



SOLOMON SORIN

Honorary Member, ISRAEL

Professor, Ph.D.

Professor of Physics at the Hebrew University, Jerusalem, Sorin Solomon holds a PhD in theoretical physics from the Weizmann Institute of Science. He is a professor at the Racah Institute of Physics of the Hebrew University of Jerusalem and was previously a Bantrell Research Fellow at Caltech and held a Career Development Chair at the Weizmann Institute. He heads the Lagrange Interdisciplinary Laboratory for Excellence in Complexity in Turin, Italy, and initiated the *European Conferences on Complex Systems* series, and the "European PhD Complexity Schools." Author of more than 200 publications in a variety of journals, including a book on

Microscopic Simulation of Financial Markets From Investor Behavior To Market Phenomena. He has been studying the generic emergence and growth of complex systemic processes in a wide range of social, cognitive and natural systems involving many simple individual components, as a result of various autocatalytic processes (positive feedback loops).

1984 PhD at Weizmann Institute in particles, quarks, super-strings 1982-1985 Bantrell Fellow at Caltech • 1985-1989 Career Development Chair at Weizmann Institute • since 1989: professor at the Hebrew University of Jerusalem in the field of Theoretical Physics. • In the 1990's he became one of the early proponents and world leaders in complexity. In 1996 he introduced Interdisciplinary and Complexity courses and seminars at the Hebrew University. • 1998 – he organized a National Competition of Graduate Multidisciplinary Research. • 2001 Founded in Jerusalem (with Henri Atlan and Irun Cohen) the Center for Complexity Science. • 2004 – he started and headed the Lagrange Interdisciplinary Laboratory for Excellence in Complexity (LIEC) and the Multi-Agent Systems Unit at ISI Torino. The Unit has supported since then about 20 (part-time) interdisciplinary resident PhD students in cooperation with senior joint supervisors from leading universities around the world. • 2004 – he initiated and chaired the first of the series of European Conferences on Complex Systems (ECCS) and the series of European Complexity PhD Schools • 2008 – he organized and chaired in Jerusalem a mega-event attended by about 450 participants from more than 30 countries including the 5th of the ECCS series and the 4th of the PhD Schools (in addition to many satellites, think tanks, public events and institutions showcases). • 2005-2009 - Scientific coordinator of large EU projects: • GIACS (General Integration of the Applications of Complexity in Science) a coordination action coordinating 23 research projects (each with a budget of 1-2 MEUR) and that mobilized thus complexity research groups from 93 European universities • CO3 (Common Complex Collective Phenomena in Statistical Mechanics, Society, Economics and Biology) a large research project for finding the fundamental laws governing the emergence and survival of adaptive collective entities. • DAPHNet (Dynamic Analysis of Physiological Networks) a project aimed at understanding human physiology by integrating in a coherent conceptual structure medical measurements that until then were considered separately.

Chair of the EU Commission Expert Group on Applications of Complexity in Science.

More than 200 refereed publications in leading international journals: *Economics Letters, Vision Research, Cognitive Development, Science, Nature, Bulletin of Mathematical Biology, Bioinformatics, Technological Forecasting and Social Change, Marketing Science, PNAS, Artificial Life, Quantitative Finance, Molecular Immunology* (in addition to *Physics journals PRE, PRL, Physica A,D, EPJB, Europhysics News*, etc)

Books: • *Microscopic Simulation of Financial Markets from Investor Behavior To Market Phenomena*, Academic Press, New York, 2000 • *Why Didn't I Think of It Before? The Anatomy of Successful Products*, (1999) (in Hebrew), Edison: Tel-Aviv • *Cracking the Ad code* – Cambridge University Press, 2009 • *Tackling Complexity in Science: General Integration of the Application of Complexity in Science*, European Communities Commission 2007 • *Complexity - A Science of Thirty*, ISI Torino 2009.

Editorial boards: • *Econophysics Forum*, Universite de Fribourg, since 1999; • *International Journal of Modern Physics C – World Scientific*, since 1999; • *Journal of Statistical Mechanics*, IOP, 2002-2006; • *ComPlexUs - Modelling in System Biology, Social, Cognitive and Information Science*, Karger; • *New Economic Windows Series*, Springer, 2005-2008

Honours: *Bantrell Prize; J.F. Kennedy Prize; Weizmann Prize; Keren Kayemet Prize; Levinson Prize; Honorary Member of the Academy of Romanian Scientists, St. Francis Xavier Prize.*

References: <http://www.sorinsolomon.net/>, <http://www.fet11.eu/programme-committee-member/38-sorin-solomon>

<http://ineteconomics.org/people/sorin-solomon>