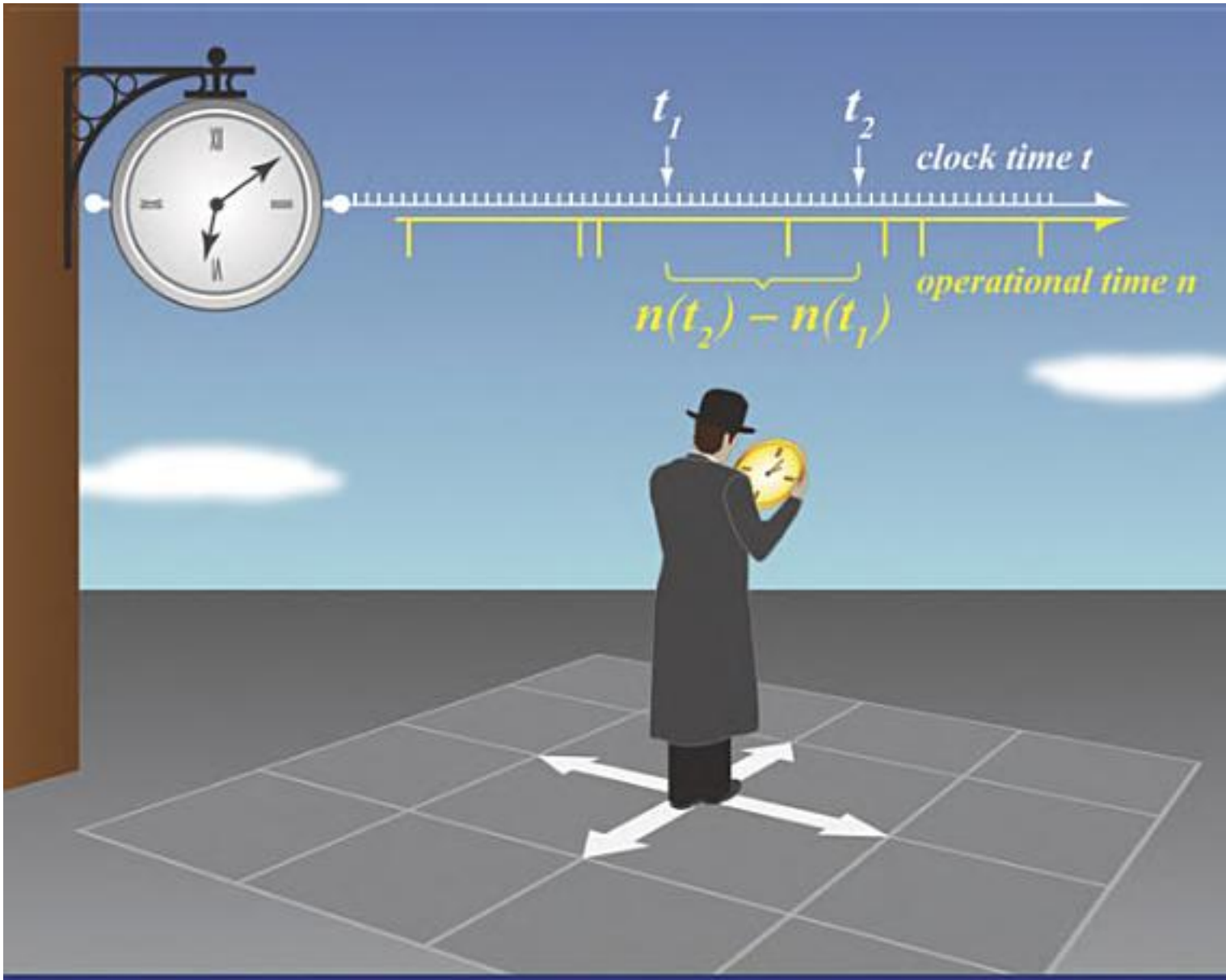

First Steps in Random Walks

From Tools to Applications

J. Klafter and I. M. Sokolov

OXFORD

First Steps in Random Walks: From Tools to Applications, , J. Klafter, I. M. Sokolov, Oxford University Press, 2011, 0199234868, 9780199234868, 152 pages. The name "random walk" for a problem of a displacement of a point in a sequence of independent random steps was coined by Karl Pearson in 1905 in a question posed to readers of "Nature". The same year, a similar problem was formulated by Albert Einstein in one of his Annus Mirabilis works. Even earlier such a problem was posed by Louis Bachelier in his thesis devoted to the theory of financial speculations in 1900. Nowadays the theory of random walks has proved useful in physics and chemistry (diffusion, reactions, mixing in flows), economics, biology (from animal spread to motion of subcellular structures) and in many other disciplines. The random walk approach serves not only as a model of simple diffusion but of many complex sub- and super-diffusive transport processes as well. This book discusses the main variants of random walks and gives the most important mathematical tools for their theoretical description..

Design at Your Service How to Improve Your Business With the Help of a Designer, XĐ“Â©nia ViladĐ“ĐŽs, May 30, 2011, , 162 pages. This book examines the rise in service design as a discipline, reviews its main tools, and proposes a model whereby design can give value in each an devery one of the phases of ....

Aspects and applications of the random walk , George Herbert Weiss, 1994, Mathematics, 361 pages. Both the formalism and many of the attendant ideas related to the random walk lie at the core of a significant fraction of contemporary research in statistical physics. In the ....

Optical spectroscopy of glasses , I. Zschokke, 1986, , 272 pages. .

Fractals in physics proceedings of the Sixth International Symposium on Fractals in Physics, ICTP, Trieste, Italy, July 9-12, 1985, Luciano Pietronero, International Centre for Theoretical Physics, 1986, Science, 476 pages. .

Theory and Evaluation of Single-molecule Signals , , 2008, SCIENCE, 399 pages. This book reviews recently developed theoretical and numerical approaches to deal with optical and mechanical signals from individual molecules. The character of data generated ....

Classical and modern branching processes , Krishna B. Athreya, Peter Jagers, 1997, Mathematics, 336 pages. .

Random and Restricted Walks Theory and Applications, Michael N. Barber, Jan 1, 1970, Mathematics, 176 pages. .

Random Walks of Infinitely Many Particles , PĐ“ĐŽl RĐ“Â©vĐ“Â©sz, Jan 1, 1994, Mathematics, 191 pages. .

Fractional Dynamics Recent Advances, Joseph Klafter, S. C. Lim, Ralf Metzler, 2012, Mathematics, 515 pages. This volume provides the latest developments in the field of fractional dynamics, which covers fractional (anomalous) transport phenomena, fractional statistical mechanics ....

Statistical Thermodynamics and Stochastic Theory of Nonequilibrium Systems , Werner Ebeling, 2005, Science, 329 pages. This book presents both the fundamentals and the major research topics in statistical physics of systems out of equilibrium. It summarizes different approaches to describe such ....

Emergence of Complexity from Synchronization and Cooperation , Elvis L. Geneston, 2008, , 120 pages. The dynamical origin of complexity is an object of intense debate and, up to moment of writing this manuscript, no unified approach exists as to how it should be properly ....

http://eduln.org/9375.pdf
http://eduln.org/11611.pdf
http://eduln.org/14745.pdf
http://eduln.org/17009.pdf
http://eduln.org/9884.pdf
http://eduln.org/928.pdf
http://eduln.org/1437.pdf
http://eduln.org/7611.pdf
http://eduln.org/15014.pdf
http://eduln.org/17296.pdf
http://eduln.org/7875.pdf
http://eduln.org/9421.pdf
http://eduln.org/15675.pdf
http://eduln.org/13331.pdf
http://eduln.org/17381.pdf
http://eduln.org/13851.pdf