

## RANDOM SPATIAL PROCESSES

MSRI Program  
Spring, 2012

- [BI11] A. D. BANDRAUK and M. IVANOV (eds.), *Quantum dynamic imaging: theoretical and numerical methods*, Springer, New York, 2011, ISBN 978-1-4419-9490-5. doi: 10.1007/978-1-4419-9491-2.
- [BR06] B. BOLLOBÁS and O. RIORDAN, *Percolation*, Cambridge University Press, New York, 2006, ISBN 978-0-521-87232-4, 0-521-87232-4. MR 2283880. Zbl 1118.60001.
- [FS09] P. FLAJOLET and R. SEDGEWICK, *Analytic combinatorics*, Cambridge University Press, Cambridge, 2009, ISBN 978-0-521-89806-5. MR 2483235. Zbl 1165.05001.
- [FM07] M. FRANCESCHETTI and R. MEESTER, *Random networks for communication: from statistical physics to information systems*, *Cambridge Series in Statistical and Probabilistic Mathematics* **24**, Cambridge University Press, Cambridge, 2007, ISBN 978-0-521-85442-9. MR 2398551. Zbl 1143.82001. Available at <http://www.cambridge.org/gb/knowledge/isbn/item2424416>.
- [Har11] J. HARNAD (ed.), *Random matrices, random processes and integrable systems*, Springer, New York, 2011, ISBN 978-1-4419-9513-1. Zbl 1215.15002. doi: 10.1007/978-1-4419-9514-8.
- [Law91] G. F. LAWLER, *Intersections of random walks*, Birkhäuser, Boston, 1991, ISBN 0-8176-3557-2. MR 1117680. Zbl 05982412.
- [LPW09] D. A. LEVIN, Y. PERES, and E. L. WILMER, *Markov chains and mixing times*, AMS, Providence, RI, 2009, ISBN 978-0-8218-4739-8. MR 2466937. Zbl 1160.60001.
- [MP10] P. MÖRTERS and Y. PERES, *Brownian motion*, *Cambridge Series in Statistical and Probabilistic Mathematics* **30**, Cambridge University Press, Cambridge, 2010, ISBN 978-0-521-76018-8. MR 2604525. Zbl 05707091. Available at <http://www.cambridge.org/gb/knowledge/isbn/item6783677>.
- [She05] S. SHEFFIELD, *Random surfaces*, *Astérisque* **304**, Société Mathématique de France, Paris, 2005, ISBN 978-2-85629-186-3. MR 2251117. Zbl 1104.60002.
- [Szn98] A.-S. SZNITMAN, *Brownian motion, obstacles and random media*, Springer, Berlin, 1998, ISBN 3-540-64554-3. MR 1717054. Zbl 0973.60003.

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*Date:* February 29, 2012.

Bibliography by David Aldous, Philippe Di Francesco, Eyal Lubetzky, and Yuval Peres.

## PERCOLATION AND INTERACTING SYSTEMS

- [Gri99] G. GRIMMETT, *Percolation*, 2nd ed., *Grundlehren der Mathematischen Wissenschaften* **321**, Springer, Berlin, 1999, ISBN 3-540-64902-6. MR 1707339. Zbl 0926.60004.
- [Gri06] G. GRIMMETT, *The random-cluster model*, *Grundlehren der Mathematischen Wissenschaften* **333**, Springer, Berlin, 2006, ISBN 978-3-540-32890-2; 3-540-32890-4. MR 2243761. Zbl 1122.60087. doi: 10.1007/978-3-540-32891-9.
- [Lig85] T. M. LIGGETT, *Interacting particle systems*, *Grundlehren der Mathematischen Wissenschaften* **276**, Springer, New York, 1985, ISBN 0-387-96069-4. MR 776231. Zbl 0559.60078.
- [Lig99] T. M. LIGGETT, *Stochastic interacting systems: contact, voter and exclusion processes*, *Grundlehren der Mathematischen Wissenschaften* **324**, Springer, Berlin, 1999, ISBN 3-540-65995-1. MR 1717346. Zbl 0949.60006.

## STATISTICAL MECHANICS AND CONFORMAL INVARIANCE

- [ABDF11] G. AKEMANN, J. BAIK, and P. DI FRANCESCO (eds.), *The Oxford handbook of random matrix theory*, Oxford University Press, Oxford, 2011, ISBN 978-0-19-957400-1. Zbl 1225.15004.
- [ADJ97] J. AMBJØRN, B. DURHUUS, and T. JONSSON, *Quantum geometry: a statistical field theory approach*, Cambridge University Press, Cambridge, 1997, ISBN 0-521-46167-7. MR 1465433. Zbl 0993.82500. doi: 10.1017/CBO9780511524417.
- [DFMS97] P. DI FRANCESCO, P. MATHIEU, and D. SÉNÉCHAL, *Conformal field theory*, Springer, New York, 1997, ISBN 0-387-94785-X. MR 1424041. Zbl 0869.53052.
- [Jimbo] M. JIMBO, T. MIWA, and A. TSUCHIYA (eds.), *Conformal field theory and solvable lattice models (Kyoto, 1986)*, *Advanced Studies in Pure Mathematics* **16**, Academic Press, Boston, 1988, ISBN 0-12-385340-0. MR 89f:81003. Zbl 0646.00016.
- [KL05] V. A. KAIMANOVICH and M. LYUBICH, *Conformal and harmonic measures on laminations associated with rational maps*, *Mem. Amer. Math. Soc.* **173**:820, AMS, Providence, RI, 2005, ISBN 0-8218-3615-3. MR 2111096. Zbl 02138787.
- [Law05] G. F. LAWLER, *Conformally invariant processes in the plane*, *Mathematical Surveys and Monographs* **114**, AMS, Providence, RI, 2005, ISBN 0-8218-3677-3. MR 2129588. Zbl 1074.60002.