Curriculum Vitae for Gordon Slade

June 1, 2026

Personal

Name: Gordon Douglas Slade

Date of birth: December 14, 1955

Citizenship: Canadian

Address:
Department of Mathematics
University of British Columbia
Vancouver, BC , Canada V6T 1Z2
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Research interests: Statistical mechanics, probability theory.

Employment

Professor Emeritus, Department of Mathematics, University of British Columbia; since July 1, 2025.
Professor, July 1, 1999 to June 30, 2025. Acting Head, July 1 to September 30, 2002. Associate Head, October 1, 2002 to June 30, 2003. Associate Head Research, July 1, 2007 to June 30, 2008; and September 1, 2010 to June 30, 2014.

Professor, Department of Mathematics and Statistics, McMaster University, Hamilton, Ontario, Canada; July 1, 1995 to June 30, 1999. Associate Professor July 1, 1990 to June 30, 1995. Assistant Professor, July 1, 1986 to June 30, 1990.

Lecturer in Mathematics, Department of Mathematics, University of Virginia, Charlottesville, Virginia, USA; January 15, 1985 to May 31, 1986.

Visiting Positions

Clay Lecturer, Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K.; July 3 to August 2, 2024.

Guest Scholar, Research Institute for Mathematical Sciences, Kyoto University; October 21 to November 5, 2023.

Visitor, University of Geneva; July 29 to August 28, 2023.

Simons Fellow, Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K.; September 3 to October 31, 2018.

Invited Researcher, Institut des Hautes Études Scientifiques, Bures-sur-Yvette, France; April 28 to May 19, 2018.

Guest Scholar, Research Institute for Mathematical Sciences, Kyoto University, Japan; March 28 to April 27, 2014.

Visiting Professor, Mathematics Institute, Leiden University, Netherlands; September 2 to November 9, 2013.

Professeur Invité, Université Paris VI; September 13 to December 12, 2009.

Invited Professor, Global COE in Mathematics of Kyoto University, February 1 to March 14, 2009, and Global COE in Mathematics of Kyushu University, March 15–28, 2009, Japan.

Professeur Invité, Université Paris VI; October 1–31, 2008.

Professeur Invité, Laboratoire de Mathématiques, Université Paris Sud, Orsay; August 29 to September 28, 2008.

Visiting Researcher, Microsoft Research, Redmond, WA, U.S.A.; March 15 to May 14, 2004.

Visitor, Statistical Mechanics and Combinatorics Research Group, Department of Mathematics, University of Melbourne, Australia; February 2 to February 27, 2004.

Visiting Stieltjes Professor, EURANDOM, Eindhoven, The Netherlands; September 6, 2003 to November 29, 2003.

Visiting Senior Fellow, Isaac Newton Institute, Cambridge, U.K.; July 21, 2003 to August 30, 2003.

Visitor, Microsoft Research, Redmond, WA, U.S.A.; June 19, 2001 to July 14, 2001.

Visiting Researcher, Microsoft Research, Redmond, WA, U.S.A.; January 5, 1998 to June 30, 1998.

Visitor, Department of Mathematics, University of Nijmegen, Nijmegen, The Netherlands; April 28, 1997 to July 1, 1997.

Visitor, Department of Mathematics, University of British Columbia, Vancouver, BC, Canada; December 15, 1996 to April 24, 1997.

Visiting Research Scientist, Department of Applied Physics, Tokyo Institute of Technology, Tokyo, Japan; May 2, 1996 to July 10, 1996.

Visiting Fellow, Isaac Newton Institute for Mathematical Sciences, Cambridge, U.K.; July 1, 1993 to December 15, 1993.

Visiting Scholar, Department of Mathematics, University of Virginia, Charlottesville, VA, USA; January 15, 1993 to May 31, 1993.

Visitor, Forschungsinstitut für Mathematik, ETH-Zentrum, Zurich, Switzerland; November 16, 1992 to December 16, 1992.

Visitor, Centre de Physique Théorique, Ecole Polytechnique, Palaiseau, France; August 1, 1992 to November 15, 1992.

Visiting Associate Professor, Department of Physics, Gakushuin University, Tokyo, Japan; April 28, 1991 to May 22, 1991.

Visiting Scientist, Courant Institute of Mathematical Sciences, New York University, New York, NY, USA; April 27, 1989 to May 27, 1989 and May 5, 1988 to June 5, 1988.

Guest Scientist, Max-Planck-Institut für Physik und Astrophysik, Munich, Germany; June 1, 1986 to August 15, 1986.

Visiting Assistant Professor, Department of Mathematics, University of British Columbia, Vancouver, British Columbia, Canada; July 1, 1985 to August 31, 1985.

Grants

NSERC Discovery Grants since 1987, currently $46,000/year (until 2028).

NSERC Leadership Support Initiative (Principal Investigator), 2003-2007.

NSERC equipment grant (principal investigator), 1997.

Japan Society for the Promotion of Science Invitation Fellowship in 1996.

British Science and Engineering Research Board Fellowship in 1993.

Coinvestigator in NSERC major equipment grant in 1988 and in NSERC infrastructure grant during 1991-94.

McMaster University Science and Engineering Research Board grant during 1986-87.

Distinguished Lectures

2024 Clay Lecturer, Isaac Newton Institute.

2018 Jeffrey–Williams Lecturer of the Canadian Mathematical Society.

2016 MINT Distinguished Lecture, Tel Aviv University.

2013 Mark Kac Lecturer in the Netherlands (an annual lecture series).

2010 CRM–Fields–PIMS Prize lectures, Vancouver, Montreal, Toronto.

2009 Institute of Mathematical Statistics Medallion Lecture, Berlin.

1997 Mark Kac Lecturer in the Netherlands (an annual lecture series).

1995 Coxeter–James Lecturer of the Canadian Mathematical Society.

1994 Invited Lecture at the International Congress of Mathematicians, Zürich.

Honours

Jeffery–Williams Prize of the Canadian Mathematical Society 2018

Fellow of the Royal Society of London for Improving Natural Knowledge 2017

UBC Faculty of Science Killam Teaching Award 2017

Simons Visiting Professor, University of Montpellier and Mathematisches Forschungsinstitut Oberwolfach 2015

Fellow of the American Mathematical Society 2012

Fellow of the Institute of Mathematical Statistics 2011

Fellow of the Fields Institute 2010

CRM–Fields–PIMS Prize 2010.

UBC Killam Research Prize (Senior Science Category) 2004.

Awarded the 2003 Prize of the Institut Henri Poincaré for best article, for the paper: R. van der Hofstad and G. Slade, Convergence of critical oriented percolation to super-Brownian motion above $4+1$ dimensions, *Ann. Inst. H. Poincaré Probab. Statist.* **39**:413-485, (2003).

Visiting Stieltjes Professor (a position filled once per year at the invitation of the Thomas Stieltjes Institute), September–November, 2003.

Elected Fellow of the Royal Society of Canada 2000.

Coxeter–James Prize of the Canadian Mathematical Society 1995

Service

Member of Selection Committee for CRM-Fields-PIMS Prize, for prizes awarded 2013 and 2014.

Member of Institute of Mathematical Statistics Committee on Nominations 2010-11.

Associate Editor for *Canadian Journal of Mathematics* and *Canadian Mathematical Bulletin*, 2009-13.

Member of the International Affairs Committee of the Canadian Mathematical Society, 2009-12.

Member of the Mathematics NSERC Liaison Committee 2007–2011.

Co-chair of Scientific Committee for Joint CRM-PIMS Thematic Programme on Challenges and Perspectives in Probability 2008–2009.

Member of the Banff International Research Station Scientific Advisory Board, 2005–2008. Member of the Program (Steering) Committee, 2006–2008.

Member of the Royal Society of Canada Synge Committee, 2005–2008.

Member of Fields Institute Scientific Advisory Panel, 2001–2005.

Member of Canadian Mathematical Society Research Committee, 2001–2003.

Member of NSERC Grant Selection Committee, Pure and Applied Mathematics B, 1998–2001.

Member of Pacific Institute of the Mathematical Sciences Scientific Research Panel, 1996–2001.

Member of the Organizing and Program Committees for the program on Probability and its Applications at the Fields Institute for Research in Mathematical Science in Toronto, during 1998–1999.

Associate Editor of *Annals of Applied Probability*, 1997–2002.

Conference Organization

PIMS–CRM Summer School in Probability, Vancouver. June 2–28, 2025.

PIMS–CRM Summer School in Probability, Montreal. July 1–26, 2024.

PIMS–CRM Summer School in Probability, Vancouver. May 30 – June 24, 2022.

Co-organizer, Pacific Workshop on Probability and Statistical Physics, (online), December 9–11, 2021.

Member of International Advisory Committee: STATPHYS 28 (Tokyo 2023), STATPHYS 27 (Buenos Aires 2019), STATPHYS 26 (Lyon 2016).

Workshop: Quantum field theory, renormalisation and stochastic partial differential equations. Isaac Newton Institute, Cambridge, U.K. October 22-26, 2018.

PIMS–CRM Summer School in Probability, Vancouver. June 5–30, 2017.

Member of Scientific Committee: Şirince (Turkey) 2016 Summer School on Random Processes in Random Environments. (Event cancelled due to State of Emergency in Turkey.)

Member of Organizing Committee: Fields Medal Symposium at the Fields Institute in Toronto, Fall 2015

Local organizer for Conference on Recent Trends in Stochastic Analysis, PIMS, UBC, Vancouver. July 22-26, 2013.

PIMS-Mprime Summer School in Probability, Vancouver. June 4-30, 2012.

Member of International Advisory Committee of STATPHYS25 2013 (Seoul)

Member of the Scientific Committee of the 2012 Summer School in Mathematical Physics, Feza Gürzey Institute, Istanbul, Turkey.

Member of the Scientific Committee of the 2010 Summer School in Mathematical Physics, Feza Gürzey Institute, Istanbul, Turkey.

Member of the Scientific Program Committee of the 34rd Conference on Stochastic Processes and their Application, Osaka, Japan, September 2010.

Member of the International Advisory Committee of STATPHYS24, Cairns 2010.

Workshop: Above the critical dimension, Institut Henri Poincaré, Paris, France. December 7–11, 2009.

Symposium in Honour of David Brydges and Joel Feldman, PIMS, UBC, Vancouver. July 5, 2009.

CRM-PIMS Summer School in Probability, Vancouver. June 8 to July 3, 2009.

PIMS-UBC Summer School in Probability, Vancouver. June 11 to July 9, 2008.

BIRS workshop on Critical Scaling for Polymers and Percolation, Banff. May 28 – June 2, 2005.

Special Session on Probability Theory, CMS Summer Meeting, Laval. June 15–17, 2002.

Special Session on Probabilistic Methods in Mathematical Physics, CMS Winter Meeting, Montréal. December 11–13, 1999.

Workshop on Mathematical Physics of Polymers and Percolation, Fields Institute, Toronto. August 24–29, 1998.

Education

Ph.D. in Mathematics, University of British Columbia, Vancouver, BC, Canada. 1984. Thesis: An asymptotic loop expansion for the effective potential in the $P(\phi)_2$ quantum field theory. Supervisors: J. Feldman and L. Rosen.

M.Sc. in Mathematics, University of Toronto, Toronto, Ont., Canada. 1979.

B.A.Sc. (Honours) in Engineering Science (physics option), University of Toronto, Toronto, Ont., Canada. 1977. Thesis: Measurement in quantum mechanics.

Scholarships

NSERC Postgraduate Scholarship 1981-83

University of British Columbia Graduate Fellowship 1980-81

NSERC Postgraduate Scholarship 1978-80

Wallberg Undergraduate Scholarship 1974-75

Lachlan Dales McKellar Admission Scholarship 1973-74

Province of Ontario Scholarship 1973

Publications

Books

1. R. Bauerschmidt, D.C. Brydges and G. Slade, *Introduction to a renormalisation group method*. Springer Lecture Notes in Mathematics #2242, (2019). xii + 281 pages.

2. G. Slade, *The Lace Expansion and its Applications*. Springer Lecture Notes in Mathematics #1879, (2006). xiii + 223 pages.

3. N. Madras and G. Slade, *The Self-Avoiding Walk*, Birkhäuser, Boston, (1993). Paperback edition published in 1996. Reprinted as a Modern Birkhäuser Classic 2013. xiv + 425 pages.

Edited Book

1. M.T. Barlow, G. Slade, editors. *Random Graphs, Phase Transitions, and the Gaussian Free Field, PIMS-CRM Summer School in Probability, Vancouver, Canada, June 5-30, 2017*. Proceedings in Mathematics & Statistics (PROMS) volume 304, Springer (2020). xvii + 407 pages.

Journal Articles

1. Y. Liu, J. Park and G. Slade. Universal finite-size scaling in high-dimensional critical phenomena. *Phys. Rev. E*, **113**:024143, (2026).

2. Y. Liu and G. Slade. Gaussian deconvolution and the lace expansion for spread-out models. *Ann. Inst. H. Poincaré Probab. Statist.*, **62**:68–85, (2026).

3. Y. Liu and G. Slade. Critical scaling profile for trees and connected subgraphs on the complete graph. *Canad. Math. Bull.*, **69**:550–565, (2026).

4. J. Park and G. Slade. Boundary conditions and the two-point function plateau for the hierarchical $|\phi|4$ model in dimensions 4 and higher. *Ann. Henri Poincaré*, **27**:1497–1561, (2026).

5. Y. Liu, R. Panis and G. Slade. The torus plateau for the high-dimensional Ising model. *Commun. Math. Phys.*, **406**:article 159, (2025).

6. E. Michta, J. Park and G. Slade. Boundary conditions and universal finite-size scaling for the hierarchical $|\phi|4$ model in dimensions 4 and higher. *Commun. Pure Appl. Math.*, **78**:2001–2118, (2025)

7. Y. Liu and G. Slade. Near-critical and finite-size scaling for high-dimensional lattice trees and animals. *J. Stat. Phys.*, **192**:article 23, (2025).

8. Y. Liu and G. Slade. Gaussian deconvolution and the lace expansion. *Probab. Theory Relat. Fields*, (2024).

9. E. Michta and G. Slade, Weakly self-avoiding walk on a high-dimensional torus. *Probab. Math. Phys.*, **4**:331–375, (2023).

10. G. Slade, The near-critical two-point function and the torus plateau for weakly self-avoiding walk in high dimensions. *Math. Phys. Anal. Geom.*, **26**:article 6 (39 pp.), (2023).

11. T. Hutchcroft, E. Michta and G. Slade, High-dimensional near-critical percolation and the torus plateau. *Ann. Probab.*, **51**:580–625, (2023).

12. G. Slade, Self-avoiding walk on the hypercube. *Random Struct. Alg.*, **62**:689–736, (2023).

13. E. Michta and G. Slade, Asymptotic behaviour of the lattice Green function. *ALEA, Lat. Am. J. Probab. Math. Stat.*, **19**:957–981, (2022).

14. G. Slade. A simple convergence proof for the lace expansion. *Ann. I. Henri Poincaré Probab. Statist*, **58**:26–33, (2022)

15. R. Bauerschmidt, G. Slade. Mean-field tricritical polymers. *Probab. Math. Phys.* **1**:167–204, (2020).

16. G. Slade. Self-avoiding walk on the complete graph. *J. Math. Soc. Japan.* **728**:1189–1200, (2020).

17. R. Bauerschmidt, M. Lohmann, G. Slade. Three-dimensional tricritical spins and polymers. *J. Math. Phys.* **61**, 033302, (2020). (31 pages)

18. A. Sakai, G. Slade, Spatial moments for high-dimensional critical contact process, oriented percolation and lattice trees. *Elect. J. Prob.* **24**, paper no. 65, (2019). (18 pages).

19. G. Slade. Self-avoiding walk spin systems and renormalization. *Proc. Roy. Soc. A*, **475**:20181549, (2019). (21 pages)

20. G. Slade. Critical exponents for long-range $O(n)$ models below the upper critical dimension. *Commun. Math. Phys.*, **358**:343–436, (2018).

21. M. Lohmann, G. Slade, B.C. Wallace. Critical two-point function for long-range $O(n)$ models below the upper critical dimension. *J. Stat. Phys.*, **169**:1132–1161, (2017).

22. R. Bauerschmidt, G. Slade, B.C. Wallace. Four-dimensional weakly self-avoiding walk with contact self-attraction. *J. Stat. Phys.*, **167**:317–350, (2017).

23. R. Bauerschmidt, G. Slade, A. Tomberg, and B.C. Wallace, Finite-order correlation length for 4-dimensional weakly self-avoiding walk and $|\phi|^4$ spins. *Annales Henri Poincaré*, **18**:375–402, (2017).

24. G. Slade, A. Tomberg, Critical correlation functions for the 4-dimensional weakly self-avoiding walk and n-component $|\varphi|^4$ model. *Commun. Math. Phys.*, **342**:675-737, (2016).

25. R. Bauerschmidt, D.C. Brydges and G. Slade. Critical two-point function of the 4-dimensional weakly self-avoiding walk. *Commun. Math. Phys.*, **338**:169-193, (2015).

26. R. Bauerschmidt, D.C. Brydges and G. Slade. Logarithmic correction for the susceptibility of the 4-dimensional weakly self-avoiding walk: a renormalisation group analysis. *Commun. Math. Phys.*, **337**:817-877, (2015).

27. D.C. Brydges and G. Slade. A renormalisation group method. I. Gaussian integration and normed algebras. *J. Stat. Phys.*, **159**:421-460, (2015).

28. D.C. Brydges and G. Slade. A renormalisation group method. II. Approximation by local polynomials. *J. Stat. Phys.*, **159**:461-491, (2015).

29. R. Bauerschmidt, D.C. Brydges and G. Slade. A renormalisation group method. III. Perturbative analysis. *J. Stat. Phys.*, **159**:492-529, (2015).

30. D.C. Brydges and G. Slade. A renormalisation group method. IV. Stability analysis. *J. Stat. Phys.*, **159**:530-588, (2015).

31. D.C. Brydges and G. Slade. A renormalisation group method. V. A single renormalisation group step. *J. Stat. Phys.*, **159**:589-667, (2015).

32. R. Bauerschmidt, D.C. Brydges, G. Slade, Structural stability of a dynamical system near a non-hyperbolic fixed point. *Ann. H. Poincaré*, **16**:1033-1065, (2015).

33. R. Bauerschmidt, D.C. Brydges and G. Slade. Scaling limits and critical behaviour of the 4-dimensional n-component $|\varphi|^4$ spin model. *J. Stat. Phys.*, **157**:692–742, (2014).

34. Y. Mejía Miranda, G. Slade, Expansion in high dimensions for the growth constants of lattice trees and lattice animals. *Combinatorics, Probability and Computing*, **22**:527–565, (2013).

35. Y. Mejía Miranda, G. Slade, The growth constants of lattice trees and lattice animals in high dimensions. *Elect. Comm. Probab.*, **16**:129–136, (2011).

36. D.C. Brydges, J.Z. Imbrie, G. Slade, Functional integral representations for self-avoiding walk. *Probability Surveys*, **6**:34–61, (2009).

37. R. van der Hofstad, M. Holmes, G. Slade, An extension of the inductive approach to the lace expansion. *Elect. Comm. Probab.*, **13**:291–301, (2008). Supplemented by the unpublished document: R. van der Hofstad, M. Holmes, G. Slade, An extension of the inductive approach to the lace expansion: Full Proof, (2007).

38. O. Angel, J. Goodman, F. den Hollander, G. Slade, Invasion percolation on regular trees. *Ann. Probab.*, **36**:420–466, (2008).

39. M. Barlow, A.A. Járai, T. Kumagai, G. Slade, Random walk on the incipient infinite cluster for oriented percolation in high dimensions. *Commun. Math. Phys.*, **278**:385–431, (2008).

40. N. Clisby, R. Liang, G. Slade, Self-avoiding walk enumeration via the lace expansion, *J. Phys. A: Math. Theor.*, **40**:10973–11017, (2007). Supplementary website:
`http://www.math.ubc.ca/~slade/lacecounts/index.html`

41. Y. Chan, A.L. Owczarek, A. Rechnitzer, G. Slade, Mean unknotting times for random knots and embeddings. *J. Stat. Mech.*, P05004, (2007).

42. R. van der Hofstad, F. den Hollander, G. Slade, The survival probability for critical spread-out oriented percolation above 4+1 dimensions. II. Expansion. *Ann. Inst. H. Poincaré Probab. Statist.*, **43**:509–570, (2007).

43. R. van der Hofstad, F. den Hollander, G. Slade, The survival probability for critical spread-out oriented percolation above 4+1 dimensions. I. Induction. *Probab. Th. Rel. Fields*, **138**:363–389, (2007).

44. R. van der Hofstad, G. Slade, Expansion in n^{-1} for percolation critical values on the n-cube and Z^n: the first three terms. *Combinatorics, Probability and Computing*, **15**;695–713, (2006).

45. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade, J. Spencer, Random subgraphs of finite graphs: III. The phase transition for the n-cube. *Combinatorica*, **26**:395–410, (2006).

46. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade, J. Spencer, Random subgraphs of finite graphs: II. The lace expansion and the triangle condition. *Ann. Probab.*, **33**:1886–1944, (2005).

47. C. Borgs, J.T. Chayes, R. van der Hofstad, G. Slade, J. Spencer, Random subgraphs of finite graphs: I. The scaling window under the triangle condition. *Random Struct. Alg.*, **27**:137–184 (2005).

48. R. van der Hofstad, G. Slade, Asymptotic expansions in n^{-1} for percolation critical values on the n-cube and Z^n. *Random Struct. Alg.*, **27**:331–357, (2005).

49. M. Holmes, A.A. Járai, A. Sakai and G. Slade, High-dimensional networks of self-avoiding walks. *Canad. J. Math.*, **56**:77-114 (2004).

50. R. van der Hofstad and G. Slade, The lace expansion on a tree with application to networks of self-avoiding walks. *Adv. Appl. Math.*, **30**:471–528, (2003).

51. R. van der Hofstad and G. Slade, Convergence of critical oriented percolation to super-Brownian motion above $4+1$ dimensions. *Ann. Inst. H. Poincaré Probab. Statist.*, **39**:413–485, (2003).

52. 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. *Ann. Probab.*, **31**:349–408, (2003).

53. 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. *Commun. Math. Phys.*, **231**:435–461, (2002).

54. R. van der Hofstad and G. Slade, A generalised inductive approach to the lace expansion. *Probab. Th. Rel. Fields*, **122**:389–430, (2002).

55. T. Hara and G. Slade. The scaling limit of the incipient infinite cluster in high-dimensional percolation. I. Critical exponents. *J. Stat. Phys.*, **99**:1075–1168, (2000).

56. T. Hara and G. Slade. The scaling limit of the incipient infinite cluster in high-dimensional percolation. II. Integrated super-Brownian excursion. *J. Math. Phys.*, **41**:1244–1293, (2000). Invited paper for special issue on probability and statistical mechanics.

57. C. Borgs, J.T. Chayes, R. van der Hofstad, and G. Slade. Mean-field lattice trees. *Annals of Combinatorics*, **3**:205–221, (1999). Invited paper for special issue on combinatorics and statistical physics.

58. T. Hara and G. Slade, The incipient infinite cluster in high-dimensional percolation. *Electron. Res. Announc. Amer. Math. Soc.*, **4**:48–55, (1998). `http://www.ams.org/era/`

59. E. Derbez and G. Slade, The scaling limit of lattice trees in high dimensions. *Commun. Math. Phys.*, **193**:69–104, (1998).

60. R. van der Hofstad, F. den Hollander and G. Slade, A new inductive approach to the lace expansion for self-avoiding walks. *Probab. Th. Rel. Fields*, **111**:253–286, (1998).

61. E. Derbez and G. Slade, Lattice trees and super-Brownian motion. *Canadian Mathematical Bulletin*, **40**:19–38, (1997).

62. D.C. Brydges and G. Slade, Statistical mechanics of the 2-dimensional focusing nonlinear Schrödinger equation. *Commun. Math. Phys.*, **182**:485–504, (1996).

63. D.C. Brydges and G. Slade, The diffusive phase of a model of self-interacting walks. *Probability Theory and Related Fields*, **103**:285–315, (1995).

64. T. Hara and G. Slade, The self-avoiding-walk and percolation critical points in high dimensions. *Combinatorics, Probability and Computing*, **4**:197–215, (1995).

65. T. Hara, G. Slade and A.D. Sokal, New lower bounds for the self-avoiding-walk connective constant, *J. Stat. Phys.* **72**:479–517, (1993). Erratum, *J. Stat. Phys.*, **78**:1187–1188, (1995).

66. T. Hara and G. Slade, The number and size of branched polymers in high dimensions. *J. Stat. Phys.*, **67**:1009–1038, (1992).

67. T. Hara and G. Slade, Self-avoiding walk in five or more dimensions. I. The critical behaviour, *Commun. Math. Phys.*, **147**:101–136, (1992).

68. T. Hara and G. Slade, The lace expansion for self-avoiding walk in five or more dimensions. *Reviews in Math. Phys.*, **4**:235–327, (1992).

69. T. Hara and G. Slade, Critical behaviour of self-avoiding walk in five or more dimensions. *Bull. Amer. Math. Soc.*, **25**: 417–423, (1991).

70. T. Hara and G. Slade, Mean-field critical behaviour for percolation in high dimensions. *Commun. Math. Phys.*, **128**:333–391, (1990).

71. T. Hara and G. Slade, On the upper critical dimension of lattice trees and lattice animals. *J. Stat. Phys.*, **59**:1469–1510, (1990).

72. G. Slade, The scaling limit of self-avoiding random walk in high dimensions. *Ann. Probab.*, **17**:91–107, (1989).

73. T. Hara and G. Slade, The triangle condition for percolation, *Bull. Amer. Math. Soc.*, **21**, 269–273, (1989).

74. G. Slade, Convergence of self-avoiding random walk to Brownian motion in high dimensions. *J. Phys. A: Math. Gen.*, **21**:L417–L420 (1988).

75. G. Slade, The diffusion of self-avoiding random walk in high dimensions. *Commun. Math. Phys.*, **110**:661–683, (1987).

76. G. Slade, The effective potential as an energy density: the one phase region, *Commun. Math. Phys.*, **104**:573–580, (1986).

77. G. Slade, The loop expansion for the effective potential in the $P(\phi)_2$ quantum field theory, *Commun. Math. Phys.*, **102**:425–462, (1985).

Preprints

1. H. Duminil-Copin, A. Markar, R. Panis, G. Slade. A random walk approach to high-dimensional critical phenomena. `https://arxiv.org/abs/2605.21438`.

2. Y. Liu and G. Slade. Crossover from subcritical to critical decay: random walk, self-avoiding walk, percolation. `https://arxiv.org/abs/2605.15545`.

Book chapters

1. N. Clisby, G. Slade, Polygons and the lace expansion. Chapter in *Polygons, Polyominoes and Polyhedra*, ed. A.J. Guttmann. Springer Lecture Notes in Physics, Vol. 775, pp. 117–142, (2009).

Expository articles

1. G. Slade, Probabilistic models of critical phenomena. In *The Princeton Companion to Mathematics*, ed. T. Gowers, assoc. ed. J. Barrow-Green and I. Leader, Princeton University Press, Princeton, (2008). 14 pp.

2. G. Slade, Wendelin Werner awarded Fields Medal, PIMS Newsletter **10**, Issue 2:4-5, Winter (2007).

3. G. Slade, Scaling limits and super-Brownian motion. *Notices Amer. Math. Soc.*, **49** (9): 1056–1067, (2002).

4. G. Slade, Random walks. *American Scientist*, **84**:146–153, (1996).

5. G. Slade, Self-avoiding walks. *The Mathematical Intelligencer*, **16**:29–35, (1994).

Conference Proceedings

1. R. Bauerschmidt, D.C. Brydges, G. Slade. Renormalisation group analysis of 4D spin models and self-avoiding walk. 9 pp. To appear in the Proceedings of the International Congress on Mathematical Physics, Santiago, Chile, 2015.

2. R. Bauerschmidt, H. Duminil-Copin, J. Goodman, G. Slade. Lectures on self-avoiding walks. In: Probability and Statistical Physics in Two and More Dimensions, Clay Mathematics Proceedings, vol. 15, Amer. Math. Soc., Providence, RI, pp. 395-467, (2012).

3. D.C. Brydges, A. Dahlqvist and G. Slade. The strong interaction limit of continuous-time weakly self-avoiding walk. Probability in Complex Physical Systems: In Honour of Erwin Bolthausen and Jürgen Gärtner. Eds. J.-D. Deuschel, B. Gentz, W König, M. von Renesse, M. Scheutzow, U. Schmock. Springer Proceedings in Mathematics, Vol. 11, pp. 275-287, (2012).

4. G. Slade. The self-avoiding walk: A brief survey. Surveys in Stochastic Processes, eds. J. Blath, P. Imkeller, S. Roelly, pp. 181-199, European Mathematical Society, Zurich, (2011).

5. D. Brydges and G. Slade, Renormalisation group analysis of weakly self-avoiding walk in dimensions four and higher. Proceedings of the International Congress of Mathematicians, Hyderabad 2010, eds. R. Bhatia et al., Volume 4, pp. 2232–2257, World Scientific, (2010).

6. G. Slade. The phase transition for random subgraphs of the n-cube. Extended abstract for the 16th Annual International Conference on Formal Power Series.
`http://www.pims.math.ca/science/2004/fpsac/ababstracts.pdf`

7. G. Slade. Lattice trees, percolation and super-Brownian motion. In: Perplexing Problems in Probability: Festschrift in Honor of Harry Kesten, eds. M. Bramson and R. Durrett, Birkhäuser (Basel), pages 35–51, (1999).

8. G. Slade, The critical behaviour of random systems. Proceedings of the International Congress of Mathematicians, August 3-11, 1994, Zürich, Volume 2, pages 1315–1324. Ed. S.D. Chatterji; Birkhäuser, Basel (1995).

9. G. Slade, Bounds on the self-avoiding-walk connective constant, *Journal of Fourier Analysis and Applications*, Special Issue: Proceedings of the Conference in Honor of Jean-Pierre Kahane (Orsay, June 28 – July 3, 1993), 525–533, (1995).

10. D.C. Brydges and G. Slade, A collapse transition for self-attracting walks. *Resenhas do Instituto de Matemática e Estatística da Universidade de São Paulo*, **1**:363–372, (1994).

11. T. Hara and G. Slade, Mean-field behaviour and the lace expansion. Pages 87–122 in *Probability and Phase Transition*, ed. G.R. Grimmett, Kluwer (Dordrecht), (1994). Proceedings of the NATO Advanced Study Institute on Probability Theory of Spatial Disorder and Phase Transition, July 1993, Isaac Newton Institute, Cambridge.

12. G. Slade, The lace expansion and the upper critical dimension for percolation. *Lectures in Applied Mathematics*, **27**:53–63, (1991). (Mathematics of Random Media, eds. W.E. Kohler and B.S. White, A.M.S., Providence. Proceedings of the AMS-SIAM Summer Seminar on Mathematics of Random Media, Blacksburg, June 1989.)

13. T. Hara and G. Slade, The mean-field critical behaviour of percolation in high dimensions. Proceedings of the IXth International Congress on Mathematical Physics, Swansea, July 1988, pages 450–453. Eds. B. Simon, A. Truman, I.M. Davies; Adam Hilger, Bristol and New York, (1989).

Book Review

1. G. Slade, review of Random walks and random environments by Barry D. Hughes, *Bull. Amer. Math. Soc.*, **35**:347–349, (1998).

PhD theses supervised

1. Yucheng Liu, Critical and near-critical scaling in high-dimensional statistical mechanics, University of British Columbia, 2025.

2. Emmanuel Michta, Finite-size scaling of a few statistical physics models in high dimensions, University of British Columbia, 2023.

3. Benjamin Wallace, Renormalization group analysis of self-interacting walks and spin systems, University of British Columbia, 2017.

4. Alexandre Tomberg, Renormalisation group and critical correlation functions in dimension four, University of British Columbia, 2015.

5. Roland Bauerschmidt, Decomposition of free fields and structural stability of dynamical systems for renormalization group analysis, University of British Columbia, 2013. (Co-supervisor: David Brydges.)

6. Yuri Mejía Miranda, The critical points of lattice trees and lattice animals in high dimensions, University of British Columbia, 2012.

7. Jesse Goodman, Invasion percolation on regular trees, University of British Columbia, 2010.

8. Mark Holmes, Convergence of lattice trees to super-Brownian motion above the critical dimension, University of British Columbia, 2005. (Secondary supervisor: Edwin Perkins.)

9. Eric Derbez, The scaling limit of lattice trees above eight dimensions, McMaster University, 1996.

Courses taught at international schools

1. March 4-5, 2026. Program on Geometric Methods in Percolation and Spin Models, International Centre for Theoretical Sciences, Bengalaru, India. Critical and Ornstein–Zernike decay for self-avoiding walk and related models (4 hours).

2. July 17-22, 2017. Basque Centre for Applied Mathematics, Bilbao, Spain. Bilbao summer school 'Probabilistic approaches in Mathematical Physics'. Critical phenomena and the renormalisation group (co-taught 14-hour course with David Brydges, tutorials by Benjamin Wallace).

3. Aug 24-28, 2015. University of Montpellier, France. Renormalisation group and 4-dimensional critical phenomena. (4 hours)

4. June 15-19, 2015. National Institute for Mathematical Sciences, Daejeon, Korea. 3rd NIMS Summer School in Probability. Renormalisation group and 4-dimensional critical phenomena (co-taught 18 hour course with David Brydges, tutorials by Alexandre Tomberg).

5. May 11-15, 2015. University of Warwick, U.K. MASDOC Summer School on Topics in renormalisation group theory and regularity structures (co-taught 9 hour course with David Brydges).

6. July 21-26, 2014. Course at Summer School on Mathematical Physics, Analysis and Stochastics. Heidelberg University, Germany. Self-avoiding walk in four dimensions (co-taught with Roland Bauerschmidt and David Brydges, with tutorials by Alexandre Tomberg.)

7. April 11-25, 2014 (4.5 hours) Mini-course at RIMS, Kyoto University. Renormalisation group analysis of the n-component $|\varphi|^4$ spin model and the weakly self-avoiding walk in dimension four.

8. August 2-7, 2010 (9 hours + 7.5 hours tutorials). Course at the Clay Institute Summer School and 14th Brazilian Probability School, on Probability and Statistical Physics in Two and more Dimensions, in Búzios, Brazil. Self-Avoiding Walks.

9. October 13 to November 24, 2009 (18 hours). Long course at Insitut Henri Poincaré, Paris, as part of the thematic program: Statistical physics, combinatorics and probability: from discrete to continuous models. Self-avoiding walks.

10. February 6-13, 2009. Mini-course at Kyoto University as part of the Global COE program in mathematics at Kyoto University. A renormalisation group analysis of the 4-dimensional self-avoiding walk.

11. June 12-20, 2008. Summer School in Mathematical Physics, Feza Gürsey Institute, Istanbul, Turkey. Introduction to Percolation Theory.

12. July 3-5, 2007. London Mathematical Society Symposium on Random Walks, Durham, U.K. Random walks and the lace expansion.

13. June 6-30, 2005. PIMS-UBC Summer School in Probability, Vancouver. The lace expansion and its applications.

14. July 8-24, 2004. Saint-Flour Summer School on Probability, Saint-Flour, France. The lace expansion and its applications.

15. May, 2000: Graduiertenkolleg, Technical University, Berlin, Germany. Critical exponents, scaling limits and the lace expansion.

Invited conference presentations

1. May 29, 2026. 2026 SASI Workshop on Probability: In Honor of Charles Newman, NYU Shanghai. A random walk approach to high-dimensional critical phenomena.

2. March 12, 2026. Program on Geometric Methods in Percolation and Spin Models, International Centre for Theoretical Sciences, Bengalaru, India. A random walk approach to high-dimensional critical phenomena.

3. November 13, 2025. Workshop: Rigorous Statistical Mechanics and Related Topics, RIMS, Kyoto University. A random walk approach to high-dimensional critical phenomena.

4. July 24, 2024. Clay Math Public Lecture, Isaac Newton Institute, Cambridge, U.K. Self-avoiding walk, spin systems, and renormalisation

5. July 10, 2024. Program: Stochastic systems for anomalous diffusion. Workshop: Self-interacting processes, Isaac Newton Institute, Cambridge, U.K. Boundary conditions and universal finite-size scaling in high dimensions.

6. December 15, 2023. Workshop: Random Interacting Systems, Scaling Limits, and Universality, National University of Singapore. Boundary conditions and universal finite-size scaling in high dimensions.

7. October 25, 2023. Workshop: Stochastic Analysis on Large Scale Interacting Systems, RIMS, Kyoto University. Boundary conditions and universal finite-size scaling in high dimensions.

8. October 16, 2023. International Conference on Probability and Stochastic Analysis, Peking University. Boundary conditions and universal finite-size scaling in high dimensions.

9. July 28, 2023. Conference: 70 Years of Percolation. University of Cambridge, U.K. Boundary conditions and finite-size scaling in high dimensions.

10. July 18, 2022. Oberwolfach Research Institute for Mathematics, Workshop on Renormalization Group. Finite-size scaling for the 4-dimensional multicomponent hierarchical $|\varphi|^4$ model.

11. May 24, 2022. Percolation Today (international seminar based in Switzerland, Zoom), joint presentation with Emmanuel Michta. Finite-size scaling and the self-avoiding walk.

12. November 23, 2021. Percolation Today (international seminar based in Switzerland, Zoom), joint presentation with Emmanuel Michta. High-dimensional near-critical percolation and the torus plateau.

13. June 15, 2021. One World IAMP Mathematical Physics Seminar (Zoom). Mean-field tricritical polymers

14. December 8, 2019. Plenary Lecture, Annual Meeting of the Taiwan Mathematical Society, Taichung City, Taiwan. Self-avoiding walk, spin systems, and renormalisation.

15. June 4, 2019. Conference: Walking Through the Brownian Zoo, Paris, France. Three-dimensional tricritical spins and polymers.

16. September 25, 2018. Workshop: High-dimensional critical phenomena and random environments, University of Bristol, Bristol, U.K. Long-range models below the upper critical dimension.

17. September 6 and 7, 2018. Workshop: Renormalisation in quantum field theory and in stochastic partial differential equations: a gentle introduction and some recent developments, Isaac Newton Institute for Mathematical Sciences. Renormalisation group and critical phenomena, parts 1,2,3,4. (4 hour lecture series)

18. June 3, 2018. Jeffrey–Williams Lecture, Canadian Mathematical Society Summer Meeting, Fredericton, N.B. Self-avoiding walk, spin systems, and renormalisation.

19. October 16, 2017. Fields Medal Symposium, Fields Institute, Toronto. Self-avoiding walk, spin systems, and renormalisation

20. July 12, 2017. New Fellows Seminar, Royal Society, London, U.K. Self-avoiding walks.

21. July 9, 2017. Plenary lecture, FPSAC 2017 (Formal Power Series and Algebraic Combinatorics), London, U.K. Self-avoiding walks, spin systems, and critical exponents.

22. December 13, 2016. Workshop: "Guided Tour: Random Media" EURANDOM, TU Eindhoven, Netherlands. Critical exponents for long-range $O(n)$ models below the upper critical dimension.

23. May 23, 2016. Workshop: Scaling Limits in Models of Statistical Mechanics, Mathematisches Forschungsinstitut Oberwolfach, Germany. Critial exponents for long-range $O(n)$ models.

24. September 2, 2015. Workshop on Scaling Limits in Models of Statistical Mechanics, Mathematisches Forschungsinstitut Oberwolfach, Germany. Critical behaviour of spin systems and weakly self-avoiding walk in dimension 4.

25. October 4 and November 9, 2013. Kac Seminar, Utrecht University, Netherlands. Self-avoiding walk and the renormalisation group I, II and III. (The Mark Kac Lectures: three 90-minute lectures).

26. August 5, 2013. Workshop on Universality and Scaling Limits in Probability and Statistical Mechanics, Hokkaido University, Sapporo, Japan. Growth constants of lattice trees and lattice animals in high dimensions.

27. July 29, 2013. Mathematical Statistical Physics, YITP, Kyoto, Japan: A satellite meeting of STATPHYS 25 and a YITP workshop. Weakly self-avoiding walk in dimension four.

28. June 28, 2013. Workshop on Random Walks: Crossroads and Perspectives, Renyi Institute, Budapest, Hungary. Weakly self-avoiding walk in dimension four.

29. June 8, 2012. PIMS-Mprime Summer School in Probability, UBC. Integral representations for the self-avoiding walk.

30. January 20, 2012. Workshop on Lattice Models and Combinatorics, MSRI. A renormalisation group analysis of the 4-dimensional weakly self-avoiding walk.

31. December 10, 2011. Probability Session of CMS Winter Meeting. A renormalisation group analysis of the 4-dimensional weakly self-avoiding walk.

32. October 16, 2010. Pacific Northwest Probability Seminar, Microsoft, Redmond WA. A renormalisation group analysis of the 4-dimensional continuous-time weakly self-avoiding walk.

33. March 26, 2010 at PIMS-UBC; October 20, 2010 at CRM Montreal; October 22, 2010 at Fields Institute Toronto. CRM-Fields-PIMS Prize Lecture. The Self-Avoiding Walk.

34. December 10, 2009. Workshop Above the critical dimension, Institut Henri Poincaré, Paris. A renormalisation group analysis of the 4-dimensional self-avoiding walk.

35. July 30, 2009. Institute of Mathematical Statistics Medallion Lecture, 33rd Conference on Stochastic Processes and Their Applications, Berlin, Germany. The self-avoiding walk.

36. July 9, 2009. Workshop on Renormalisation group and statistical mechanics, PIMS, UBC. A renormalisation group analysis of the 4-dimensional self-avoiding walk.

37. February 16, 2009 Workshop on Random Processes and Systems, Kyoto University, Japan. Random walks and critical percolation.

38. January 22, 2009 Workshop on Random Trees, Oberwolfach, Germany. A renormalisation group analysis of the 4-dimensional self-avoiding walk.

39. November 21, 2008. Northeast Probability Seminar, NYU, New York, N.Y., U.S.A. Random walks and critical percolation

40. September 8, 2008. Fall school on Random Media, Phase Transitions and Information Theory, Institut Henri Poincaré, Paris, France. Invasion percolation on a regular tree.

41. August 28, 2008 EURANDOM 1998-2008: A Random Tour Through a Decade of Research. EURANDOM, Eindhoven, The Netherlands. Self-avoiding walks.

42. May 22, 2008. Workshop on Combinatorics and Statistical Physics, Erwin Schroedinger Institute, Vienna. Invasion percolation on a regular tree.

43. August 8, 2007. Plenary Lecture, 32nd Conference on Stochastic Processes and their Applications, Urbana-Champaign. Invasion percolation on a tree.

44. June 20, 2007. Workshop on Random Polymers, EURANDOM, Eindhoven. The lace expansion and the enumeration of self-avoiding walks.

45. June 5, 2007. Symposium on Probability and Statistics in honour of Donald A. Dawson, Carleton University, Ottawa. Random walk on the incipient infinite cluster for oriented percolation.

46. February 19, 2007. Plenary Lecture, Workshop on Problems in Combinatorics Raised by Statistical Mechanics, CRM, Montreal. The lace expansion and the enumeration of self-avoiding walks.

47. November 9, 2006. Workshop on Random Media, BIRS, Banff. Invasion percolation on regular trees.

48. September 21, 2006. Mathematical Physics Session, CMS/SMM Meeting, Guanajuato, Mexico. Invasion percolation on a tree.

49. May 7, 2006. 95th Statistical Mechanics Conference, Rutgers, N.J. The survival probability for critical oriented percolation above 4+1 dimensions.

50. October 26, 2005. Plenary Lecture, Annual Congress of the Mexican Mathematical Society, Instituto Politécnico Nacional, Mexico City. Critical oriented percolation.

51. September 29-30, 2005 (two talks). Some Recent Topics on Stochastic Models, Workshop at RIMS, Kyoto. Critical oriented percolation above $4+1$ dimensions I and II.

52. September 23, 2005. Workshop on Interating Stochastic Systems, EURANDOM, Eindhoven. The survival probability for critical oriented percolation above $4+1$ dimensions.

53. September 15, 2005. Stieltjes Afternoon, CWI, Amsterdam. Critical oriented percolation above $4+1$ dimensions.

54. March 16, 2005. BIRS workshop on Dynamics, Probability and Conformal Invariance, Banff. Scaling limits and super-Brownian motion.

55. June 29, 2004. Plenary lecture, 16th Annual International Conference on Formal Power Series and Algebraic Combinatorics, Vancouver, BC. The phase transition for random subgraphs of the n-cube.

56. May 16, 2004. 91st Statistical Mechanics Meeting, Rutgers Univeristy, New Brunswick, N.J. Phase transition in high-dimensional networks.

57. January 12, 2004. Conference on Percolation, Particle Systems and Random Media, Santiago de Chile. Percolation on finite graphs.

58. November 17-18, 2003. Annual Dutch Stochastics Meeting. Lunteren, The Netherlands. 1. Scaling limits and super-Brownian motion. 2. Random subgraphs of finite graphs.

59. October 16, 2003. Stieltjes Afternoon, EURANDOM, Eindhoven, The Netherlands. Scaling limits and super-Brownian motion.

60. October 10, 2003. Mark Kac seminar, EURANDOM, Eindhoven, The Netherlands. The lace expansion for percolation.

61. September 1, 2003. Conference on Discrete Random Walks. Institut Henri Poincaré, Paris, France. Scaling limits and super-Brownian motion.

62. April 10, 2003. Closing event, German Research Network on Interacting Stochastic Systems, Berlin, Germany. Percolation on finite graphs.

63. May 12, 2003. Workshop on Statistical Mechanics of Polymer Models, Banff International Research Station, Banff, Canada. Scaling limits and super-Brownian motion.

64. July, 2002. Conference on Phenomena of Large Dimensions, PIMS, Vancouver, BC. The percolation phase transition on the n-cube.

65. June, 2002. Special Session on Probability Theory, CMS Summer Meeting, Laval, Québec. The incipient infinite cluster for high-dimensional oriented percolation.

66. August, 2001. Plenary lecture, Canada–China Mathematics Congress, Vancouver, BC. Scaling limits and super-Brownian motion.

67. June, 2001. Special Session on Lattice Models in Statistical Mechanics, CMS Summer Meeting, Saskatoon, SK. High-dimensional networks of self-avoiding walks.

68. June, 2001. Special Session on Discrete Probability, IMS Meeting, Burnaby, BC. Critical two-point functions for self-avoiding walk, percolation, lattice trees and lattice animals.

69. September, 2000. Topics in Modern Stochastic Analysis, The Fields Institute, Toronto. Critical oriented percolation in high dimensions.

70. August, 2000. Workshop on Statistical Mechanics (satellite meeting of the XIII International Congress in Mathematical Physics), St. John's College, Cambridge, England. Critical oriented percolation in high dimensions.

71. May, 2000: Workshop on Self-interacting Random Processes, Oberwolfach, Germany. Critical two-point functions for percolation and related models in high dimensions.

72. August, 1999: Summer School on Phase Transitions, Centre for Theoretical Studies, Prague, Czech Republic. Statistical mechanics and super-Brownian motion (2 lectures).

73. August, 1999: Workshop on Probability and Physics of Disordered Systems. Paul Erdős Summer Research Center of Mathematics, Eotvos University, Budapest, Hungary. Statistical mechanics and super-Brownian motion (2 lectures).

74. April, 1999: Workshop on Stochastic Models from Statistical Physics. Eurandom, Eindhoven, The Netherlands. Minicourse: Statistical mechanics and super-Brownian motion.

75. December, 1998. Special Session on Probability Theory, Winter CMS Meeting, Kingston. Statistical mechanics and super-Brownian motion.

76. August, 1998: Workshop on Mathematical Physics of Polymers and Percolation, Fields Institute, Toronto, ON. Lattice trees, percolation and super-Brownian motion.

77. June, 1998: Conference in Probability at Cornell in Honor of Harry Kesten, Ithaca, NY. Lattice trees, percolation and super-Brownian motion.

78. April, 1998: Invited Lecture in Special Session of Western Regional AMS Meeting, Davis CA. Statistical mechanics and super-Brownian motion.

79. January, 1998. First Pacific Rim Conference on Mathematics, City University of Hong Kong, Hong Kong. Statistical mechanics and super-Brownian motion.

80. May–June, 1997. The Mark Kac Lectures:

    - Introduction to the Lace Expansion I. Kac Seminar, Utrecht, The Netherlands.
    - Scaling limits for polymers and percolation. Scientific Meeting on Mathematatical Physics, Amersfoort, The Netherlands.
    - Introduction to the Lace Expansion II. Kac Seminar, Utrecht, The Netherlands.

81. May, 1997. Mathematical Physics Days, K.U. Leuven, Leuven, Belgium.
    Lattice trees, percolation and super-Brownian motion.

82. March, 1997. Workshop on Statistical Physics Methods in Discrete Probability, Combinatorics and Theoretical Computer Science, Institute for Advanced Study, Princeton and DIMACS Center, Rutgers University, NJ, USA.
    Lattice trees, percolation and super-Brownian motion.

83. March, 1997. Pacific Northwest Probability Seminar, University of Washington, Seattle, WA, USA.
    Lattice trees and super-Brownian motion.

84. February, 1997. 16th Annual Western States Mathematical Physics Meeting, California Institute of Technology, Pasadena, CA, USA.
    Statistical mechanics of the nonlinear Schrödinger equation.

85. December, 1995. The Coxeter–James Lecture at the 50th Anniversay Winter Meeting of the Canadian Mathematical Society, Vancouver.
    Polymers, percolation and critical exponents.

86. August, 1995. Conference on Probability and Physics, Renkum, Netherlands.
The statistical mechanics of the nonlinear Schrödinger equation.

87. June, 1995. 50th Anniversary Summer Meeting of the Canadian Mathematical Society, University of Toronto.
Special Session on Stochastic Models.
The scaling limit of lattice trees in high dimensions.

88. August, 1994. Invited Lecture in the Mathematical Physics section of the International Congress of Mathematicians, ETH-Zentrum, Zurich.
The critical behaviour of random systems.

89. July, 1994. Conference on Mathematical Physics of Disordered Systems (Sorbonne, Paris), a Satellite meeting of the XIth International Congress of Mathematical Physicists.
A collapse transition for self-attracting walks.

90. July 1994, Conference on Dynamical Phase Transitions, University of São Paulo, Brazil.
A collapse transition for self-attracting walks.

91. November 1993, Mark Kac Seminar, Amsterdam, Netherlands.
Attractive and repulsive walks.

92. August 1993, DMV Seminar (Deutschen Mathematiker-Vereinigung), Irsee, Germany.
Percolation Theory (one-week course taught with G.R. Grimmett).

93. July 1993, Nato Advanced Study Institute on Probability Theory of Spatial Disorder and Phase Transition, Isaac Newton Institute for Mathematical Sciences, Cambridge, UK.
Mean-field behaviour and the lace expansion (2 lectures).

94. June 1993, Colloque en l'Honneur de Jean-Pierre Kahane, Université de Paris-Sud, Orsay, France.
Bounds on the self-avoiding-walk connective constant.

95. October 1992, Oberwolfach meeting on Stochastic Processes, Germany.
Critical behaviour of the self-avoiding walk.

96. July 1992, Workshop on Mathematical Physics of Disordered Systems, Luminy, France.
Polymers, percolation and the lace expansion.

97. August 1990, 2nd World Congress of the Bernoulli Society and 53rd Annual Meeting of the IMS, Uppsala, Sweden.
Chair of Session on Percolation.

98. March 1990, Biannual Rochester–Syracuse Probability Meeting, Rochester, NY.
The lace expansion and the upper critical dimension of percolation.

99. June 1989, AMS–SIAM Summer Seminar: Mathematics of Random Media, Blacksburg, VA.
The lace expansion and the upper critical dimension of percolation.

100. July 1988, IXth International Congress on Mathematical Physics, Swansea, Wales.
The mean-field critical behaviour of percolation in high dimensions.

101. May 1988, Institute of Mathematical Statistics Regional Meeting, Madison, WI.
Self-avoiding random walk in high dimensions.

102. April 1988, Cornell MSI Workshop on Order and Disorder in Random Systems, Ithaca, NY.
Self-avoiding random walk in high dimensions.

103. February 1985, Virginia Tech Mid-winter Mathematical Physics Day, Blacksburg, VA.
The effective potential in quantum field theory.