



ACADEMY OF ECONOMIC STUDIES, Bucharest
together with: Faculty of Physics - University of Bucharest
INFLPR Bucharest
HYPERION University Bucharest
SBSol Group Bucharest
ALTERNATIVE SCIENCES ASSOCIATION Romania



Daltnis, Sibiu, Romania 1-9 September 2007 Casa Turistilor



ECONOPHYSICS AND COMPLEXITY
International Summer School

**ALTERNATIVE SCIENCES BRIDGING
EDUCATION ANS SOCIETY**

Round Tables and satellite workshops:

- 1. What is really progressive for science and education?*
- 2. New opportunities and tools for business and corporate: Business Intelligence, Emotional Intelligence, Competitive Intelligence*
- 3. Management of risk and crisis*
- 4. Communications for durable development under multiculturalism and globalisation*
- 5. Gender role in science and education in the knowledge based society*

List of Participants

- 1. Key invited speakers*

Names	Affiliation:	Email:
1. Massimo Salzano	Professor University of Salerno Italy	salzano@unisa.it
2. Michael Sonis	Professor Bar-Ilan University Israel	sonism@mail.biu.ac.il
3. Jurgen Mimkes	Professor University of Paderborn Germany	mimkes@physik.uni-paderborn.de
4. Tiziana di Matteo	Associate professor ANU Canberra Australia	tiziana.dimatteo@anu.edu.au
5. Tomaso Aste	Professor Australian National University of Canberra	tomaso.aste@anu.edu.au
6. Wolfgang Ecker-Lala	Dipl.eng.Math-Up.Com Vienna Austria	wolfgang.ecker-lala@math-up.com
7. Stefan Thurner	Professor Medical University Vienna, Austria	thurner@univie.ac.at
8. Etta Mimkes	Children psychotherapist Paderborn Germany	ettamimkes@gmx.de
9. Alla Sonis	Professor Bar-Ilan University Israel	sonism@mail.biu.ac.il

2. Invited speakers

Names	Affiliation:	Email:
1. Bulinski Mircea	Senior lector University of Bucharest	Mircea_bulinsky@yahoo.com
2. Combat Nicolas	General manager CEFORA CORPORATE	Nicolas@cefora.ro
3. Costea Carmen	Professor ASE Bucharest Faculty of Commerce	Carmen.costea@com.ase.ro
4. Gheorghiu Anca	Vice Rector Hyperion University Bucharest	Anca.gheorghiu@gmail.com
5. Gheorghiu Anda	Lawyer PhD at OMBUDSMAN Romania	Andagheorghiu@yahoo.com
6. Ionescu Sorina	Journalist The Economic Tribune Bucharest	Colibry_ro@yahoo.com
7. Nicolae Mariana	A/Professor ASE Bucharest Chancellor Faculty of REI	Mariananicolae2004@yahoo.com
8. Pistol Luminita	Professor Spiru Haret University Bucharest	Prolu2001@yahoo.com
9. Popescu Constantin	Professor ASE Bucharest Dean Faculty of Economics	decanat@ecg.ase.ro, costicapopescu@yahoo.com
10. Scarlat Luminita	Director SBSol Group Bucharest	Luminita.scarlat@sistec-sbsol.ro
11. Stanculescu Gabriela	Professor ASE Bucharest Dean Faculty of Commerce	Gabriela.stanculescu@com.ase.ro;
12. Tais Ioana	Dipl.ec.Hyperion University Bucharest	ioana.tais@yahoo.com
13. Tachiciu Laurentiu	Professor ASE Bucharest Chair, Faculty of Commerce	Ltachiciu@ase.ro
14. Tasnadi Alexandru	Professor ASE Bucharest D/Dean Faculty of Economics	Relationistul@yahoo.com

3. Students:

Nume și prenume	Affiliation:	Adresa de e-mail
1. Caiazza Giuseppina student	University of Salerno Italy	Caiazza @unisa.it
2. Mihoreanu Larisa - PhD researcher	University of Evry Paris, France	lmihoreanu@yahoo.com
3. Parziale Anna - PhD researcher	University of Salerno Italy	Parziale@unisa.it
4. Sessa Mario student	University of Salerno Italy	Sessa @unisa.it
5. Sorrentino Angela student	University of Salerno Italy	Sorrentino @unisa.it
6. Stanzione Elvira student	University of Salerno Italy	Stanzione @unisa.it
7. Andrei Ionut Relu- PhD student	INFLPR Bucharest	andreirelu@yahoo.co.uk
8. Aristotel Marina student	Cosmote Bucharest	marina_xpl@yahoo.co.uk
9. Constantinescu Simona student	ASE Bucharest Faculty of CIG	sim02mona1986@yahoo.com
10. Ciutea Andra student	ASE Bucharest Faculty of Economics	andra_ciutea@yahoo.com
11. Craciun Florenta dipl.economist	INFLPR Bucharest	florentacraciun@yahoo.com
12. Cristea Andrei - PhD student	Hyperion Univ. Bucharest	cristeaandm@yahoo.com
13. Culev Iuliana student	ASE Bucharest Faculty of CIG	pacey_iuly@yahoo.com
14. Dugan Cosmin - PhD student	Faculty of Medicine and Pharmacy Bucharest	dugcosmin@yahoo.com
15. Gherman Cosmin student	ASE Bucharest Faculty of Commerce	gherman_cosmin@yahoo.com
16. Iordache Margareta dipl.economist	INFLPR Bucharest	margaretai@yahoo.com
17. Iordache Nicoleta highshool student	INFLPR Bucharest	margaretai@yahoo.com
18. Marin Ioana-Maria student	ASE Bucharest Faculty of REI	oannamarin@yahoo.com
19. Maxim Claudiu student	ASE Bucharest Faculty of REI	cla_scorpio@yahoo.com
20. Moise Mariana student	ASE Bucharest Faculty of REI	mmaryroses@yahoo.com
21. Neagu Catalina student	ASE Bucharest Faculty of REI	catalina_delana@yahoo.com
22. Neagu Mihaela student	ASE Bucharest Faculty of REI	mihaela26iulie@yahoo.com
23. Neagu Oana student	ASE Bucharest Faculty of REI	catalina_delana@yahoo.com
24. Paun Mihaela student	ASE Bucharest Faculty of REI	mihaelap06@yahoo.co.uk
25. Popescu Irina student	ASE Bucharest Faculty of Commerce	ipopescq@yahoo.com
26. Sarghe Alexandru student	ASE Bucharest Faculty of Commerce	alexandrusarghe@yahoo.com
27. Scarlat Irina student	ASE Bucharest Faculty of REI	irina_cruela@yahoo.com
28. Scripcaru Diana student	ASE Bucharest Faculty of CIG	diana_krta@yahoo.com
29. Simhas Corina student	ASE Bucharest Faculty of Economics	corina_simhas@yahoo.com
12. Stanciu Angela dipl. eng.PhD	INFLPR Bucharest	stanciu@inflpr.ro
30. Tais Cristian student	Hyperion University Bucharest	cristian.tais@yahoo.com
31. Voinea Alexandra student	ASE Bucharest Faculty of Marketing	alexavoinea@yahoo.com

COMMITTEES:

a. Scientific Committee

- Prof. Dr. Carmen Costea - Academy of Economic Studies, Bucharest, Romania
- Senior Lect. Dr. Mircea Bulinski University of Bucharest Faculty of Physics
- Drd. Andrei Ionut Relu INFLPR Bucharest

b. Program Committee

- Senior Lect. Dr. Mircea Bulinski - University of Bucharest, Romania
- Prof. Dr. Alexandru Tasnadi, Deputy Dean Academy of Economic Studies, Bucharest, Romania
- Prof. Dr. Constantin Popescu Dean Faculty of Economics Academy of Economic Studies
- Prof. Dr. Viorel Lefter - Vice-rector, Academy of Economic Studies, Bucharest, Romania
- Prof. Dr. Ion Stancu - Vice-rector Academy of Economic Studies, Bucharest, Romania
- Prof. Dr. Gabriela Stanciulescu - Dean Faculty of Commerce A.S.E. Bucharest, Romania
- Prof. Dr. Mihail Pascu INFLPR Bucharest

c. Organizing Committee

- Res .PhD. Andrei Ionut Relu - I.N.F.L.P.R. Bucharest, Romania
- Prof. Dr. Anca Gheorghiu vice-rector Hyperion University Bucharest, Romania
- Claudiu Maxim student Faculty of REI A.S.E. Bucharest, Romania
- Alexandra Voinea student Faculty of REI A.S.E. Bucharest, Romania
- Alexandru Sarghe student Faculty of Commerce A.S.E. Bucharest, Romania
- Cosmin Gherman student Faculty of Commerce A.S.E. Bucharest, Romania
- Irina Popescu student Faculty of Commerce A.S.E. Bucharest, Romania

Accommodation: Hotel CASA TURISTILOR Paltinis at 32 kms distance of SIBIU

Rates:

- Single room (one bed): 112 RON/per night BB
- Twin Room, Single Occupancy: 123 RON/per night BB
- Twin Room, Twin Occupancy: 154 RON/per night BB
- Meals: 78 RON per day per person coffee breaks (18 RON) separated
- Official dinner: 69.95 RON
- Accommodation costs quoted are inclusive full option and GST and are quoted in RON.

Travel information:

Located in the middle of the country, at the intersection of the roads that connect the historical Romanian territories, **Sibiu** has been and still remains a bridge for the circulation of material and spiritual values. Product of the Romanians, Saxons ("Sachsen") and Hungarians living together, the civilization created here, in the southern Transylvania, was a basic component of the European civilization. You can reach Sibiu very easily by car, by train or by plane http://www.sibiu.ro/index_en.php.

Paltinis (Hohe Rinne) <http://www.sibiu.ro/en/paltinis.htm> is a tourist resort built by Siebenburgischer Karpatenverein in 1894. Situated at 35 Km from Sibiu, Paltinis is the highest (1440 m altitude), and the oldest resort in Romania. Its beautiful location, fresh air, and numerous hiking opportunities, have made Paltinis a favorite for everyone. The resort includes 4 hotels, 6 chalets and 17 villas for tourists, many restaurants, bars and shops.

A large residential area was developed in the last couple of years.

Philosopher Constantin Noica's grave is at Schit Church on the road to Sibiu. The house where he spent his last years, Noica House reveals more of his life and work.

From Paltinis is very easy to reach the main points on the mountains around.

The red-dot trail leads northwest toward Cheile Cibinului (5 Km)

The red-cross-red trail follows an unpaved road for part of the way to P. Batrâna (Old Woman Peak), at 1911 m. Red-strip trail for 25 Km to the Cindrel peak (2244 m) is the more difficult one, but more visually rewarding experience.

Participants may prefer to arrive by plane (international airport Bucharest Otopeni - Henri Coanda). A fast bus (783) could bring you in Bucharest (Piata Romana) from where you can go by trolleybus 86, 87 (1.2 RON) to the Northern Railway Station and take the train to Sibiu.

Weather: Average for September High 20-24 C degrees, Low 10-14 C degrees Precip. 10-25%

International diplomatic information: www.mae.ro

National Currency: ROL and RON 1 RON= 10,000 ROL and 1 Euro= 3.1 RON

INTERNATIONAL KEY INVITED SPEAKERS

In alphabetical order

TOMASO ASTE

1st-4th September 2007

Romania, Sibiu, Paltinis, Casa Turistilor

Phone:



Professor at the Australian National University, Canberra

Contact information

E-mail: tomaso.aste@anu.edu.au

++ 61 (0)2 61252846

Fax: ++ 61 (0)2 61250732

Address: Applied Math. RSPHysSE, ANU, Australia

Website: <http://www.rspphysse.anu.edu.au/~tas110>

Education

February 1994 - Ph.D. Politecnico di Milano. (2nd year at the Imperial College, London).

Thesis: "Effect of geometrical and topological constraints on the formation, evolution and functional properties of disordered cellular systems". Supervisor: Prof. Dario Beruto

February 1990 - Ms Degree in Physics, University of Genova, with mark 110/110.

Thesis: "A model for high Tc superconductivity induced by antiferromagnetic fluctuations". Supervisors: Prof. Enrico Galleani d'Agliano and Prof. Franco Napoli.

Other qualifications

March 1998 - Qualification as Professor, in French Universities: "Qualification aux fonctions de professeur des université"

March 1998 - Qualification as assistant Professor, in French Universities: "Qualification aux fonctions de maître de conférences".

Awards and distinctions

1996 Marie Curie Individual Fellowship;

1994 University of Genoa, post-graduate Individual Fellowship;

1991 Bachelor Boncompagni-Ludovisi Foundation, Fellowship.

Publications and patents

- Book (1): "The Pursuit of Perfect Packing" (Institute of Physics Ed. 2000); a book about packing problems and disordered granular systems that recounts the story of the solution in 1998 of the long standing "Kepler problem" and addresses many topics ranging from soap bubbles to atomic structures
- Scientific Publications in international journals with referees (>70)
- Patents (2)
- Copyrights(2)

Memberships and recognitions

From May 06 - Member of the European Physical Society

From July 2005 - Elected member of the scientific committee of the AEMMG Association pour L'Etude de la Micromécanique des Milieux Granulaires.

Jan 04 - Founding member and Coordinator of the Australian Marie Curie Fellowship Group (www.mariecurie.org/au/)

Jun 01 - Founding member of the Researcher association "ARIA" (Association of Researchers in Australasia for Cooperation in S&T with Italy)

From Feb. 1996 - Member of the International Association "Marie Curie Fellowship"

From Feb. 1990 - Associate member of the INFM (The National Institute for the Physics of Matter, Italy)

March 1997 Best Talk Prize, at the International Conference "Shape Modeling and Applications" Aizu, Japan.

From 2000, Expert Evaluator (ref: ex2002B072055, 2002-) for the V and VI framework programme projects of the European Commission and ERC projects.

Editorial activity

1st-9th September 2007

Romania, Sibiu, Paltinisi, Casa Turistilor

Guest Editor, for the special issue of *Physica A* "Econophysics Colloquium", 2006

Guest Editor, for the topical issue of the "No Worries: Trends in Econophysics" on *Econophysics*, 2006

Guest Editor, for the special issue of *Physica A*, "Materials and Complexity", 2004

Research:

Tomaso Aste's research mainly concerns the study of complex materials and complex systems by using geometrical and topological investigation tools within the framework of a statistical mechanics approach. Recent research interests include: Granular Matter; Packings; Complex Systems; Econophysics; Science of Networks; Glasses. These different topics are unified by a common aim: the search for fundamental mechanisms underneath the formation of complex structures where an organized disorder emerges.

TIZIANA DI MATTEO



Position: Queen Elizabeth II Fellow: Level D (Assoc.Professor)

Institute address: Applied Mathematics - Research School of Physical Sciences,
Australian National University, Canberra 0200, AUSTRALIA.
Telephone number: +61 (0) 2 61250166.
Fax number: +61 (0) 2 61250732.
E-mail address: tdm110@rsphysse.anu.edu.au
tiziana.dimatteo@anu.edu.au
Web Page: <http://www.rsphysse.anu.edu.au/~tdm110/>

Academic Qualifications:

- 10-02-1999 PhD in Physics, Dipartimento di Fisica - Università di Salerno, Italy.
- 14-07-1994 BSc (Hons) in Physics (110/110 Cum Laude), Dipartimento di Fisica Teorica - Università di Salerno, Italy.

Main Research Interests:

My present main research interest is on "Complex Systems" and "Econophysics": the application of methods from statistical physics, the physics of complex systems and science of networks to macro/micro-economic modeling, financial market analysis, time series analysis, social problems and biological systems.

Other research interests are:

- Granular materials (from 2001).
- Numerical simulations of diffusive processes for the analysis of the magnetic properties in new materials (from 1999 to 2003).
- Magnetic Properties of High-Tc Superconductors, Josephson Junction networks, Superconducting technological devices (from 1996 to 2003).
- Strongly Correlated Electronic Systems and High-Tc Superconductivity (from 1994 to 1997).

Selected publications:

1. A.V Anikeenko, N.N. Medvedev, T. Di Matteo, G. Delaney and T. Aste, "Delaunay simplex analysis of the structure of equal sized sphere packings", Chap. 2 in *Lecture Notes in Complex Systems, Granular and Complex materials*, Edited by T. Aste, T. Di Matteo and A. Tordeillas (World Scientific, Singapore, 2007).
2. T. Aste and T. Di Matteo, "Nanomeric architectures: emergence of efficient non-crystalline atomic organization in nanostructures", Chap. 2 in "Nanostructure control of materials", Edited by R. H. J. Hannink and A. J. Hill (Woodhead Publishing Limited Cambridge, 2006).
5. M. Bartolozzi, C. Mellen, T. Di Matteo, T. Aste, "Multi-scale correlations in different futures markets", *European Physical Journal B* 58 (2007) 207-220.

6. T. Aste, T. Di Matteo, M. Saadatfar, T.J. Senden, M. Schroter, Harry L. Swinney, "An invariant distribution in static granular media", *cond-mat/0612063*, *Europhysics Letters* 79 No 2 (2007) 24003.

JÜRGEN MIMKES



Universität Paderborn, Germany
 E-mail: mimkes@physik.uni-paderborn.de;
 Web-site: www.uni-paderborn.de

Short CV

- After studies of physics in Goettingen, Germany he worked in semiconductor research at the Universities of Berlin and Clausthal, Germany, in Rolla, Missouri and College Park, Maryland, USA.
- He taught physics and solid state thermodynamics in Paderborn, Germany from 1977 until 2004.
- He was the chairman of the physics department from 1991 to 1993.
- In 1992 he became engaged in application of thermodynamics to German-Turkish integration problems, to Protestant-Catholic aggression in Northern Ireland and to the war in Bosnia.
- He started lectures in "politics and thermodynamics" and "thermodynamic concepts in socio-economic systems".
- In 2001 he was foundation member of the workgroup on "Socio-Economic Systems" in the German Physical Society.
- Since 2005 he is prof. emeritus at University Paderborn, Germany.

Selected publications

- J. Mimkes, M. Lüblers, H. H. Thomas: Thermophysical Properties of Cubic Elements, *Thermochimica Acta* 245 (1994) 1-19;
- J. Mimkes: Binary Alloys as a Model, *J. Thermal Anal.* 43 (1995) 521-537;
- D. J. As, D. Schikora, A. Greiner, M. Lüblers, J. Mimkes, K. Lischka: p- and n- type cubic GaN epilayers on GaAs, *Phys. Rev. B* 54 Rapid Communications (1996) R11 118;
- D. J. As, A. Greiner, M. Lüblers, J. Mimkes, M. Hankeln, K. Lischka and D. Schikora: Hall-Effect Measurements on stoichiometrically grown GaN epilayers on GaAs Substrates, 23rd Int. Conf. on the Physics of Semiconductors, Berlin, p. 509, World Scientific Publ. Co. Singapore, 1996;
- J. Mimkes, M. Wutting: Diffusion and Phasediagram in Binary Alloys, *Thermochimica Acta* 281S (1996) 1-9.

WOLFGANG ECKER-LALA

CEO



MATH-UP.COM
 Landesstrasse 58
 A-3441 Ranzelsdorf
 E-Mail: wolfgang.ecker-lala@math-up.com
 Mobile: 0043 699 11 50 34
 Website: <http://www.math-up.com/>

- 1974 - 1982: Bundesrealgymnasium Wien VII with final examination (excellent success)
- 1982 - 1989: study of Technical Mathematics (branch of study: mathematics for economics, planning and optimization) with final examination (excellent success)
- 1989 - 1994: Software developer at Alcatel Austria AG
- since 1994: IT-Consultant and consultant of statistics, mathematical optimization, numerical mathematics, financial mathematics, software development

CONSULTING

MATH-UP steht für Methodenkenntnisse auf dem neuesten Stand der Wissenschaft. Wir zeichnen uns dabei durch den pragmatischen Einsatz von methodischen Werkzeugen aus.

Wir vereinen Kompetenzen aus folgenden Gebieten, deren Verfahren wir schlagkräftig und problemgerecht zum Einsatz bringen:

- Qualitätskontrollplanung, Stichprobenplanung und Versuchsplanung
- Monte-Carlo-Simulation, Risikosimulation und computerintensive Verfahren
- Business Intelligence (Data Warehouse, OLAP, Data Mining)
- Test- und Schätzverfahren, klassisch oder bayesianisch
- Zeitreihen- und Risikoanalyse, ökonomische Verfahren
- Multivariate Verfahren
- Stochastische Prozesse und Lebensdaueranalysen
- lineare Modelle, nichtlineare Modelle, Modelle zur Analyse allgemeiner diskreter Strukturen
- Optimierungsverfahren
- numerische Approximationsverfahren
- Prognosemodell für Gewährleistungsvoraussagen
- Verfahren für Berechnung der technischer Zuverlässigkeit von Systemen
- Verfahren aus dem Bereich „Operations Research“

Entsprechend Ihren Wünschen, kann die Implementierung mittels gängiger statistischer Programmpakete erfolgen. Ebenso bieten wir die Möglichkeit zur Entwicklung individueller Softwarelösungen bis hin zu Bereitstellung von Tools in Ergänzung zu standardmäßig vorhandenen Office-Paketen.

Unser Unternehmen ist in der Lage, nahezu alle statistischen Fragestellungen professionell und der individuellen Situation angepaßt zu lösen. Unsere Leistung umfasst dabei den gesamten Prozess von der Fragestellung bis hin zur Lösung und Implementierung. Gerne unterbreiten wir Ihnen in einem persönlichen Gespräch ein Angebot.

COACHING

- Transparenz ist für MATH-UP das Kriterium, an dem sich seriöses Coaching messen lassen muss.
- Wir legen in der Bearbeitung statistischer bzw. mathematischer Fragestellungen großen Wert auf die nachvollziehbare Darstellung des Lösungsprozesses.
- Entsprechend den jeweiligen Anforderungen bieten wir unseren Klienten mathematisches Coaching zu einer Vielzahl von Themen an.

ENGINEERING

- MATH-UP steht für eine lösungs- und leistungsoptimierte Kombination von Rechenperformance und menschlichem Know-How.
- MATH-UP berät Unternehmen beim Aufbau statistischer Strukturen bzw. auf dem Gebiet des „Operations Research“.
- Das Angebot reicht dabei von Personalberatung über Personalschulungen bis hin zur Ausstattung von Hochleistungsrechnern oder Rechenclustern mit mathematischen Programmen.
- Der strategische Einsatz von Analyseprogrammen erlaubt uns die zielgerichtete, transparente und flexible Lösung Ihrer Aufgaben.
- Hintergrund sind eine breite Erfahrung in der Anwendung aller gängigen mathematischen Software-Pakete, die detaillierte Kenntnis unterschiedlicher Hochsprachen sowie Expertenwissen in Techniken der parallelen und symmetrischen Programmierung.
- Die Mitarbeiter von MATH-UP zeichnen sich durch langjährige Erfahrung in der Administration von großen Netzwerken und Großrechnern mit diversen Betriebssystemen aus. Dieses Fundament ermöglicht den effektiven und effizienten Einsatz der technischen Mittel in Bezug auf die Problemstellung.



MASSIMO SALZANO

Director of the International Center of Complexity

Department of Economics and Statistics University of Salerno, Via Ponte don Melillo, 1 84084

Fisciano Salerno Italy

Email: salzano@unisa.it

Web-site: www.dise.unisa.it/docenti/salzano.htm

1st-9th September 2007

Romania, Sibiu, Paltinis, Casa Turistilor

Current Position: Professor of Public Finance University of Salerno, Italy; Environmental Economics University of Salerno, Italy

Research Interests

- Complexity in Economics
- Chaos Theory
- Social Simulation
- Fuzzy systems
- Neural Networks
- Public finance

Academic Background and Work Experience

- Visiting Student, Institute of Social and Economic Research (I.S.E.R.) University of York 1977
- Visiting Lecturer in Advanced Public Finance University of Roskilde Denmark 1996-1997
- Invited Lecturer Summer School Econophysics and Complexity, Navodari, Romania 2-9 Sept 2005
- Professor of Public Finance, University of Salerno 1996-present

Research Projects and Grants

- 1994-1997 General Co-ordinator of Tempus Joint European Project T_JEP_08536
- 2000-2002 Local Co-ordinator of Italian Project CNR "Strumenti quantitative di previsione in finanza pubblica: simulazione e reti neurali".
- 2003-2006 General Co-ordinator of Italian Project "Scienza e Tecnologia nella Società della Conoscenza: Economia e complessità Fondo per gli investimenti della Ricerca di Base (FIRB)"
- 2004-2006 Local Co-ordinator of "Realizzazione dell'infrastruttura per l'e-Science"-PON 2004-2006-Misura II.2-Azione C
- 2005-2006 General Co-coordinator of International Master in Economics & Complexity, organized with University of Barcelona le Università di Barcelona and Roskilde
- 2004-2007 Local Co-coordinator of international project GIACS (General Integration of the Applications of Complexity in Science) NEST-2003-Path-1 "Tackling Complexity in Science" with Sorin Solomon, Università di Israele

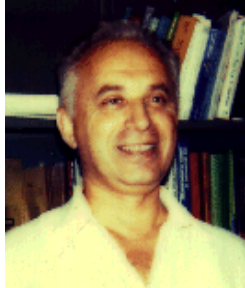
Refereeing and Editorial Activity

- Series Editor of New Economic Windows, by Springer
- General Editor of Interdisciplinary Review Economics & Complexity
- Referee for Journal of Economic Dynamics and Control
- Referee for Journal of Artificial Societies and Social Simulation

Publications in the last five years

◆ Un esercizio di Simulazione Fiscale Multidimensionale: L'Irap e la Dit, XIV Riunione Scientifica SIEP 4-5 ottobre 2002 (www.ecople.org); ◆ Optimal non-linear Income Taxation and Heterogenous Agents' Preferences, Riunione Scientifica SIEP 4-5 ottobre 2002 (www.ecople.org); ◆ Attualità del Pensiero di Ernesto D'Allergo alla luce della moderna teoria della scienza: l'irreversibilità degli effetti, in Ernesto D'Allergo e l'Evoluzione della Scienza delle Finanze Italiana, (a cura di D. Da Empoli), Febbraio 2003, Gangemi Editori, ISBN 88492-375-6; ◆ Globalization, Complexity and Holism - a new research strategy, in globalization and welfare, in Globalization and Welfare Bent Greve and Jesper Jespersen, (eds.) Roskilde University Press, 2003/4, ISBN 87-7867-272-4; ◆ Globalization, Complexity and Holism of Italian School of Public Finance, Working paper 3.135, DISES, Università di Salerno, Ottobre 2003; ◆ Economics: a Complex Windows (in collaborazione con Alan Kirman) Springer-Verlag Berlino, 2005; Conference Proceedings NEW2004 Complexity Hints for Economic Policy University of Salerno, Italy, 16-17-18 September 2004 (a cura di); ◆ Una simulazione Neo-Keynesiana ad agenti eterogeni, in Modelli per la Complessità. La simulazione ad agenti in Economia (a cura di P. Terna, R. Boero, M. Morini, M. Sonnensha), Il Mulino, 2005; Complexity Hints for Economic Policy, (in collaborazione con David Colander), Springer Verlag Berlin.

MICHAEL SONIS



Department of Geography
Bar-Ilan University
Ramat-Gan 52100, Israel
Tel: (+972-3) 531-8773
Fax: (+972-3) 344622
E-mail: sonism@mail.biu.ac.il
Website: <http://www.geog.uiuc.edu/people/sonis.html>

Michael Sonis is Professor of Geography, at Bar-Ilan University, Israel, and Distinguished research Professor, University of Illinois.

Michael Sonis is Emeritus Professor of the Department of Geography, Bar-Ilan University, Ramat-Gan, Israel. He specializes in modeling socio-spatial dynamic processes, applications of the chaos theory, multi-regional input-output tables, and application of mathematical models to the social studies. He is the author and co-author of several books and 250 research papers.

Short CV

- Received Ph.D. from Moscow State University in 1967.
- First came to the University of Illinois in 1986 as a Fulbright and George A. Miller visiting Professor.
- Collaborates with the Regional Economics Applications Laboratory in several projects, including interregional trade models and the changing economic structure of the Midwest.
- Specialist in modeling socio-spatial dynamic processes, applications of the chaos theory, multi-regional input-output tables, and application of mathematical models to the social studies.
- Author and co-author of several books and 250 research papers.

Books:

<http://www.amazon.com/exec/obidos/search-handle-url/002-9216376-6952004?%5Fencoding=UTF8&search-type=ss&index=books&field-author=Michael%20Sonis>

STEFAN THURNER



Complex Systems Research Group, HNO (Head)
Medizinische Universität Wien 1
Währinger Gürtel 18-20,
A-1090 Vienna, Austria

Santa Fe Institute
1399 Hyde Park Road
Santa Fe, NM 87501, USA

Phone: +43 1 40400-2099 (-3332 fax)
Email: thurner@univie.ac.at
Website: www.meduniwien.ac.at/complex-systems

Date of Birth: February 1969

Place of Birth: Innsbruck, Austria

Nationality: Austrian

Languages: German, English, Spanish, (French), (Italian)

Professional skills

- Habilitation (Theoretical Physics), Vienna University of Technology, 2001
- Dr. rer. soc. oec. (PhD in Financial Economics), University of Vienna, 2001 (honors)
- CCEFM program in finance 1998-2000
- Dr. techn. (PhD in Theoretical Physics), Vienna University of Technology, 1995 (honors)
- Magister rer. nat. (MS in Theoretical Physics), University of Vienna, 1993 (honors)

Career History

- External Professor at Santa Fe Institute (from July 2007)
- Fellow at the Collegium Budapest (from March 2007)
- Associate Professor at Medical University Vienna (2004-present)
- Associate Professor (a.o. Universit"atsprofessor, tenure) at University of Vienna (2001-2004)
- Tenure track position (Universit"atsassistent) at University of Vienna (1999-2001)
- Postdoctoral Position at Vienna University of Technology, Vienna (1998-1999)
- Member of NuHAG, Institute of Mathematics, University of Vienna (1997-present)
- Research Associate at Boston University, Boston (1996-1997)
- Postdoctoral Position at Humboldt University, Berlin (1996)
- Guest researcher at Columbia University, New York (1996), Universidad de Zaragoza, Zaragoza, Spain (1995), Columbia University, New York

Scientific Interests

- Complex Systems: (1) Bioinformatics (2) Network theory (3) Evolutionary processes (4) Entropy formulations (5) Fractal time series analysis
- Life Sciences: (1) Reconstruction of gene regulatory networks (2) Control and analysis of biological rhythms (3) Cell motility
- Numerical Mathematics: (1) Wavelet analysis (2) Dimension processes (3) Fractal harmonic analysis
- Econophysics: (1) Stochastic calculus (2) Arbitrage pricing (3) Banking regulation
- Particle Physics: Topology of Quantum Gauge Fields

Publications/Patents

- About 100 publications in journals like Physical Review Letters, Physical Review D and E, Nuclear Physics B, J Quantitative Finance, Neuroimage, J Pathology, Europhysics Letters, Histochemical Cell Biology, Physica A, Applied Bioinformatics or Physical Letters. Publications cover quantum chromodynamics, statistical mechanics of complex systems, medical- and biophysics, network theory, stochastic processes, fractal timeseries, financial models
- Holding one patent, one patent pending

Conferences

- About 20 invited talks and lectures at international conferences and summer schools. About 100 talks at conferences, workshops and seminars

Reviews/Mass Media

- Der Standard, Suche nach dem Selbstbewusstsein, October 18 2006
- News, Die kreativsten Köpfe, September 21 2006
- Der Standard, STANDARD-Interview: Ich sitze zwischen allen Stühlen, May 24/25 2006
- Profil News Magazine, Portrait Complex Systems Research Group, March 27 2006
- Universum Magazin, Auf dem Weg zur Systembiologie, December Issue 2005
- Der Standard, Genies im Clusterland, nicht im Kömmertein, November 14 2005
- Datum, Mathematik der Macht, September Issue 2004
- Gegenworte, Vom Mekka zur Denkfabrik, Spring Issue 2004
- Der Standard, Eine kleine Lücke, ein grosser Kollaps, April 26 2004

1st-9th September 2007

Romania, Sibiu, Paltinis, Casa Turistilor

Alternative Sciences bridging education and society

International Summer school and satellite workshops

- Austrian National Television ORF, Modern Times, December 5 2003
- ORF science online: November 2003, WWTF fördert zehn Life Science-Projekte
- Austrian National Television ORF, Modern Times, November 7 2003
- Profil News Magazine, September 2003, Portrait of Stefan Thurner
- ORF science online: April 2002, Fraktale Geometrie in der Krebsforschung
- Austrian National Broadcast ORF 1, Dimensionen, Welt der Wissenschaft, February 28 2000
- ÄrzteWoche 25: June 1999: Fraktale Prozesse als Prognosefaktor
- Austrian National Broadcast ORF 1, Dimensionen, Welt der Wissenschaft, November 6 1998
- Physical Review Focus: September 15 1998, Separating the Good Hearts from the Bad
- Profil: March 30 1998, Infarkt Mathematik
- UniSci: February 19 1998, Wavelet Analysis Of Heartbeat Spots Congestive Heart Failure
- Science Now: February 6 1998, Cardiology by the Numbers

Prizes

- WWTF Life Science Award 2003 (2003)
- Research Stipend of the Austrian Ministry of Science, BMWFK (1995)
- Vienna University Prize (1994), awarded by the "Gewerbliche Wirtschaft, Wien" shared with M. Feurstein and H.G. Feichtinger

Funding (Project Leader)

- Austrian Science Fund FWF Project P19132 (2006-2009)
- Austrian Science Fund FWF Project P17621 (2004-2007)
- WIZ/OEAD: Bilateral Project: Slovenia-Austria SI-AT/04-05/01
- WWTF Project LS139 (2004-2007)
- Austrian Science Fund FWF Project P16022 (2002-2004)
- Austrian National Bank Project P8584 (2000-2003)
- Austrian Scientific Community P065984 (2000)
- Austrian Scientific Community P065094 (1998-1995)

PROGRAM

DAY 1. Saturday, 1st of September 2007

- 13:00-17:00 Registration for the summer school
- 16:30-17:00 Coffee break
- 17:00-17:40 Official welcome: What is really progressive in education and society (Carmen Costea, Constantin Popescu, Mircea Bulinski)

1st-9th September 2007

Romania, Sibiu, Paltinisi, Casa Turistilor

Alternative Sciences bridging education and society

International Summer school and satellite workshops

- 17:40-18:10 **Communication in a world of diversity; its importance for research and education**
Speaker: Mariana NICOLAE
- 18:10-19:00 **Introduction to Calculus based Economic theory (I)**
Key invited Speaker: Juergen MIMKES
- 19:10-22:30 **Brainstorming Meeting: plenary session with welcome cocktail**
Moderators: Mariana NICOLAE, Laurentiu TACHICIU, Tiziana di MATTEO, Luminita SCARLAT
Chair: Laurentiu TACHICIU
- 21:00-22:30 **Welcome cocktail**

DAY 2. Sunday, 2nd of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-10:45 **Lecture 1 on Econophysics and Complexity: Introduction to information based networks**
Key invited speaker: Tomaso ASTE
- 10:45-11:00 **Coffee break (I)**
- 11:00-12:45 **Tutorial 1: plenary discussions and applications: Filtering information in Complex Systems**
Moderator: Tiziana di MATTEO, Mircea BULINSKI
- 12:45-14:00 **Lunch**
- 14:00-16:30 **Workshop 1: The complex approach of dreams in economics and the Economics of dreams**
Speaker: Alexandru TASNADI
- 17:00-17:30 **Coffee break (II)**
- 17:00-19:00 **Femina Caff and Alternative Sciences Association**
Discussants: Carmen Costea, Anca Gheorghiu, Tiziana di Matteo, Etta Mimkes, Mariana Nicolae, Alla Sonis, Anna Parziale, Luminita Scarlat, Anda Gheorghiu, Luminita Pistol.
Chair: Anca GHEORGHIU
- 20:00-22:00 **Diner with conclusion of the day**

DAY 3. Monday, 3rd of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-10:45 **Lecture 2 on Econophysics and Complexity:**
Key invited speaker: Massimo SALZANO
- 10:45-11:00 **Coffee break (I)**
- 11:00-12:45 **Tutorial 2: plenary discussions and applications**
Moderators: Tomaso ASTE and Juergen MIMKES
- 12:45-14:00 **Lunch**
- 14:00-16:30 **Workshop 2: New opportunities and tools for business and corporate: SAP Solutions**
Speaker: Luminita SCARLAT SBSol Group
- 16:30-17:00 **Coffee break (II)**
- 17:00-19:00 **Business Caff and Tutorial on BI and SAP in practice : Risk Management, Strategic Enterprise Management; Business Planning Simulation; Off-line SAP scenarios**
Moderator : Wolfgang ECKER-LALA, Luminita Scarlat
- 19:00-21:00 **Official Diner**

DAY 4. Tuesday, 4th of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-14:00 **One day trip and Itinerant Brainstorming Meeting „What is really progressive in education and society: the role of culture and communication in education and developing a durable society”**
Moderators: C. Costea, Etta Mimkes, Alex.Tasnadi, C.Popescu, M.Bulinski, Mariana Nicolae, L.Pistol - trip to Sibiu to see the City of Sibiu including Brukenthal Museum and participate at the Cheese Festival
- 12:00-13:00 **Lunch in the city**
- 17:30-20:00 **First round table: Alternative Sciences bridging education and society; the role of New economics (the dream of economics as creative economics versus Economics of dreams) (I) plenary session back at Casa Turistilor**
Moderators: Constantin POPESCU, Mariana NICOLAE, Alex. TASNADI.
- 19:00-21:00 **Diner with conclusions of the day**

1st-4th September 2007

Romania, Sibiu, Paltinis, Casa Turistilor

DAY 5. Wednesday, 5th of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-10:45 **Lecture 3 on Econophysics and Complexity:** The emergence of economic cooperation: How the choice of your partners solves the prisoners dilemma on dynamic networks. Theory and applications
Key invited speaker: Stefan THURNER
- 10:45-11:00 **Coffee break (I)**
- 11:00-12:45 **Tutorial 3:** plenary discussions and applications
Moderator: J. MIMKES, Anna Parziale
- 12:45-14:00 **Lunch**
- 14:00-16:30 **Workshop 3:** Creative economics: a complex approach of labor and education inside a sound organisation
Speaker: Constantin POPESCU
- 17:00-17:30 **Coffee break (II)**
- 17:00-19:00 **Scientists' Calf** - round table managed by Michael Sonis, Massimo Salzano, Tiziana di Matteo, Stefan Thurner, Tomaso Aste, Anna Parziale, Constantin Popescu
Chair: Massimo SALZANO
- 19:00-21:00 **Diner with conclusions of the day**

DAY 6. Thursday, 6th of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-10:45 **Lecture 4 on Econophysics and Complexity:** Evolution of Complexity and Mathematical Models inspired by empirical regularities of Socio-Economic and Behavioral Sciences.
Key invited speaker: Michael SONIS
- 10:45-11:00 **Coffee break (I)**
- 11:00-12:30 **Tutorial 4 ;** plenary discussions and applications
Moderator: Stefan THURNER
- 12:30-13:30 **Lunch**
- 13:30-18:00 **Trip to Dumbrava Sibului to visit The Village Museum and popular techniques**
- 18:00-18:30 **Coffee break (II)**
- 18:30-20:00 **Academic Calf**
Chair: Michael SONIS
Discussants: Massimo Salzano Tomaso Aste, Mircea Bulinski, Stefan Thurner, Constantin Popescu, Alexandru Tamadi, Carmen Costea
- 20:00-21:30 **Diner with conclusions of the day.**

DAY 7. Friday, 7th of September 2007

- 07:00-08:30 **Breakfast**
- 08:45-10:45 **Lecture 5 on Econophysics and Complexity:** Multi-scaling analysis in Finance; The Generalized Hurst exponent approach and its application to financial data
Key invited speaker: Tomaso ASTE and Tiziana di MATTEO
- 10:45-11:00 **Coffee break (I)**
- 11:00-12:30 **Tutorial 5** plenary discussion on students topics
Chairs: Juergen MIMKES and Wolfgang ECKERLALA
- 12:30-13:30 **Lunch**
- 14:00-16:30 **Workshop 4:** An introduction into datawarehousing and business intelligence
Speaker: Wolfgang ECKER-LALA
- 17:00-17:30 **Coffee break (II)**
- 17:00-19:00 **Students' Calf** - round table on BI as a controlling mechanism in enterprises; Managing the risk (application managed by Carmen Costea)
Discussants: Caiazza Giuseppina, Sessa Mario, Sorrentino Angela, Stanzione, Elvira, Alex. Sarfhe, Claudiu Maxim, Alexa Voinea, Cosmin Gherman, Cosmin Dugan.
Chair: Wolfgang ECKER-LALA.
- 19:00-21:00 **Diner with conclusions of the day**

DAY 8. Saturday, 8th of September 2007

- 07:00-08:45 *Breakfast*
- 08:45-10:45 *Introduction to Calculus based Economic theory (II)*
Key invited Speaker: Juergen MIMKES
Applications on all lectures per teams coordinated by all lectures (revision of lectures)
Chair: Juergen MIMKES
- 10:45-11:00 *Coffee break (I)*
- 11:00-12:30 *Applications on all lectures per teams coordinated by all lectures (revision of lectures)*
Chair: Tiziana di MATTEO
- 12:30-14:00 *Lunch*
- 14:00-16:30 *The second round table: Quo vadis education and society? plenary session* Chair: Tomaso ASTE
Moderators: Tiziana di Matteo, Massimo Salzano, Juergen Mimkes,
Michael Somis, Wolfgang Eckerlala
- 16:30-17:00 *Coffee break*
- 17:00-19:30 *Students examination*
- 19:30-21:00 *Diner with conclusions of the day*

DAY 9. Sunday, 9th of September 2007

- 07:00-08:30 *Breakfast*
- 09:00-11:00 *Official Closing of the Summer school Econophysics and Complexity Formal Evaluation with*
Granting the certificates participation mentioning 5 transferable credit units.
- 11:00-12:00 *Lunch*
- *Farewell and see you in 2008 trip back to Bucharest via the Olt Valley*

Usefull links:

- <http://www.sibiu.ro/turism/en/around.htm>
- <http://www.sibiu.ro/turism/en/etno.htm>
- http://www.scpaltinis.com/sites/cai_de_acces_eng.htm
- http://www.scpaltinis.com/sites/cazare_eng.htm
- http://www.cazari.ro/Casa_Turistilor_16_din_Paltinis_Sibiu.htm