

BIBLIOGRAFIA

1. N.G.van Kampen, Stochastic Processes in Physics and Chemistry, North-Holland, 1992, 480 p.
2. J.J.Higgins, S.Keller-McNulty, Concepts in Probability and Stochastic Modeling, Wadsworth, 1994, 432 p.
3. J.L.Snell, Topics in Contemporary Probability and Its Applications (Probability & Stochastics S.), CRC Press, 1995, 400 p.
4. Z.Brzezniak, T.Zastawniak, Basic Stochastic Processes: A Course Through Exercises, Springer-Verlag Berlin and Heidelberg GmbH&Co.K, 1998, 236 p.
5. T.Mikosch, Elementary Stochastic Calculus, with Finance in View (Advanced Series on Statistical Science & Applied Probability), World Scientific Publishing, 1998, 224 p.
6. S.Karlin, H.M.Taylor, P.Taylor, An Introduction to Stochastic Modeling, Academic Press, 1998, 631 p.
7. G.Adomian, Applications of Nonlinear Stochastic Systems Theory to Physics (Mathematics & Its Applications S.), Kluwer Academic Publishers, 1988, 248 p.
8. B.Oksendal, Stochastic Differential Equations: An Introduction with Applications, Springer-Verlag Berlin and Heidelberg GmbH&Co.K, 1998, 346 p.
9. G.Grimmett, D.Stirzaker, Probability and Random Processes, Oxford University Press, 2001, 608 p.
10. A.Papoulis, S.U.Pillai, Probability, Random Variables and Stochastic Processes, McGraw-Hill Education, 2001, 852 p.
11. M.Aoki, Modeling Aggregate Behavior and Fluctuations in Economics, Cambridge: Cambridge University Press, 2002, 263 p.
12. O.Descalzi, J.Martinez, E.Tirapegui, Instabilities and Nonequilibrium Structures (Nonlinear Phenomena & Complex Systems), Kluwer Academic Publishers, 2004, 423 p.
13. http://en.wikipedia.org/wiki/Brownian_motion.

14. A.A.Markov, Rasprostranenie zakona bol'shih chisel na velichiny, zavisyaschie drug ot druga, Izvestiya Fiziko-matematicheskogo Obschestva pri Kazanskom Universitete, 1906, 2-ya seriya, tom 15, p. 135–156.
15. A.N.Shiryayev (Editor), Selected Works of A.N.Kolmogorov: Probability Theory and Mathematical Statistics, Springer, 1989, vol.2, 616 p.
16. http://www.actrus.ro/buletin/2_2000/articol19.html,
http://en.wikipedia.org/wiki/Hidden_Markov_model,
<http://www.nightgarden.com/shannon.htm>.
17. B.D.Craven, S.M.N.Islam, Optimization in Economics and Finance. Some Advances in Non-Linear, Dynamic, Multi-Criteria and Stochastic Models. Series: Dynamic Modeling and Econometrics in Economics and Finance (Series Editors: S.Mitnik, W.Semmler), Springer, 2005, vol. 7, 163 p.
18. A.Mele, F.Fornari, Stochastic Volatility in Financial Markets: Crossing the Bridge to Continuous Time. Series: Dynamic Modeling and Econometrics in Economics and Finance (Series Editors: S.Mitnik, W.Semmler), Springer, 2000, vol. 3, 168 p.
19. B.Heer, A.Maussner, Dynamic General Equilibrium Modelling, Computational Methods and Applications, Springer, 2005, 540 p.
20. B.Contini, R.Leombruni, M.Richiardi (Editors), Advances in Complex Systems, 2004, vol. 7, no. 2, 288 p.
21. A.Tabarrok, The Ramsey model of economic growth, *Mathematica in Education and Research*, 1999, vol. 8, no. 3–4, p. 43–51; <http://library.wolfram.com/infocenter/Articles/3156/>.
22. W.M.Saslow, An economic analogy to thermodynamics, *American Journal of Physics*, 1999, vol. 67, no. 12, p. 1239–1247.
23. F.Paladi, I.Galaju, V.Enachi, Problema compensării datoriilor reciproce ale unităților economice, *Economie și Finanțe*, 1996, nr.4–5 (6–7), p. 49–54.
24. F.Paladi, Aspectul sinergetic al dezvoltării economice, *Economie și Finanțe*, 1996, nr.10–12 (12–14), p.140–149.
25. R.N.Mantegna, Z.Palagyi, H.E.Stanley, Applications of statistical mechanics to finance, *Physica A*, 1999, vol. 274, no. 1–2, p. 216–221.

26. A.Chakraborti, B.K.Chakrabarti, Statistical mechanics of money: How saving propensity affects its distribution, 2000, vol. 2, arXiv:cond-mat/0004256.
27. R.Mahnke, J.Kaupuzs, I.Lubashevsky, Probabilistic description of traffic flow, *Physics Reports*, 2005, vol. 408, no. 1–2, p. 1–130.
28. J.Schmelzer Jr., U.Lembke, R.Kranold, Nucleation and growth of AgCl clusters in a sodium borate glass: numerical analysis and SAXS results, *The Journal of Chemical Physics*, 2000, vol. 113, no. 3, p. 1268–1275.
29. J.Schmelzer, G.Röpke, R.Mahnke, *Aggregation Phenomena in Complex Systems*, Weinheim: Wiley–VCH, 1999, 459 p.
30. D.T.Wu, Nucleation theory. In H.Ehrenreich, F. Spaepen, *Solid State Physics*, San Diego: Academic Press, 1997, vol. 50, p. 37–187.
31. I.M.Lifshitz, V.V.Slyozov, The kinetics of precipitation from supersaturated solid solutions, *Journal of Physics and Chemistry of Solids*, 1961, vol. 19, no. 1–2, p. 35–50.
32. C.Wagner, Theory of precipitate change by redissolution, *Z. Elektrochem.*, 1961, vol. 65, p. 581–594.
33. J.S.Langer, A.J.Schwartz, Kinetics of nucleation in near-critical fluids, *Physical Review A*, 1980, vol. 21, no. 3, p. 948–958.
34. M.Tokuyama, Y.Enomoto, Dynamics of crossover phenomenon in phase-separating systems, *Physical Review Letters*, 1992, vol. 69, no. 2, p. 312–315.
35. M.Aoki, *New Approaches to Macroeconomic Modeling: Evolutionary Stochastic Dynamics, Multiple Equilibria, and Externalities as Field Effects*, New York: Cambridge University Press, 1996, 288 p.
36. M.Aoki, Cluster size distributions of economic agents of many types in a market, *Journal of Mathematical Analysis and Applications*, 2000, vol. 249, no. 1, p. 32–52.
37. W.J.Ewens, The sampling theory of selectively neutral alleles, *Theoretical Population Biology*, 1972, vol. 3, no. 1, p. 87–112.
38. J.F.C.Kingman, The representation of partition structures, *Journal of the London Mathematical Society*, 1978, vol. 18, p. 374–380.

39. U.Garibaldi, D.Costantini, P.Viarengo, A finite characterization of Ewens sampling formula, *Advances in Complex Systems*, 2004, vol. 7, no. 2, p. 265–284.
40. R.L.Axtell, Zipf distribution of U.S. firm sizes, *Science*, 2001, vol. 293, no. 5536, p. 1818–1820.
41. D.Costantini, S.Donadio, U.Garibaldi, P.Viarengo, Herding and clustering in economics: the Yule-Zipf-Simon model, paper presented at Wild@Ace conference, Torino, Italy, 3–4 December 2004, and submitted to *Computational Economics*.
42. J.F.Fontanari, L.I.Perlovsky, Solvable null model for the distribution of word frequencies, *Physical Review E*, 2004, vol. 70, 042901 (4 pages).
43. R.N.Mantegna, H.E.Stanley, *An Introduction to Econophysics: Correlations and Complexity in Finance*. Cambridge: Cambridge University Press, 2000, 158 p.
44. B.Mandelbrot, The variation of certain speculative prices, *The Journal of Business*, 1963, vol. 36, no. 4, p. 394–419.
45. O.V.Pictet, M.Dacorogna, U.A.Muller, R.B.Olsen, J.R.Ward, Statistical study of foreign exchange rates, empirical evidence of a price change scaling law and intraday analysis, *Journal of Banking and Finance*, 1990, vol. 14, no. 6, p. 1189–1208.
46. L.A.N.Amaral, V.Plerou, P.Gopikrishnan, M.Meyer, H.E.Stanley, The distribution of returns of stock prices, *International Journal of Theoretical and Applied Finance*, 2000, vol. 3, no. 3, p. 365–369.
47. S.Rawal, G.J.Rodgers, Growth and coagulation in a herding model, *Physica A*, 2004, vol. 344, no. 1–2, p. 50–55.
48. S.Bikhchandani, S.Sharma, Herd behavior in financial markets, *IMF Staff Papers*, 2001, vol. 47, p. 279–310.
49. A.Devenow, I.Welch, Rational herding in financial economics, *European Economic Review*, 1996, vol. 40, no. 3–5, p. 603–615.
50. R.Wermers, Mutual fund herding and the impact on stock prices, *The Journal of Finance*, 1999, vol. 54, no. 2, p. 581–622.
51. D.S.Scharfstein, J.C.Stein, Herd behavior and investment, *The American Economic Review*, 1990, vol. 80, no. 3, p. 465–479.
52. R.Cont, J.-P.Bouchaud, Herd behavior and aggregate fluctuations in financial markets, *Macroeconomic Dynamics*, 2000, vol. 4, no. 2, p. 170–196.

53. V.M.Eguiluz, M.G.Zimmermann, Transmission of information and herd behavior: an application to financial markets, *Physical Review Letters*, 2000, vol. 85, no. 26, p. 5659–5662.
54. R.D’Hulst, G.J.Rodgers, Democracy versus dictatorship in self-organized models of financial markets, *Physica A*, 2000, vol. 280, no. 3–4, p. 554–565.
55. R.D’Hulst, G.J.Rodgers, Exact solution of a model for crowding and information transmission in financial markets, *International Journal of Theoretical and Applied Finance*, 2000, vol. 3, no. 4, p. 609–616.
56. R.D’Hulst, G.J.Rodgers, Transition from coherence to bistability in a model of financial markets, *The European Physical Journal B*, 2001, vol. 20, no. 4, p. 619–625.
57. G.J.Rodgers, Y.J.Yap, Growth and addition in a herding model, *The European Physical Journal B*, 2002, vol. 28, no. 1, p. 129–132.
58. G.J.Rodgers, D.Zheng, A herding model with preferential attachment and fragmentation, *Physica A*, 2002, vol. 308, no. 1–4, p. 375–380.
59. B.Rosenberg, J.A.Ohlon, The stationary distribution of returns and portfolio separation in capital markets: a fundamental contradiction, *The Journal of Financial and Quantitative Analysis*, 1976, vol. 11, no. 3, p. 393–402.
60. M.H.R.Stanley, L.A.N.Amaral, S.V.Buldyrev, S.Havlin, H.Leschhorn, P.Maass, M.A.Salinger, H.E.Stanley, Scaling behaviour in the growth of companies, *Nature (London)*, 1996, vol. 379, no. 6568, p. 804–806.
61. L.A.N.Amaral, S.V.Buldyrev, S.Havlin, M.A.Salinger, H.E.Stanley, Power law scaling for a system of interacting units with complex internal structure, *Physical Review Letters*, 1998, vol. 80, no. 7, p. 1385–1388.
62. R.N.Mantegna, Z.Palagyi, H.E.Stanley, Applications of statistical mechanics to finance, *Physica A*, 1999, vol. 274, no. 1–2, p. 216–221.
63. M.Ausloos, N.Vandewalle, Ph.Boveroux, A.Minguet, K.Ivanova, Applications of statistical physics to economic and financial topics, *Physica A*, 1999, vol. 274, no. 1–2, p. 229–240.

64. K.Nagel, M.Shubik, M.Paczuski, P.Bak, Spatial competition and price formation, *Physica A*, 2000, vol. 287, no. 3–4, p. 546–562.
65. D.Zheng, G.J.Rodgers, P.M.Hui, A model for the size distribution of customer groups and businesses, *Physica A*, 2002, vol. 310, no. 3–4, p. 480–486.
66. D.Costantini, U.Garibaldi, P.Viarengo, A finitary characterization of the Ewens sampling formula. 8th Annual Workshop on Economics with Heterogeneous Interacting Agents (WEHIA), oral presentations, Kiel, Germany, 29–31 May 2003, <http://www.bwl.uni-kiel.de/vwlinstitute/gwrp/wehia>.
67. P.Gopikrishnan, M.Meyer, L.A.N.Amaral, H.E.Stanley, Inverse cubic law for the distribution of stock price variations, *The European Physical Journal B*, 1998, vol. 3, no. 2, p. 139–140.
68. M.M.Dacorogna, U.A.Muller, R.J.Nagler, R.B.Olsen, O.V.Pictet, A geographical model for the daily and weekly seasonal volatility in the foreign exchange market, *Journal of International Money and Finance*, 1993, vol. 12, no. 4, p. 413–438.
69. D.Kashchiev, *Nucleation: Basic Theory with Applications*, Butterworth-Heinemann, 2000, 529 p.
70. V.Eremeev, I.Rasca, F.Paladi, The size impact on evolutionary dynamics of agents-clusters. 8th Annual Workshop on Economics with Heterogeneous Interacting Agents (WEHIA), oral presentations, Kiel, Germany, 29–31 May 2003, <http://www.bwl.uni-kiel.de/vwlinstitute/gwrp/wehia>.
71. F.Paladi, V.Eremeev, A Szilard model-based computational study of the evolution of agents-clusters, *Physica A*, 2005, vol. 348, no. 1–4, p. 630–640.
72. M.Khoshyaran, The role of small business based structures in promoting innovation, and creating employment, as compared to oligopolistic based structures. In R.Leombruni, M.Richiardi (Editors), *Industry and Labor Dynamics: the Agent-based Computational Economics Approach*, World Scientific, 2004, p. 350–373.
73. I.Antoniou, V.V.Ivanov, Yu.L.Korolev, A.V.Kryanev, V.V.Matokhin, Z.Suchanecki, Analysis of resources distribution in economics based on entropy, *Physica A*, 2002, vol. 304, no. 3–4, p. 525–534.

74. P.T.Landsberg, Fragmentations, mergings and order: aspects of entropy, *Physica A*, 2002, vol. 305, no. 1–2, p. 32–40.
75. I.Antoniou, V.V.Ivanov, A.V.Kryanev, V.V.Matokhin, M.V.Shapovalov, On the efficient resources distribution in economics based on entropy, *Physica A*, 2004, vol. 336, no. 3–4, p. 549–562.
76. Entropy on the World Wide Web, <http://www.math.psu.edu/gunesch/entropy.html>.
77. J.Gleick, *Chaos: Making a New Science*, New York: Penguin Books, 1988, 368 p.
78. J.Horgan, From complexity to perplexity, *Scientific American*, 1995, vol. 272, no. 6, p. 104–109.
79. J.Kleijnen, Experimental design for sensitivity analysis, optimization, and validation of simulation models. In J.Banks (Editor), *Handbook of Simulation*, New York: Wiley, 1998, cap. 6, p. 173–223.
80. P.W.Anderson, K.J.Arrow, D.Pines, *The Economy as an Evolving Complex System*. SFI Studies in the Sciences of Complexity, Redwood City, CA: Addison-Wesley Longman, 1988, 336 p.
81. W.B.Arthur, S.N.Durlauf, D.A.Lane, *The Economy as an Evolving Complex System II: Proceedings* (Santa Fe Institute Studies in the Sciences of Complexity Lecture Notes), Perseus Books Group, 1997, 600 p.
82. L.Tesfatsion, Introduction to the special issue on agent-based computational economics, *Journal of Economic Dynamics and Control*, 2001, vol. 25, no. 3–4, p. 281–293.
83. L.Tesfatsion, Introduction to the special issue on agent-based computational economics, *Computational Economics*, 2001, vol. 18, no. 1, p. 1–8.
84. L.Tesfatsion, Agent-based computational economics: a brief guide to the literature. In J.Michie (Editor), *Reader's Guide to the Social Sciences*, London: Fitzroy-Dearborn, 2001, vol. 1, preprint 6 p.
85. H.A.Wan, A.Hunter, P.Dunne, Autonomous agent models of stock markets, *Artificial Intelligence Review*, 2002, vol. 17, no. 2, p. 87–128.
86. J.Arifovic, Genetic algorithms and inflationary economies, *Journal of Monetary Economics*, 1995, vol. 36, no. 1, p. 219–243.

87. J.Arifovic, The behavior of the exchange rate in the genetic algorithm and experimental economies, *Journal of Political Economy*, 1996, vol. 104, no. 3, p. 510–541.
88. J.Andreoni, J.H.Miller, Auctions with artificial adaptive agents, *Games and Economic Behavior*, 1995, vol. 10, no. 1, p. 39–64.
89. W.B.Arthur, Designing economic agents that act like human agents: a behavioral approach to bounded rationality, *The American Economic Review*, 1991, vol. 81, no. 2, p. 353–359.
90. W.B.Arthur, Inductive reasoning and bounded rationality, *The American Economic Review*, 1994, vol. 84, no. 2, p. 406–411.
91. D.K.Gode, S.Sunder, Allocative efficiency of markets with zero-intelligence traders: markets as a partial substitute for individual rationality, *Journal of Political Economy*, 1993, vol. 101, no. 1, p. 119–137.
92. G.Weisbuch, A.Kirman, D.Herreiner, Market organization and trading relationships, *The Economic Journal*, 2000, vol. 110, no. 463, p. 411–436.
93. G.Tullock, C.D.Campbell, Computer simulation of a small voting system, *The Economic Journal*, 1970, vol. 80, no. 317, p. 97–104.
94. R.Leombruni, M.Richiardi, Why are economists skeptical about agent-based simulations? *Physica A*, 2005, in press.
95. JAS library, <http://jaslibrary.sourceforge.net/index.html>.
96. N.Gilbert, Open problems in using agent-based models in industrial and labor dynamics. In R.Leombruni, M.Richiardi (Editors), *Industry and Labor Dynamics: the Agent-based Computational Economics Approach*, World Scientific, 2004, p. 401–405.
97. R.L.Trivers, The evolution of reciprocal altruism, *The Quarterly Review of Biology*, 1971, vol. 46, no. 1, p. 35–57.
98. R.Axelrod, W.D.Hamilton, The evolution of cooperation, *Science*, 1981, vol. 211, no. 4489, p. 1390–1396.
99. H.Gintis, S.Bowles, R.Boyd, E.Fehr, Explaining altruistic behavior in humans, *Evolution and Human Behavior*, 2003, vol. 24, no. 3, p. 153–172.
100. L.L.Cavalli-Sforza, M.W.Feldman, *Cultural Transmission and Evolution*, Princeton, NJ: Princeton University Press, 1981, 388 p.

101. R.Boyd, P.J.Richerson, *Culture and the Evolutionary Process*, Chicago: University of Chicago Press, 1988, 340 p.
102. C.J.Lumsden, E.O.Wilson, *Genes, Mind, and Culture: The Coevolutionary Process*, Cambridge, MA: Harvard University Press, 1981, 428 p.
103. H.A.Simon, Altruism and economics, *The American Economic Review*, 1993, vol. 83, no. 2, p. 156–161.
104. D.S.Wilson, L.A.Dugatkin, Group selection and assortative interactions, *The American Naturalist*, 1997, vol. 149, no. 2, p. 336–351.
105. E.Sober, D.S.Wilson, *Unto Others: The Evolution and Psychology of Unselfish Behavior*, Cambridge, MA: Harvard University Press, 1998, 394 p.
106. E.Fehr, U.Fischbacher, Social norms and human cooperation, *Trends in Cognitive Sciences*, 2004, vol. 8, no. 4, p. 185–190.
107. M.Richiardi, F.Paladi, Jesus, Hillel, and the Man of the Street: Moral and social norms in heterogeneous populations, in press.
108. M.Sonnessa, JAS: Java agent-based simulation library, an open framework for algorithm-intensive simulations. In R.Leombruni, M.Richiardi (Editors), *Industry and Labor Dynamics: the Agent-based Computational Economics Approach*, World Scientific, 2004, p. 43–56 (see also, <http://jaslibrary.sourceforge.net>).
109. <http://mathworld.wolfram.com/PochhammerSymbol.html>.