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## References

[CS:AAS01] AAS. Priorities in research and innovation for the next Australian government. (Australian Academy of Science: Canberra), 2001. Available online:  
<http://www.science.org.au/academy/media/priorities.prf>.

[CS:albert02] R. Albert and A.-L. Barabási. Statistical mechanics of complex networks. *Rev. Mod. Phys.*, 74:47–97, 2002.

[CS:albritton01] D. L. Albritton, L. G. Meira Filho, et al. Technical summary. In J. T. Houghton, Y. Ding, D.J. Griggs, M. Noguer, P.J. van der Linden, X. Dai, K. Maskell, and C.A. Johnson, editors, *Climate Change 2001: The Scientific Basis*, pages 21–83. Published for the IPCC by CUP, Cambridge, UK, 2001.

[CS:aleksic00] Z. Aleksić. Artificial life: growing complex systems. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 91–126. CUP, Cambridge, U.K., 2000.

[CS:amit78] D. J. Amit. *Field Theory, the Renormalization Group, and Critical Phenomena*. McGraw-Hill, New York, 1978.

[CS:arneodo02] A. Arneodo, B. Audit, N. Decoster, J.-F. Muzy, and C. Vaillant. Wavelet based multifractal formalism: Applications to DNA sequences, satellite images of the cloud structure and stock market data. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 2, pages 26–102. Springer-Verlag, Berlin, 2002.

[CS:arnold86] V. I. Arnold. *Catastrophe Theory*. Springer-Verlag, Berlin, second English edition, 1986.

[CS:arthur99] W. B. Arthur. Complexity and the economy. *Science*, 284:107–109, 1999.

[CS:bahr95] D. B. Bahr and J. B. Rundle. Theory of lattice Boltzmann simulations of glacier flow. *J. Glaciol.*, 41:634–640, 1995.

[CS:bak96] P. Bak. *How Nature Works: The Science of Self-Organized Criticality*. Springer-Verlag, New York, 1996.

[CS:bak87] P. Bak, C. Tang, and K. Wiesenfeld. Self-organized criticality: an explanation for 1/f noise. *Phys. Rev. Lett.*, 59:381–384, 1987.

[CS:bak88] P. Bak, C. Tang, and K. Wiesenfeld. Self-organized criticality. *Phys. Rev. A*, 38:364–374, 1988.

[CS:barber83] M. N. Barber. Finite size scaling. In C. Domb and J. L. Lebowitz, editors, *Phase Transitions and Critical Phenomena. Vol 8.*, pages 145–266. Academic, London, 1983.

[CS:barlow91] C. Barlow, editor. *From Gaia to Selfish Genes: Selected Writings in the Life Sciences*. MIT Press, Cambridge, Mass., 1991.

[CS:barnsley88] M. F. Barnsley. Fractal modelling of real world images. In H.-O. Peitgen and D. Saupe, editors, *The Science of Fractal Images*, chapter 5. Springer-Verlag, Berlin, 1988.

[CS:bennett85] C. Bennett and G. Grinstein. Role of irreversibility in stabilizing complex and nonergodic behaviour in locally interacting discrete systems. *Phys. Rev. Lett.*, 55:657–660, 1985.

[CS:biggs74] N. Biggs. *Algebraic Graph Theory*. CUP, Cambridge, 1974.

[CS:binder83] K. Binder. Critical behaviour at surfaces. In C. Domb and J. L. Lebowitz, editors, *Phase Transitions and Critical Phenomena. Vol 8*, pages 1–144. Academic, London, 1983.

- [CS:binder88] K. Binder and D. W. Heermann. *Monte Carlo Simulation in Statistical Physics*. Springer-Verlag, Berlin, 1988.
- [CS:blackmore99] S. Blackmore. *The Meme Machine*. OUP, Oxford, 1999.
- [CS:bohr98] T. Bohr, M. H. Jensen, G. Paladin, and A. Vulpiani. *A Dynamical Systems Approach to Turbulence*. CUP, Cambridge, UK, 1998.
- [CS:bollobas01] B. Bollobás. *Random Graphs*. CUP, Cambridge, UK, 2nd edition, 2001.
- [CS:bossomaier00b] T. R. J. Bossomaier. Complexity and neural networks. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 367–406. CUP, Cambridge, UK, 2000.
- [CS:bossomaier00] T. R. J. Bossomaier and D. G. Green, editors. *Complex Systems*. CUP, Cambridge, UK, 2000a.
- [CS:bossomaier00a] T. R. J. Bossomaier and D. G. Green. Introduction. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 1–9. CUP, Cambridge, UK, 2000b.
- [CS:bradbury00] R. H. Bradbury, D. G. Green, and N. Snoad. Are ecosystems complex systems? In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 339–365. CUP, Cambridge, UK, 2000.
- [CS:broecker87] W. S. Broecker. Unpleasant surprises in the greenhouse. *Nature*, 328:123–126, 1987.
- [CS:buchanan00] M. Buchanan. *Ubiquity: The Science of History ... Or Why the World is Simpler than We Think*. Weidenfeld and Nicholson, London, 2000.
- [CS:bunde02a] A. Bunde, S. Havlin, E. Koscielny-Bunde, and H. J. Schellnhuber. Atmospheric persistence analysis: Novel approaches and applications. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 5, pages 170–191. Springer-Verlag, Berlin, 2002a.
- [CS:bunde02] A. Bunde, J. Kropp, and H. J. Schellnhuber, editors. *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*. Springer-Verlag, Berlin, 2002b.
- [CS:bunk02] W. Bunk, F. Jamitzky, R. Pompl, C. R ath, and G. Morfill. Local scaling properties for diagnostic purposes. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 9, pages 282–309. Springer-Verlag, Berlin, 2002.
- [CS:burkhardt82] T. W. Burkhardt and J. M. J. van Leeuwen, editors. *Real-Space Renormalization*. Springer-Verlag, Berlin, 1982a.
- [CS:burkhardt82a] T. W. Burkhardt and J. M. J. van Leeuwen. Progress and problems in real-space renormalization. In T. W. Burkhardt and J. M. J. van Leeuwen, editors, *Real-Space Renormalization*, pages 1–31. Springer-Verlag, Berlin, 1982b.
- [CS:cardy87] J. L. Cardy. Conformal invariance. In C. Domb and J. L. Lebowitz, editors, *Phase Transitions and Critical Phenomena. Vol 11.*, pages 55–126. Academic, London, 1987.
- [CS:carlson94] J. M. Carlson, J. S. Langer, and B. E. Shaw. Dynamics of earthquake faults. *Rev. Mod. Phys.*, 66:657–670, 1994.
- [CS:cary02] G. J. Cary. Importance of changing climate for fire regimes in Australia. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 26–46. CUP, Cambridge, U.K., 2002.
- [CS:catchpole02] W. Cathpole. Fire properties and burn patterns in heterogeneous landscapes. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 49–75. CUP, Cambridge, U.K., 2002.
- [CS:clarke02] J. S. Clark, A. M. Gill, and A. P. Kershaw. Spatial variability in fire regimes: its effects on recent and past vegetation. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 125–141. CUP, Cambridge, U.K., 2002.
- [CS:cohen94] J. Cohen and I. Stewart. *The Collapse of Chaos: Discovering Simplicity in a Complex World*. Penguin, London, 1994.
- [CS:cohen88] M. E. Cohen, A. J. C. Ladd, and B. J. Alder. Maximally discretized molecular dynamics. *Phys. Rev. Lett.*, 61: 381–384, 1988.
- [CS:conwaymorris98] S. Conway Morris. *The Crucible of Creation: The Burgess Shale and the Rise of Animals*. OUP, Oxford, 1998.
- [CS:cox00] P. M. Cox, R. A. Betts, and C. D. Jones. Acceleration of global warming due to carbon-cycle feedback in a coupled climate model. *Nature*, 408:184–187, 2000.

- [CS:crawford91] J. D. Crawford. Introduction to bifurcation theory. *Rev. Mod. Phys.*, 991:991,1037, 1991.
- [CS:creutz86] M. Creutz. Deterministic Ising dynamics. *Ann. Phys.*, 167:62–72, 1986.
- [CS:cvtanovic98] P. Cvitanović, editor. *Universality in Chaos*. Adam Hilger, Bristol, 1998.
- [CS:daley91] R. Daley. *Atmospheric Data Analysis*. CUP, Cambridge, UK, 1991.
- [CS:dawkins82] R. Dawkins. *The Extended Phenotype*. OUP, Oxford, 1982.
- [CS:dawkins89] R. Dawkins. *The Selfish Gene*. OUP, Oxford, 1989.
- [CS:dawkins98] R. Dawkins. *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder*. Allen Lane, London, 1998.
- [CS:debenedetti01] P. G. Debenedetti and F. H. Stillinger. Supercooled liquids and the glass transition. *Nature*, 410:259–267, 2001.
- [CS:denman96] K. Denman, E. Hofmann, and H. Marchant. Marine biotic responses to environmental change and feedbacks to climate. In J. T. Houghton, L. G. Meira Filho, B. A. Callander, N. Harris, A. Kattenberg, and K. Maskell, editors, *Climate Change 1995: the Science of Climate Change*, pages 483–516. Published for the IPCC by CUP, Cambridge, UK, 1996.
- [CS:dennett03] D. C. Dennett. *Freedom Evolves*. Penguin, London, 2003.
- [CS:diamond05] J. Diamond. *Collapse: How Societies Choose to Fail or Survive*. Allen Lane (Penguin), Camberwell, Australia, 2005.
- [CS:dobrovolski00] S. G. Dobrovolski. *Stochastic Climate Theory*. Springer-Verlag, Berlin, 2000.
- [CS:domany84] E. Domany and W. Kinzel. Equivalence of cellular automata to Ising models and directed percolation. *Phys. Rev. Lett.*, 53:311–314, 1984.
- [CS:ebeling02] W. Ebeling, L. Molgedey, J. Kurths, and U. Schwarz. Entropy, complexity, predictability, and data analysis of time series and letter sequences. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 1, pages 3–25. Springer-Verlag, Berlin, 2002.
- [CS:eckermann85] J.-P. Eckermann and D. Ruelle. Ergodic theory of chaos and strange attractors. *Rev. Mod. Phys.*, 57:617–656, 1985.
- [CS:egolf00] D. A. Egolf. Equilibrium regained: From nonequilibrium chaos to statistical mechanics. *Science*, 287:101–104, 2000.
- [CS:enting02] I. G. Enting. *Inverse Problems in Atmospheric Constituent Transport*. CUP, Cambridge, UK, 2002.
- [CS:enting85] I. G. Enting. A lattice statistics model for the age distribution of bubble trapping in polar ice. *Nature*, 315:654–655, 1985.
- [CS:enting87] I. G. Enting. A modelling spectrum for carbon cycle studies. *Math. Comput. Simulation*, 29:75–85, 1987.
- [CS:enting93] I. G. Enting. Statistics of fire closure: a simulation study. *J. Glaciology*, 39:133–142, 1993.
- [CS:enting95] I. G. Enting, C. M. Trudinger, and R. J. Francey. A synthesis inversion of the concentration and  $\delta^{13}\text{C}$  of atmospheric  $\text{CO}_2$ . *Tellus*, 47B:35–52, 1995.
- [CS:evans02] S. N. Evans and P. B. Stark. Inverse problems as statistics. *Inverse Problems*, 18:R55–R97, 2002.
- [CS:falkovich01] G. Falkovich, K. Gawędzki, and M. Vergassola. particles and fields in fluid turbulence. *Rev. Mod. Phys.*, 2001:913–975, 2001.
- [CS:falkowski00] P. Falkowski, R. J. Scholes, E. Boyle, J. Canadell, D. Canfield, J. Elser, N. Gruber, K. Hibbard, P. Höberg, S. Linder, F. T. Mackenzie, B. Moore III, T. Pedersen, Y. Rosenthal, S. Seitzinger, V. Smetacek, and W. Steffan. The global carbon cycle: A test of our knowledge of the earth as a system. *Science*, 290:291–296, 2000.
- [CS:farman85] J. C. Farman, B. G. Gardiner, and J. D. Shanklin. Large losses of total ozone in Antarctica reveal  $\text{ClO}_x/\text{NO}_x$  interaction. *Nature*, 315:207–201, 1985.
- [CS:feder90] J. Feder and A. Aharony, editors. *Fractals in Physics: Essays in Honour of Benoit B. Mandelbrot*. North Holland (Elsevier), Amsterdam, 1990.
- [CS:fisher74] M. E. Fisher. The renormalization group in the theory of critical phenomena. *Rev. Mod. Phys.*, 46:597–616, 1974.

- [CS:fortuin72] C. M. Fortuin and P. W. Kasteleyn. On the random cluster model I. introduction and relation to other models. *Physica*, 57:536–564, 1972.
- [CS:fox00] G. Fox and P. Coddington. Parallel computers and complex systems. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 289–338. CUP, Cambridge, UK, 2000.
- [CS:fraedrich02] K. Fraedrich and C.-D. Schönwiese. Space-time variability of the European climate. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 3, pages 104–138. Springer-Verlag, Berlin, 2002.
- [CS:frisch86] U. Frisch, B. Hasslacher, and Y. Pomeau. Lattice-gas automata for the Navier-Stokes equation. *Phys. Rev. Lett.*, 56:1505–1508, 1986.
- [CS:gallagher99] R. Gallagher and T. Appenzeller. Beyond reductionism. *Science*, 284:79, 1999.
- [CS:ganachaud00] A. Ganachaud and C. Wunsch. Improved estimates of global ocean circulation, heat transport and mixing from hydrographic data. *Nature*, 408:453–457, 2000.
- [CS:gill02] A. M. Gill, R. A. Bradstock, and J. A. Williams. Fire regimes and biodiversity: legacy and vision. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 429–446. CUP, Cambridge, U.K., 2002.
- [CS:glass01] L. Glass. Synchronization and rhythmic processes in physiology. *Nature*, 410:277–284, 2001.
- [CS:goldenfeld99] N. Goldenfeld and L. P. Kadanoff. Simple lessons from complexity. *Science*, 284:87–89, 1999.
- [CS:gomez87] M. A. F. Gomez. Paper crushes fractally. *J. Phys. A*, 20:L283–L284, 1987.
- [CS:goosse99] H. Goosse and T. Fichefet. Importance of ice-ocean interactions for the global circulation: a model study. *J. Geophys. Res.*, 104C:23337–23355, 1999.
- [CS:goossens93] M. Goossens, F. Mittelbach, and A. Samarin. *The L<sup>A</sup>T<sub>E</sub>X Companion*. Addison-Wesley, Reading, Mass., 1st edition, 1993.
- [CS:goossens97] M. Goossens, S. Rahtz, and F. Mittelbach. *The L<sup>A</sup>T<sub>E</sub>X Graphics Companion: Illustrating Documents with T<sub>E</sub>X and Postscript*. Addison-Wesley, Reading, Mass., 1st edition, 1997.
- [CS:gould04] S. J. Gould. *The Hedgehog, The Fox and the Magister’s Pox: Mending and Minding the Misconceived Gap Between Science and the Humanities*. Vintage (Random House), London, 2004.
- [CS:gould81] S. J. Gould. *The Mismeasure of Man*. W.W. Norton, New York, 1981.
- [CS:gould89] S. J. Gould. *Wonderful Life: The Burgess Shale and the Nature of History*. Penguin, London, 1989.
- [CS:gould96] S. J. Gould. *Life’s Grandeur: The Spread of Excellence from Plato to Darwin*. Vintage, London, 1996. (Published in USA as *Full House*.)
- [CS:grassberger84] P. Grassberger, F. Krause, and T. von der Twer. A new type of kinetic critical phenomena. *J. Phys.*, A17:L105–L109, 1984.
- [CS:green00] D. G. Green. Self-organization in complex systems. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 11–50. CUP, Cambridge, UK, 2000.
- [CS:grinstein85] G. Grinstein, C. Jayaprakash, and Yu He. Statistical mechanics of probabilistic cellular automata. *Phys. Rev. Lett.*, 55:2527–2530, 1985.
- [CS:grubler01] A. Grubler and N. Nakicenovic. Identifying dangers in an uncertain climate. *Nature*, 412:15, 2001.
- [CS:gutzwiller96] M. C. Gutzwiller. Moon-Earth-Sun: The oldest three-body problem. *Rev. Mod. Phys.*, 70:589–639, 1996.
- [CS:haggert69] P. Haggert and R. J. Chorley. *Network Analysis in Geography*. Edward Arnold, London, 1969.
- [CS:haken75] H. Haken. Cooperative phenomena in systems far from thermal equilibrium. *Rev. Mod. Phys.*, 47:67–121, 1975.
- [CS:halloy98] S. R. P. Halloy. A theoretical framework for abundance distributions in complex systems. *Complexity International*, 6:12–xxx, 1998.
- [CS:hankey72] A. Hankey and H. E. Stanley. Systematic application of generalized homogeneous functions to static scaling, dynamic scaling and universality. *Phys. Rev. B*, 6:3515–3542, 1972.

- [CS:hardy76] J. Hardy, O. de Pazzis, and Y. Pomeau. Molecular dynamics of a classical lattice gas: Transport properties and time correlation functions. *Phys. Rev. B*, 13:1949–1961, 1976.
- [02hargreaves] J. C. Hargreaves and J. D. Annan. Assimilation of paleo-data in a simple Earth system model. *Climate Dynamics*, 19:371–381. doi: 10.1007/s00382-002-0241-0, 2002.
- [CS:harris75] A. B. Harris, T. C. Lubensky, W. K. Holcomb, and C. Dasgupta. Renormalization-group approach to percolation problems. *Phys. Rev. Lett.*, 35:327–330, 1975.
- [CS:hasselmann02] K. Hasselmann. Is climate predictable? In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 4, pages 140–169. Springer-Verlag, Berlin, 2002.
- [CS:hefferon01] J. Hefferon. Why T<sub>E</sub>X? *TUGBOAT*, 22:8–12, 2001.
- [CS:helbing02] D. Helbing, I. J. Farkas, and T. Vicsek. Crowd disasters and simulation of panic situations. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 11, pages 330–350. Springer-Verlag, Berlin, 2002.
- [CS:hergarten02] S. Hergarten. *Self-Organized Criticality in Earth Systems*. Springer-Verlag, Berlin, 2002.
- [CS:hodges92] A. Hodges. *Alan Turing: The Enigma*. Vintage (Random House), London, 1992.
- [CS:hohenberg77] P. C. Hohenberg and B. I. Halperin. Theory of dynamic critical phenomena. *Rev. Mod. Phys.*, 49:435–479, 1977.
- [CS:hulme00] M. Hulme. Choice is all. *New Scientist*. 4 November, 2000, pages 56–57, 2000.
- [00hutchinson] J. E. Hutchinson. Deterministic and random fractals. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 127–166. CUP, Cambridge, UK, 2000.
- [CS:isichenko92] M. B. Isichenko. Percolation, statistical topography and transport in random media. *Rev. Mod. Phys.*, 64: 961–1043, 1992.
- [CS:ivanov02] P. Ch. Ivanov, A. L. Goldberger, and H. E. Stanley. Fractal and multifractal approaches in physiology. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 7, pages 218–257. Springer-Verlag, Berlin, 2002.
- [CS:james00] M. R. James. Non-linear control systems. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 249–287. CUP, Cambridge, UK, 2000.
- [CS:kadanoff01] L. P. Kadanoff. Turbulent heat flow: Structures and scaling. *Physics Today*, 54(8):34–39, 2001.
- [CS:kadanoff02] L. P. Kadanoff. Wolfram on cellular automata: A clear and very personal exposition. (review of A New Kind Of Science). *Physics Today*, July 2002:55–60, 2002.
- [CS:kahn73] D. Kahn. *The Code-Breakers*. Sphere Books, London, 1973.
- [CS:kamien02] R. D. Kamien. The geometry of soft materials: a primer. *Rev. Mod. Phys.*, 74:953–971, 2002.
- [CS:kaneko86] K. Kaneko and Y. Akutsu. Phase transitions in two-dimensional stochastic cellular automata. *J. Phys.*, A19: L69–L75, 1986.
- [CS:karplus77] W. J. Karplus. The spectrum of mathematical modelling and systems simulation. *Math. Comput. Simulation*, 19:3–10, 1977.
- [CS:kates01] R. W. Kates, W. C. Clark, R. Corell, J. M. Hall, C. C. Jaeger, I. Lowe, J. McCarthy, H. J. Schellnhuber, B. Bolin, N. M. Dickson, S. Fauchaux, G. C. Gallopin, A. Grübler, B. Huntley, J. Jäger, N. S. Jodha, R. E. Kasperson, A. Mabogunje, P. Matson, H. Mooney, B. Moore, T. O’Riordan, and U. Svedin. Sustainability science. *Science*, 292:641–642, 2001.
- [CS:kauffmann00] S. Kauffmann. *Investigations*. OUP, Oxford, 2000.
- [CS:keith02] D. A. Keith, J. E??????. williams, and J. C. Z. Woinakski. Fire management and biodiversity conservation: key approaches and principles. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 401–425. CUP, Cambridge, U.K., 2002.
- [CS:kershaw02] A. P. Kershaw, J. S. Clark, A. M. Gill, and D. M. D’Costa. A history of fire in Australia. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 3–25. CUP, Cambridge, U.K., 2002.

- [CS:kinzel85] W. Kinzel. Phase transitions of cellular automata. *Z. Phys.*, B58:229–244, 1985.
- [CS:knighton98] D. Knighton. *Fluvial Forms and Processes: A New Perspective*. Arnold, London, 1998.
- [CS:knorr95] W. Knorr and M. Heimann. Impact of drought stress and other factors on seasonal land biosphere CO<sub>2</sub> exchange studied through an atmospheric tracer transport model. *Tellus*, 47B:471–489, 1995.
- [CS:knuth84] D. E. Knuth. *The T<sub>E</sub>Xbook*. Addison-Wesley, Reading, Mass., 1984.
- [CS:koch94] A. J. Koch and H. Meinhardt. Biological pattern formation: from basic mechanisms to complex structures. *Rev. Mod. Phys.*, 66:1481–1507, 1994.
- [CS:koch99] C. Koch and G. Laurent. Complexity and the nervous system. *Science*, 284:96–98, 1999.
- [CS:kropp02] J. Kropp, K. Zickfeld, and K. Eisnack. Assessment and management of critical events: The breakdown of marine fisheries and the North Atlantic Thermohaline Circulation. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 6, pages 192–216. Springer-Verlag, Berlin, 2002.
- [CS:kruijt01] B. Kruijt, A. J. Dolman, J. Lloyd, J. Ehleringer, M. Raupach, and J. Finnigan. Assessing the regional carbon balance: Towards an integrated, multiple constraints approach. *Change*, 56 (March–April 2001):9–12, 2001.
- [CS:langton90] \* Langton. \*\*\*\*. *Physica D*, 42:12–37, 1990.
- [CS:lavis99a] D. A. Lavis and G. M. Bell. *Statistical Mechanics of Lattice Systems 1. Closed-form and Exact Solutions*. Springer-Verlag, Berlin, 1999a.
- [CS:lavis99b] D. A. Lavis and G. M. Bell. *Statistical Mechanics of Lattice Systems 2. Exact, Series and Renormalization Group Methods*. Springer-Verlag, Berlin, 1999b.
- [CS:lenton98] T. M. Lenton. Gaia and natural selection. *Nature*, 394:439–447, 1998.
- [CS:lenton01a] T. M. Lenton and J. E. Lovelock. Daisyworld revisited: quantifying biological effects on planetary self-regulation. *Tellus*, 53B:288–305, 2001.
- [CS:lenton01] T. M. Lenton and W. von Bloh. Biotic feedback extends the life of the biosphere. *Geophys. Res. Lett.*, 28: 1715–1718, 2001.
- [CS:lieb67] E. H. Lieb. The residual entropy of square ice. *Phys. Rev.*, 162:162–172, 1967.
- [CS:liebovitch02] L. S. Liebovitch, T. Penzel, and J. W. Kantelhardt. Physiological relevance of scaling of heart phenomena. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 8, pages 258–281. Springer-Verlag, Berlin, 2002.
- [CS:lissauer99] J. Lissauer. Chaotic motion in the solar system. *Rev. Mod. Phys.*, 71:835–845, 1999.
- [CS:lorenc86] A. Lorenc. Analysis methods for numerical weather prediction. *Q. J. Roy. Meteorol. Soc.*, 112:1177–1194, 1986.
- [CS:lorenz64] E. N. Lorenz. Irregularity: A fundamental property of the atmosphere. *Tellus*, 36A:98–110, 1964.
- [CS:lorenz72] E. N. Lorenz. Predictability: Does the flap of a butterfly’s wings in Brazil set off a tornado in Texas? [Lecture at AAAS meeting. Reprinted in E. Lorenz (1993) *The Essence of Chaos*. (UCL Press: London)], 1972.
- [CS:lorenz93] E. N. Lorenz. *The Essence of Chaos*. UCL Press, London, 1993.
- [CS:lovelock79] J. E. Lovelock. *Gaia: A New Look at Life on Earth*. OUP, Oxford, 1979.
- [CS:lovelock74] J. E. Lovelock and L. Margulis. Atmospheric homeostasis by and for the biosphere: the Gaia hypothesis. *Tellus*, 26:2–10, 1974.
- [CS:lux02] F. Lux and M. Ausloos. Market fluctuations I: Scaling, multiscaling and their possible origins. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 13, pages 372–409. Springer-Verlag, Berlin, 2002.
- [CS:mackey89] M. C. Mackey. The dynamic origin of increasing entropy. *Rev. Mod. Phys.*, 61:981–1015, 1989.
- [CS:mandelbrot77] B. B. Mandelbrot. *Fractals: Form Chance and Dimension*. W. H. Freeman, San Francisco, 1977.
- [CS:mantegna02] R. N. Mantegna and H. E. Stanley. Investigations of financial markets using statistical physics methods. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 12, pages 352–371. Springer-Verlag, Berlin, 2002.

- [CS:marsili96] M. Marsili, A. Maritan, F. Toigi, and J. R. Banavar. Stochastic growth equations and reparameterization invariance. *Rev. Mod. Phys.*, 68:963–983, 1996.
- [CS:martin84] O. Martin, A. Odlyzko, and S. Wolfram. Algebraic properties of cellular automata. *Commun. Math. Phys.*, 93:219–258, 1984.
- [CS:may74] R. May. Biological populations with nonoverlapping generations: Stable points, stable cycles, and chaos. *Science*, 186:645–647, 1974.
- [CS:mccarthy02] M. A. McCarthy and G.J. Cary. Fire regimes in landscapes: Models and reality. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 77–93. CUP, Cambridge, U.K., 2002.
- [CS:mcmahon01] S. M. McMahon, K. H. Miller, and J. Drake. Networking tips for social scientists and ecologists. *Nature*, 293:1604–1605, 2001.
- [CS:mcmichael01] A. J. McMichael. *Human Frontiers, Environments and Disease*. CUP, Cambridge, UK, 2001.
- [CS:melillo96] J. M. Melillo, I. C. Prentice, G. D. Farquhar, E.-D. Schulze, and O. E. Sala. Terrestrial biotic responses to environmental change and feedbacks to climate. In J. T. Houghton, L. G. Meira Filho, B. A. Callander, N. Harris, A. Kattenberg, and K. Maskell, editors, *Climate Change 1995: the Science of Climate Change*, pages 445–481. Published for the IPCC by CUP, Cambridge, UK, 1996.
- [CS:menard00b] R. Ménard and L.-P. Chang. Stratospheric assimilation of chemical tracer observations using a Kalman filter. Part II.  $\chi^2$  validated results and analysis of variance and correlation dynamics. *Monthly Weather Rev.*, 128:2671–2686, 2000.
- [CS:menard00a] R. Ménard, S. E. Cohn, L.-P. Chang, and P. M. Lyster. Stratospheric assimilation of chemical tracer observations using a Kalman filter. Part I. Formulation. *Monthly Weather Rev.*, 128:2654–2671, 2000.
- [CS:mermin79] N. D. Mermin. The topological theory of defects in ordered media. *Rev. Mod. Phys.*, 51:591–648, 1979.
- [CS:mitchell01] J. F. B. Mitchell, D. J. Karoly, G. C. Hegerl, F. W. Zwiers, M. R. Allen, and J. Marengo. Detection of climate change and attribution of causes. In J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linden, X. Dai, K. Maskell, and C. A. Johnson, editors, *Climate Change 2001: The Scientific Basis*, pages 695–738. Published for the IPCC by CUP, Cambridge, UK, 2001.
- [CS:morgan90] M. G. Morgan and M. Henrion. *Uncertainty: A Guide to Dealing with Uncertainty in Quantitative Risk and Policy Analysis*. CUP, Cambridge, UK, 1990.
- [CS:moss02] F. Moss and H. Braun. Unstable periodic orbits and stochastic synchronization in sensory biology. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 10, pages 310–329. Springer-Verlag, Berlin, 2002.
- [CS:nagel92] S. R. Nagel. Instabilities in a sandpile. *Rev. Mod. Phys.*, 64:321–325, 1992.
- [CS:nakayama94] T. Nakayama and K. Yakubo. Dynamical properties of fractal networks: Scaling, numerical simulations, and physical realizations. *Rev. Mod. Phys.*, 66:381–443, 1994.
- [CS:SRES00] N. Nakićenović and R. Swart, editors. *Special Report on Emission Scenarios*. Published for the IPCC by CUP, Cambridge, UK, 2000a. (IPCC WG III Special Report).
- [CS:nakicenovic00] N. Nakićenović and R. Swart, editors. *Special Report on Emission Scenarios*. Published for the IPCC by CUP, Cambridge, UK, 2000b. (IPCC WG III Special Report).
- [CS:nasa86] NASA. Earth system science: A program for global change, 1986.
- [CS:nightingale76] M. P. Nightingale. \*\*\*. *Physica*, 83A:561–\*\*\*, 1976.
- [CS:nightingale77] M. P. Nightingale. \*\*\*. *Phys. Lett.*, 59A:486–, 1977.
- [CS:noble02] J. C. Noble and A. C. Grice. Fire regimes in semi-arid and tropical pasture lands: managing biological diversity and ecological function. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 373–400. CUP, Cambridge, U.K., 2002.
- [CS:odor04] G. Ódor. Universality classes in nonequilibrium lattice systems. *Rev. Mod. Phys.*, pages 663–724, 2004.
- [Z5] \* Erdős and Rényi. \*\*. \*\*, \*\*\*.
- [CS:packard85] N. Packard and S. Wolfram. Two-dimensional cellular automata. *J. Statist. Phys.*, 38:901–946, 1985.

- [CS:parrish99] J. K. Parrish and L. Edelman-Keshet. Complexity, pattern, and evolutionary trade-offs in animal aggregation. *Science*, 284:99–101, 1999.
- [CS:perelson97] A. S. Perelson and G. Weisbuch. Immunology for physicists. *Rev. Mod. Phys.*, 69:1219–1267, 1997.
- [CS:pittock01] A. B. Pittock, R. N. Jones, and C. D. Mitchell. Probabilities will help us plan for climate change. *Nature*, 413:249, 2001.
- [CS:prigogine80] I. Prigogine. *From Being to Becoming: Time and Complexity in the Physical Sciences*. Freeman, San Francisco, 1980.
- [CS:ravilious01] K. Ravilious. Songs before the storm. *New Scientist*, pages 30–34, 2001.
- [CS:rayner01] P. J. Rayner. Atmospheric perspectives on the ocean carbon cycle. In E.-D. Schulze, M. Heimann, S. Harrison, E. Holland, J. Lloyd, I. C. Prentice, and D. Schimel, editors, *Global Biogeochemical Cycles in the Climate System*. Academic, San Diego, 2001.
- [CS:rind99] D. Rind. Complexity and climate. *Science*, 284:105–107, 1999.
- [CS:rogers00] C. D. Rodgers. *Inverse Methods for Atmospheric Sounding: Theory and Practice*. World Scientific, Singapore, 2000.
- [CS:rogers76] C. D. Rodgers. Retrieval of atmospheric temperature and composition from remote measurements of thermal radiation. *Rev. Geophys. Space Phys.*, 14:609–624, 1976.
- [rothman94] D. H. Rothman and S. Zaleski. Lattice-gas models of phase separation: interfaces, phase transitions and multiphase flow. *Rev. Mod. Phys.*, 66:1417–1479, 1994.
- [CS:rujan87] P. Rujan. Cellular automata and statistical mechanics models. *J. Statist. Phys.*, 49:139–222, 1987.
- [CS:santer96] B. D. Santer, T. M. L. Wigley, T. P. Barnett, and E. Anyamba. Detection of climate change and attribution of causes. In J. T. Houghton, L. G. Meira Filho, B. A. Callander, N. Harris, A. Kattenberg, and K. Maskell, editors, *Climate Change 1995: The Science of Climate Change*, pages 407–443. Published for the IPCC by CUP, Cambridge UK, 1996.
- [CS:scheffer01] M. Scheffer, S. Carpenter, J.A. Foley, C. Folke, and B. Walker. Catastrophic shifts in ecosystems. *Nature*, 413:591–596, 2001.
- [CS:schneider01] S. Schneider. What is ‘dangerous’ climate change? *Nature*, 411:17–19, 2001.
- [CS:schwander84] J. Schwander and B. Stauffer. Age difference between polar ice and air trapped in its bubbles. *Nature*, 311:45–47, 1984.
- [CS:seeley00] D. A. Seeley. Network evolution and the emergence of structure. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 51–89. CUP, Cambridge, UK, 2000.
- [CS:service99] R. F. Service, D. Normile, and E. Pennish. Exploring systems of life. *Science*, 284:80–83, 1999.
- [CS:sethna01] J. P. Sethna, K. A. Dahmen, and C. R. Myers. Crackling noise. *Nature*, 410:242–250, 2001.
- [CS:shalizi01] C. R. Shalizi and J. P. Crutchfield. Computational mechanics: pattern, prediction structure and simplicity. *J. Statist. Phys.*, 104:817–879, 2001.
- [CS:shinbrot01] T. Shinbrot and F. J. Muzzio. Noise to order. *Nature*, 410:251–258, 2001.
- [CS:siedler01] G. Siedler, J. Church, and J. Gould, editors. *Ocean Circulation and Climate: Observing and Modelling the Global Ocean*. Academic, San Diego, 2001.
- [CS:sigman00] D. M. Sigman and E. A. Boyle. Glacial/interglacial variations in atmospheric carbon dioxide. *Nature*, 407:859–869, 2000.
- [CS:sornette00] D. Sornette. *Critical Phenomena in Natural Sciences*. Springer-Verlag, Berlin, 2000.
- [CS:sornette02] D. Sornette, D. Stauffer, and H. Takayasu. Market fluctuations II: Multiplicative and percolation models, size effects and prediction. In A. Bunde, J. Kropp, and H. J. Schellnhuber, editors, *The Science of Disasters: Climate Disruptions, Heart Attacks, and Market Crashes*, chapter 14, pages 410–435. Springer-Verlag, Berlin, 2002.
- [CS:speelman05] C. Speelman and K. Kirchner. *Beyond the Learning Curve: The Construction of Mind*. Oxford University Press, Oxford, 2005.
- [CS:stammer02] D. Stammer, C. Wunsch, I. Fukumori, and J. Marshall. State estimation improves prospects for ocean research. *EOS: Trans. AGU*, 83 (27):289 and 294–5, 2002.

- [CS:stanley86] H. E. Stanley and N. Ostrowsky. *On Growth and Form: Fractal and Non-Fractal Patterns in Physics*. Martinus Nijhoff (Kluwer), Boston, 1986.
- [CS:stauffer85] D. Stauffer. *Introduction to Percolation Theory*. Taylor and Francis, London, 1985.
- [CS:sterelny01] K. Sterelny. *Dawkins vs. Gould: Survival of the Fittest*. Icon Books, Cambridge, UK, 2001.
- [CS:stewart00] D. E. Stewart and R. L. Dewar. Non-linear dynamics. In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*, pages 167–248. CUP, Cambridge, UK, 2000.
- [CS:stocker01] T. F. Stocker, G. K. C. Clarke, H. Le Treut, R. S. Lindzen, V. P. Meleshko, R. K. Mugara, T. N. Palmer, R. T. Pierrehumbert, P. J. Sellers, K. E. Trenberth, and J. Willebrand. Physical climate processes and feedbacks. In J. T. Houghton, Y. Ding, D. J. Griggs, M. Noguer, P. J. van der Linder, X. Dai, K. Maskell, and C. A. Johnson, editors, *Climate Change 2001: The Scientific Basis*, pages 417–470. Published for the IPCC by CUP, Cambridge, UK, 2001.
- [CS:strogatz01] S. H. Strogatz. Exploring complex networks. *Nature*, 410:268–276, 2001.
- [CS:sundquist85] E. T. Sundquist. Geological perspectives on carbon dioxide and the carbon cycle. In E. T. Sundquist and W. S. Broecker, editors, *The Carbon Cycle and Atmospheric CO<sub>2</sub>: Natural Variations Archean to Present*, Geophysical Monograph 32, pages 5–59. AGU, Washington, 1985.
- [CS:tauber02] U. C. Tauber, V. K. Akkineni, and J. E. Santos. Effects of violating detailed balance on critical dynamics. *Phys. Rev. Lett.*, 88:045702, 2002.
- [CS:taylor69] A. J. P. Taylor. *War by Timetable*. Macdonald and Co., London, 1969.
- [CS:thompson61] D. W. Thompson. *On Growth and Form*. CUP, Cambridge, UK, abridged edition, 1961.
- [CS:trudinger00] C. M. Trudinger. *The Carbon Cycle over the Last 1000 Years Inferred from Inversion of Ice Core Data*. Ph.D. thesis, Monash University, 2000. Electronic edition from: [http://www.dar.csiro.au/publications/Trudinger\\_2001a0.htm](http://www.dar.csiro.au/publications/Trudinger_2001a0.htm).
- [CS:trudinger99] C. M. Trudinger, I. G. Enting, R. J. Francey, D. M. Etheridge, and P. J. Rayner. Long-term variability in the global carbon cycle inferred from a high-precision CO<sub>2</sub> and  $\delta^{13}\text{C}$  ice-core record. *Tellus*, 51B:233–248, 1999.
- [CS:turing52] A. M. Turing. The chemical basis of morphogenesis. *Phil. Trans. R. Soc. London*, B327:7–72, 1952.
- [CS:twomey77] S. Twomey. *Introduction to the Mathematics of Inversion of Remote Sensing and Indirect Measurements*. Elsevier, Amsterdam, 1977.
- [CS:vanderwaals73] J. D. van der Waals. *Over de Continuïteit van der Gas- en Vloeïstoestand*. Doctoral thesis, Leiden, 1873.
- [CS:volk98] T. Volk. *Gaia's Body: Towards a Physiology of Earth*. Copernicus (Springer-Verlag), New York, 1998.
- [CS:waldrop92] M. M. Waldrop. *Complexity: The Emerging Science at the Edge of Order and Chaos*. Viking, London, 1992.
- [CS:watkin93] T. L. H. Watkin, A. Rau, and M. Biehl. The statistical mechanics of learning a rule. *Rev. Mod. Phys.*, 65:499–556, 1993.
- [CS:weisse99] R. Weisse, U. Mikolajewicz, A. Sterl, and S. Drijfhout. Stochastically forced variability in the Antarctic Circumpolar Current. *J. Geophys. Res.*, 104:11049–11064, 1999.
- [CS:Welberry85] T. R. Welberry. Diffuse x-ray scattering and models of disorder. *Rep. Prog. Phys.*, 48:1543–1593, 1985.
- [CS:weng99] G. Weng, U. S. Bhalla, and R. Iyengar. Complexity in biological signalling systems. *Science*, 284:92–96, 1999.
- [CS:werner99] B. T. Werner. Complexity in natural landform patterns. *Science*, 284:102–104, 1999.
- [CS:whelan02] R. J. Whelan, L. Rodgers, C. R. Dickman, and E. F. Sutherland. Critical life cycles of plants and animals: developing a process-based understanding of population changes in fire-prone landscapes. In R. A. Bradstock, J. A. Williams, and A. M. Gill, editors, *Flamable Australia: The fire regimes and biodiversity of a continent*, pages 94–124. CUP, Cambridge, U.K., 2002.
- [CS:whiteside99] G. M. Whiteside and R. F. Ismagilov. Complexity in chemistry. *Science*, 284:89–92, 1999.
- [CS:wigley90] T. M. L. Wigley and T. P. Barnett. Detection of the greenhouse effect in the observations. In J. T. Houghton, G. J. Jenkins, and J. J. Ephraum, editors, *Climate Change: The IPCC Scientific Assessment*, pages 239–255. Published for the IPCC by CUP, Cambridge, UK, 1990.
- [CS:wilson98] E. O. Wilson. *Consilience: The Unity of Knowledge*. Abacus, London, 1998.

- [CS:wilson83] K. G. Wilson. The renormalization group and critical phenomena. (1982 Nobel prize in physics lecture). *Rev. Mod. Phys.*, 55:583–600, 1983.
- [CS:winfree85] A. Winfree, E. Winfree, and H. Seifert. Organizing centers in a cellular excitable medium. *Physica*, 17D: 109–115, 1985.
- [CS:5wolfram85b] S. Wolfram. Random sequence generation by cellular automata. *Adv. Appl. Math.*, 7:123–169, 1985a.
- [CS:wolfram02] S. Wolfram. *A New Kind of Science*. Wolfram Press, 2002.
- [CS:wolfram83] S. Wolfram. Statistical mechanics of cellular automata. *Rev. Mod. Phys.*, 55:601–644, 1983.
- [CS:wolfram84] S. Wolfram. Universality and complexity in cellular automata. *Physica*, 10D:1–35, 1984a.
- [CS:wolfram84a] S. Wolfram. Cellular automata as models of complexity. *Nature*, 311:419–, 1984b.
- [CS:wolfram85] S. Wolfram. Twenty problems in the theory of cellular automata. *Physica Scripta*, T9:170–183, 1985b.
- [CS:wolfram85a] S. Wolfram. Origins of randomness in physical systems. *Phys. Rev. Lett.*, 55:449–452, 1985c.
- [CS:wolfram86] S. Wolfram, editor. *Theory and Applications of Cellular Automata*. World Scientific, Singapore, 1986a.
- [CS:wolfram86a] S. Wolfram. Approaches to complexity engineering. In S. Wolfram, editor, *Theory and Applications of Cellular Automata*. World Scientific, Singapore, 1986b.
- [CS:woodwell95] G. M. Woodwell and F. T. MacKenzie, editors. *Biotic Feedbacks in the Global Climatic System: Will the Warming Feed the Warming?* OUP, New York, 1995.
- [CS:wu78] F. Y. Wu. Percolation and Potts model. *J. Statist. Phys.*, 18:115–123, 1978.
- [CS:wu92] F. Y. Wu. Knot theory and statistical mechanics. *Rev. Mod. Phys.*, 64:1099–1131, 1992.
- [CS:wunsch96] C. Wunsch. *The Ocean Circulation Inverse Problem*. CUP, Cambridge, UK, 1996.
- [CS:young84] D. A. Young. A local activator-inhibitor model of vertebrate skin patterns. *Math. Biosciences*, 72:51–58, 1984.
- [CS:ziemelis01] K. Ziemelis. Nature insight: Complex systems. *Nature*, 410:241, 2001.
- [CS:zimmer99] C. Zimmer. Life after chaos. *Science*, 284:83–86, 1999.

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