PERCOLATION

This list is based on *Computing Reviews*, *Mathematical Reviews*, *Zentralblatt für Mathematik*, *Current Mathematical Publications*, home pages of *Barnesandnoble* and *Amazon*, recent numbers of journals, Arxiv.org and personal communications. Abbreviations: **E** english, **F** French, **G** German, **H** Hungarian, **L** library, **R** Russian, @ `electronic address`.

BOOKS ON PERCOLATION

1978: R. T. Smythe, John C. Wierman: *First-Passage Percolation on the Square Lattice.* Springer-Verlag, Berlin, 1978. 201 oldal, 42 hivatkozás. ISBN 3-540-08928-4. **L**

1983: B. D. Hughes, B. W. Ninham: *The Mathematics and Physics of Disordered Media.* Springer-Verlag, Berlin, 1978. 431 oldal, ?? hivatkozás. ISBN 3-387-12707-0. **L**

1985: Dietrich Stauffer: *Introduction to Percolation Theory.* Taylor & Francis, London, 1985. 124 oldal, ISBN 0-85066-315-6. **L**

1994: Dietrich Stauffer, A. Aharony: *Introduction to Percolation Theory.* CRC Press; 2nd edition, London, 1994. 190 oldal, ISBN 0748402535.

1996: Ronald Meester, Rahul Roy, B. Bollobas: *Continuum Percolation (Cambridge Tracts in Mathematics. 129).* Cambridge University Press, 1996. ISBN 052147504X, 250 oldal.

1999: Geoffrey Grimmett: **Percolation (Grundlehren der mathematischen Wissenschaften. Vol. 321)**. Springer, 2 edition. 1999, 444 oldal, ISBN 3540649026.

PAPERS ON PERCOLATION

1985 Iványi, Antal; Kátai, Imre: Modeling of prioritiyless processing in an interleaved memory with a perfectly informed processor. *Autom. Remote Control* **46/4** (1985), 520–526. Fordítás oroszból: *Avtom. Telemekh.* **46/4** (1985), 129–136. ZB 581.68035 **L** @ tony@compalg.inf.elte.hu

2000 Gács, Péter: The clairvoyant demon has a hard task. *Combin. Probab. Comput.* **9/5** (2000), 421–424. MR1810149 (68R10, 05C80 60C05 60K35 68M14 82B43). **E**

2002 Gács, Péter: Clairvoyant Scheduling of Random Walks (submitted to *Electronic Journal of Probability*). Rövid változat: Clairvoyant scheduling of random walks. In *Proceedings of the Thirty-Fourth Annual ACM Symposium on Theory of Computing,* 99–108 (electronic), ACM, New York, 2002. MR2121131 (05C85, 60G50). **E**

2004 Alon, Noga; Benjamini, Itai; Stacey, Alan: Percolation on finite graphs and isoperimetric inequalities. *Ann. Probab.* **32/3A** (2004), 1727–1745. MR2073175

Balister, Paul; Bollobás, Béla; Walters, Mark: Continuum percolation with steps in an annulus. *Ann. Appl. Probab.* **14/4** (2004), 1869–1879. http://arxiv.org/find **E**

Friedli, Sacha; de Lima, Bernardo Nunes Borges; Sidoravicius, Vladas On long range percolation with heavy tails. *Electron. Comm. Probab.* **9** (2004), 175–177 (electronic). MR2108864 **E**

Gács, Péter: Compatible sequences and a slow Winkler percolation. *Combin. Probab. Comput.* **13/6** (2004), 815–856. MR2102411 (60C05, 60K35) **E**

Howard, C. Douglas: Models of first-passage percolation. *Probability on discrete structures,* 125–173, Encyclopaedia Math. Sci., 110, Springer, Berlin, 2004. MR2023652

Lin, Xue; Wierman, John C. Cycles as constraint graphs in multi-type percolation. Proceedings of the Thirty-Fifth Southeastern International Conference on Combinatorics, Graph Theory and Computing. *Congr. Numer.* **171** (2004), 67–75. MR2122098 **L**

Wierman, John C.; Cheng, Rulian; May, William D. Estimating bond percolation thresholds using the substitution method. Proceedings of the Thirty-Fifth Southeastern International Conference on Combinatorics, Graph Theory and Computing. *Congr. Numer.* **170** (2004), 113–122. MR2122081 (Review)

van der Hofstad, Remco; Járai, Antal A. The incipient infinite cluster for high-dimensional unoriented percolation. *J. Statist. Phys.* **114/3-4** (2004), 625–663. MR2035627

2005 Balister, P.; Bollobás, Béla; Quas, A. Percolation in Voronoi tilings. *Random Structures Algorithms* **26/3** (2005), 310–318. MR2127372

Balogh, József; Peres, Yuval; Pete, Gábor: Bootstrap percolation on infinite trees and non-amenable groups. (17 pages, 2 figures. This is the final version, for the journal *Combinatorics, Probability and Computing.* Proposition 1.5 is new, proving the "intuitively clear statement" left open in the previous versions. http://arxiv.org/find **E**

Bela Bollobas, Oliver Riordan: Sharp thresholds and percolation in the plane. (26 pages, 7 figures, MSC-class: 60K35; 82B43). http://arxiv.org/find **E**

Bollobas, Béla; Riordan, OLiver: The critical probability for random Voronoi percolation in the plane is 1/2. (54 pages, 19 figures, MSC-class: 60K35; 82B43). http://arxiv.org/find. **E**

Derényi Imre, Palla Gergely, Vicsek Tamás: Clique percolation in random networks. *Phys. Rev. Lett* **94** (2005) 160–202.
http://arxiv.org/find **E**

Heicklen, Deborah; Hoffman, Christopher Return probabilities of a simple random walk on percolation clusters. Electronic Journal of Probability **10/8** (2005), 250–302 (electronic). MR2120245 **E**

Hammond, Alan Critical exponents in percolation via lattice animals. Electronic Comm. Probab. 10 (2005), 45–59 (electronic). MR2119153 **E**

Gergely Palla, Imre Derényi, Illés Farkas, Tamás Vicsek: Uncovering the overlapping community structure of complex networks in nature and society *Nature* **435**, 814-818 (09 Jun 2005) Letters to Editor.
http://www.nature.com/

Ritchie, Thomas Logan; Belitsky, Vladimir: Improved Lower Bounds for the Critical Probability of Oriented-Bond Percolation in Two Dimensions. (Comments: 16 pages, 5 figures, MSC-class: 60K35). http://arxiv.org/find **E**

MATHEMATICAL BACKGROUND

1968 Feller, William: *An Introduction to Probability Theory and its Applications.* John Wiley and Sons, New York, 1968. Magyarul: *Bevezetés a valószínűségszámításba és alkalmazásaiba.* Műszaki Könyvkiadó, Budapest, 1978. **L**

1997 Knuth, Donald Ervin: *The Art of Computer Programming. Vol. 1. Fundamental Algorithms.* Addison-Wesley, 1997 (3., javított kiadás). Magyarul: *A számítógép-programozás művészete. 1. kötet. Alapvető algoritmusok*, Műszaki Könyvkiadó, 1993, 2. kiadás.)

1999 Stanley, Richard P.: *Enumerative Combinatorics, Volume 2.* Cambridge Studies in Advanced Mathematics, **62.** Cambridge University Press, Cambridge, 1999. Stanley

2001 Bege, Antal and Kása, Zoltán: Coding objects related to Catalan numbers. *Studia Univ. Babes-Bolyai, Informatica* Volume **XLVI/1** (2001), 31–39.

Cormen, Thomas H., Leiserson, Charles E., Rivest, Ronald E., Stein, Clifford: *Introduction to Algorithms*, The MIT Press/McGraw-Hill, 2004 (Második kiadás ötödik, javított utánnyomása. Magyarul: *Új algoritmusok.* Scolar Kiadó, 2003).

2004 Kása, Zoltán: Rekurzív egyenletek. In: *Informatikai algoritmusok. 1* (szerk. Iványi Antal). ELTE Eötvös Kiadó, Budapest, 2004. 14–37.

INTERNET SITES

Arxiv.org: http://arxiv.org/find
Bookshop *Amazon*: `http://www.amazon.com`
Bookshop *Barnesandnoble*: `http://shop.barnesandnoble.com/booksearch`
Electronic Journals of *EMIS*: `http://www.emis/journals`
Mathematical Reviews: `http://www.acm.org/mathscinet`
Zentralblatt für Mathematik: `http://www.emis/ZMATH`

Budapest, June 13, 2005. Antal Iványi (tony@compalg.inf.elte.hu)