacting Stochastic Systems* (VARIS) (2011–2015).

Personal grant of 2 MEuro

- Initiator of German Priority Program on *Probabilistic Structures in Evolution*, funded by the German National Science Foundation (2012–2017, jointly with E. Baake, A. Bovier, A. Greven and A. Wakolbinger).
- Grant by the Leverhulme Truste (United Kingdom) for an exchange program on *Laplacians, Random Walks, Bose Gas, Quantum Spin Systems* between Bristol, Haifa, Leiden, Warwick and Zürich (2014–2016, jointly with M. van den Berg, E. Bolthausen, D. Ioffe, B. Tóth, D. Ueltschi).
- COFUND grant by the European Commission for 14 PhD-positions in the NWO Gravitation Program NETWORKS: NETCO-PhD (2020–2025, jointly with 6 colleagues from Amsterdam and Eindhoven).

Consortium grant of 3 MEuro

- COFUND grant by the European Commission for 14 postdoc positions in the NWO Gravitation Program NETWORKS: NETCO-PD (2021–2026, jointly with 6 colleagues from Amsterdam and Eindhoven).

Consortium grant of 2 MEuro

Involvement in research programmes:

- **EURANDOM** (≥ 1998):

EURANDOM (<http://www.eurandom.tue.nl/>) is a European institute for research in probability, statistics and stochastic operations research. In the period 1998–2010 it had a junior staff of 25 postdocs and graduate students, a senior staff of 15 researchers in part-time advisory appointments, a small managing staff, and an extensive workshop and visitor programme. During that period it hosted a total of 150 junior researchers. After 2010, EURANDOM gradually evolved into a workshop and visitor center.

In the period 2000–2005 I was scientific director of EURANDOM. In that capacity I was able to help young researchers advance their career, to stimulate the development of Dutch stochastics via national collaboration and international exchange, to take strategic initiatives to strengthen collaboration within Europe, and to secure 5 MEuro core funding for EURANDOM for the period 2003–2007, from NWO and Eindhoven University of Technology.

- **ERC-project VARIS** (2011 – 2016):

VARIS focussed on systems consisting of a large number of random components that interact locally but exhibit a global dependence, resulting in phase transitions and associated critical behaviour. Typically, the components of these systems are subject to a

simple and well understood microscopic dynamics. The challenge lies in understanding the complex macroscopic phenomena that may arise from this dynamics.

The project combined large deviation theory and variational calculus with space-time coarse-graining and scaling techniques. It focussed on five classes of highly complex random interacting systems: (1) polymer chains; (2) porous domains; (3) flipping magnetic spins; (4) lattice gases; (5) evolving random media. A total of 4 PhD-students, 4 postdocs and 6 visiting professors (half year) were appointed through the grant.

- **NETWORKS (2014 – 2024):**

NETWORKS is a consortium of 11 researchers from 4 institutions: University of Amsterdam, Center for Mathematics and Computer Science in Amsterdam, Eindhoven University of Technology, Leiden University. The aim of NETWORKS is to address the pressing challenges posed by large-scale networks. The focus is on modeling, understanding, controlling and optimizing networks that are complex and highly volatile.

The project is funded by the Ministry of Education, Culture and Science and administered by NWO. It brings together researchers from stochastics and algorithmics, and runs for a period of 10 years. At any time, it supports 20 PhD-students, 7 postdocs and 7 assistant professors. It further maintains an extensive workshop and visitor programme, develops a teaching and training programme, organises outreach activities, and builds up an interactive webpage (called “thenetworkpages”).

- **NETCO-PhD (2020 – 2025):**

The European Commission decided to fund 14 additional graduate students in NETWORKS through the COFUND program. They will be integrated into the training program of NETWORKS and will do internships with companies and industries.

- **NETCO-PD (2021 – 2026):**

The European Commission decided to fund 14 additional postdoctoral fellows in NETWORKS through the COFUND program. They will be integrated into the training program of NETWORKS and will do internships with companies and industries.