Geoffrey R. Grimmett

Published Work

August 2012

Books

B1. (with D. R. Stirzaker) Probability and Random Processes

- First edition, Clarendon Press, Oxford, 1982, 354 + ix pp.
- Second edition, greatly extended and revised, Clarendon Press, Oxford, 1992, 541 + xii pp.
- Third edition, greatly extended and revised, Oxford University Press, Oxford, 2001, 596 + xii pp.
- Macedonian and Albanian translations, 2012.
- B2. (with D. J. A. Welsh) Probability, an Introduction
- Clarendon Press, Oxford, 1986, 211 + ix pp.
- Japanese translation, 2004.
- **B3**. Percolation
- First edition, Springer-Verlag, New York, 1989, 296 + xi pp.
- Second edition, greatly extended and revised, 'Grundlehren der Mathematischen Wissenschaften' no. 321, Springer-Verlag, Heidelberg, 1999, 444 + xiii pp.
- B4. (with D. R. Stirzaker) Probability and Random Processes: Problems and Solutions, Clarendon Press, Oxford, 1992, 366 + x pp.
- B5. (with E. Giné and L. Saloff-Coste) *Lectures on Probability Theory and Statistics*, Springer-Verlag, Heidelberg, 'Lecture Notes in Mathematics' no. 1665, 1996. See paper [68] below.
- B6. (with D. R. Stirzaker) One Thousand Exercises in Probability
- First edition, Oxford University Press, 2001, 438 + x pp.
- Chinese translation, 2012.
- B7. The Random-Cluster Model
- First edition, 'Grundlehren der Mathematischen Wissenschaften' no. 333, Springer-Verlag, Heidelberg, 2006, 377 + xiii pp.
- Corrected second printing, 2009, available at http://www.statslab.cam.ac.uk/~grg/books/rcm.html.
- B8. *Probability on Graphs*, IMS Textbooks no. 1, Cambridge University Press, 2010, 247 + xii pp, http://www.statslab.cam.ac.uk/~grg/books/pgs.html.
- B9. (with H. Kesten) *Percolation Theory at Saint-Flour*, Springer-Verlag, Heidelberg, 2012, in press. See papers [68, 117] below.

Edited volumes

- E1. (with D. J. A. Welsh) *Disorder in Physical Systems, A Volume in Honour of J. M. Hammersley*, Clarendon Press, Oxford, 1990, 378 pp. Now available at
 - http://www.statslab.cam.ac.uk/~grg/books/jmh.html
- E2. *Probability and Phase Transition*, Kluwer, Dordrecht, 1994, 322 pp. Now available at http://www.statslab.cam.ac.uk/~grg/books/nato93.html
- E3. (with K. Golden, R. James, G. Milton, P. Sen) *Mathematics of Multiscale Materials*, IMA Volumes in Mathematics and its Applications, vol. 99, Springer, New York, 1998, 280 pp.
- E4. (with C. J. H. McDiarmid) *Combinatorics, Complexity, and Chance, A Tribute to Dominic Welsh*, Oxford University Press, Oxford, 2007, 310 + x pp.

Published articles

- 1. A theorem about random fields, Bulletin of London Mathematical Society 5 (1973) 81-84.
- 2. A generalization of a theorem of Kleitman and Milner, *Bulletin of London Mathematical Society* 5 (1973) 157–158.
- 3. (with J. M. Hammersley) Maximal solutions of the generalized subadditive inequality, in *Stochastic Geometry*, ed. E. Harding and D. Kendall, Wiley, 1974, 270–284.

- 4. Random graph theorems, *Transactions of 7th Prague Conference on Information Theory and Related Topics*, 1974, 203–209.
- 5. (with C. J. H. McDiarmid) On colouring random graphs, *Mathematical Proceedings of Cambridge Philosophical Society* 77 (1975) 313–324.
- 6. A non-Markovian birth process with logarithmic growth, *Journal of Applied Probability* 12 (1975) 673–683.
- 7. An upper bound for the number of spanning trees of a graph, Discrete Mathematics 16 (1976) 323–324.
- 8. On the number of clusters in the percolation model, *Journal of London Mathematical Society* 13 (1976) 346–350.
- 9. Multidimensional lattices and their partition functions, *Oxford Quarterly Journal of Mathematics* 29 (1978) 142–157.
- 10. The rank polynomials of large random lattices, *Journal of London Mathematical Society* 18 (1978) 567–575.
- 11. (with M. Treisman) On taking up position in a group: A continuous-time Markov model for biased random movement, *British Journal of Mathematical and Statistical Psychology* 33 (1980) 247–261.
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- 13. Random labelled trees and their branching networks, *Journal of Australian Mathematical Society A* 30 (1980) 229–237.
- 14. On the differentiability of the number of clusters per vertex in the percolation model, *Journal of London Mathematical Society* 23 (1981) 372–384.
- 15. (with J. T. Cox) Central limit theorems for percolation models, *Journal of Statistical Physics* 25 (1981) 237–251.
- 16. Critical sponge dimensions in percolation theory, Advances in Applied Probability 13 (1981) 314–324.
- 17. (with D. J. A. Welsh) Flow in networks with random capacities, *Stochastics* 7 (1982) 205–229.
- 18. (with W.-C. S. Suen) The maximal flow through a directed graph with random capacities, *Stochastics* 8 (1982) 153–159.
- 19. Bond percolation on subsets of the square lattice, and the threshold between one-dimensional and two-dimensional behaviour, *Journal of Physics A: Mathematical and General* 16 (1983) 599–604.
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- 21. (with J. T. Cox) Central limit theorems for associated random variables and the percolation model, *Annals of Probability* 12 (1984) 514–528.
- 22. (with M. Keane and J. M. Marstrand) On the connectedness of a random graph, *Mathematical Proceedings of Cambridge Philosophical Society* 96 (1984) 151–166.
- 23. (with H. Kesten) First-passage percolation, network flows and electrical networks, Zeitschrift für Wahrscheinlichkeitstheorie und verwandte Gebiete 66 (1984) 335–366.
- 24. (with H. Kesten) Random electrical networks on complete graphs, *Journal of London Mathematical Society* 30 (1984) 171–192.
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- 26. (with A. M. Frieze) The shortest-path problem for graphs with random arc-lengths, *Discrete Applied Mathematics* 10 (1985) 57–77.
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- 118. (with S. Janson and J. R. Norris) Influences in product spaces: BKKKL re-revisited, http://arxiv.org/abs/1207.1780.