

**Curriculum Vitae**  
**Sorinel Adrian Oprisan**

2000 Lakeshore Drive  
Apt. E206, UNO Box 1108  
New Orleans, LA 70148, U.S  
Phone (504) 280 - 7621  
E-mail [soprisan@uno.edu](mailto:soprisan@uno.edu)  
Web page <http://www.cns.uno.edu/~soprisan>

**EDUCATION**

- 2004 M.Sc. Computer Science, University of New Orleans, New Orleans, U.S., (to be completed) December 2004
- 1998 Ph.D. Theoretical Physics, "Al.I.Cuza" University of Iasi, Romania, June 1998
- 1987 B.Sc. Physics, "Al.I.Cuza" University of Iasi, Romania, June 1987

**APPOINTMENTS**

- 08/2001 - present Research Specialist  
Departments of Psychology, University of New Orleans,  
New Orleans, U.S.
- 01/2001 – 07/2001 Postdoctoral Research Associate  
Department of Psychology and Department of Physics, University of  
New Orleans, New Orleans, U.S.  
Associate Professor  
Department of Theoretical Physics, "Al.I.Cuza" University of Iasi,  
Romania
- 08/1999 – 01/2001 Postdoctoral Researcher  
Department of Psychology, University of New Orleans, New Orleans,  
U.S.  
Associate Professor  
Department of Theoretical Physics, "Al.I.Cuza" University of Iasi,  
Romania
- 02/1999 - 08/1999 Lecturer  
Department of Theoretical Physics, "Al.I.Cuza" University of Iasi,  
Romania
- 11/1990 – 02/1997 Assistant Professor  
Department of Theoretical Physics, "Al.I.Cuza" University of Iasi,  
Romania

**GRANTS**

- Pending approval
- Distributed decision-making system based on coordination of mobile agents without direct communication, U.S. Department of Energy  
Dr. Sorinel Adrian Oprisan (PI)
- Efficient learning algorithm for team of mobile agents self-organization using temporally correlated memory, U.S. National Science Foundation  
Dr. Sorinel Adrian Oprisan (PI)
- Distributed decision-making algorithm for efficient routing and network balancing, U.S. National Science Foundation  
Dr. Sorinel Adrian Oprisan (PI)
- Phase resetting and phase locking in neural circuits, U.S. National Science Foundation  
Dr. Carmen C. Canavier (PI), and Sorinel Adrian Oprisan (Co-PI)
- Complex Systems Biology of Cancer Integrated with Molecular Imaging and Diagnosis, U.S. National Cancer Institute  
Dr. Ionel C. Baianu (PI), and Dr. Sorinel Adrian Oprisan (Co-PI)
- Current  
01/2002-01/2005
- Nonlinear phenomena in far from equilibrium complex systems. Romanian Ministry of Education and Research, CNCSIS 582/2002  
Dr. Margareta Ignat (PI), and Dr. Sorinel Adrian Oprisan (Co-PI)
- Former  
01/1998-01/2000
- Chemical mechanisms involved in tumor growth, Romanian Ministry of Research and Technology, grant nr. 4118-GR/30.11.1998  
Dr. Petre T. Frangopol (PI), and Dr. Sorinel Adrian Oprisan (Co-PI)
- 01/1998-01/2001
- Theoretical modeling of nonlinear phenomena complex systems with short and long range interactions, Romanian Ministry of Education and Research, CNCSIS 79/1998;12/1999;178/2000  
Dr. Margareta Ignat (PI), and Dr. Sorinel Adrian Oprisan (Co-PI)

**RESEARCH EXPERIENCE**

- Thermodynamics and Statistical Physic
- Analytical and computational method for the q-index evaluation in nonextensive Tsallis statistics.
- Theoretical Condensed
- Analytic and numerical models for diffusion limited aggregation in

Matter	2D and 3D. Surface roughness correlation with the interaction potential exponent via fractal dimensions spectrum.
Nonlinear Dynamics, Chaos and Fractals	Model synthesis algorithm from experimental data. Delay embedding dimension extraction based on Hidden Markov Models. Proportional control of unstable periodic orbits and chaos.
Self-Organized Complex Systems	Analytic and numeric solutions for the evolution equations of mobile agents with spatial and temporal-based decision. Proved the convergence and established efficiency criterion for learning rule. Computational model of carcinoma.
Artificial Intelligence and Mobile Robots	Metaheuristic approach on hard NP problems based on AntSystem. Analytic and numeric solution to unsupervised sorting problem. Learning and decision-making algorithm implemented in software (mobile) agents. Efficient routing algorithms using ant-like-agents for network balancing.
Computational Neuroscience	Analytical and numerical study of small neural networks. Analytical method for the phase resetting curve with weak/strong coupling. Stability criterion for m:n entrainment. Electrophysiology data analyses for hybrid neural networks and model prediction.
Computer Science	Pattern recognition and artificial texture generation based on ant-like agents algorithm, bioinformatics.

## TEACHING EXPERIENCE

2004-2005	General Physics (undergraduate level), Department of Physics, University of New Orleans, New Orleans, U.S.
2003-2004	Introductory Physics (undergraduate level), Division of Mathematics and Sciences, Delgado Community College, New Orleans, U.S.
2000-2001	General Physics (undergraduate level), Department of Physics, University of New Orleans, New Orleans, U.S.
1990-1999	Graduate level courses: Theory of Nonlinear Phenomena, Chaos Theory and Chaos Control, Nonlinear Dynamics and Self-Organization Phenomena, Nonequilibrium Thermodynamics and Statistical Physics Undergraduate level courses: Thermodynamics, Statistical Physics, Classical Mechanics, Electrodynamics, Theoretical Physics, Programming language - PASCAL Department of Physics, "A.I.Cuza" University of Iasi, Romania

- FELLOWSHIPS** June-July 1997, Tempus Fellowship, Department of Plasma Physics, University of Innsbruck, Innsbruck, Austria
- MERITS AND AWARDS** Distinguished in the international acclaimed Marquis Who's Who in the World, 5th edition, 1999 as well as in the latest edition, New Jersey, U.S.  
The Neuroscience Center of Excellence Travel Award, March 2003
- PROFESSIONAL MEMBERSHIPS** The American Physical Society (2002)  
The New York Academy of Science (2001)  
EU/ME the European chapter on metaheuristics (2000)  
The New England Complex System Institute (1999)  
The Society for Neuroscience (1999)  
Balkan Physics Union (1990)  
The Romanian Physical Society (1990)
- SERVICE ACTIVITIES**  
Journal Reviewer FEBS Letters (2004-present); Biophysical Journal (2003-present); The Scientific Annals of the "Al.I.Cuza" University of Iasi, Romania (1998-present)
- American Biographical Institute, Research Board of Advisers Member (since 2002)  
The American Hellenic Educational Progressive Association (member since 2003)

**SELECTED PUBLICATIONS****BOOKS**

Oprisan S.A., Ignat M., and I. Bena, Thermodynamics Exercises (544 pages in Romanian), "Al.I.Cuza" University Press, Iasi, 2002.

Oprisan S.A., and Ignat M., Numerical methods of theoretical physics I. Thermodynamics and statistical physics, (in Romanian), "Al.I.Cuza" University Press, Iasi, 1999.

Singurel Gh., and Oprisan S.A., Quantum optics I (in Romanian), "Al.I.Cuza" University Press, Iasi, 1997.

**SCIENTIFIC PAPERS PUBLISHED IN PEER-REVIEWED JOURNALS**

Oprisan S.A., A.A. Prinz, and C.C. Canavier, Phase resetting and phase locking in hybrid circuits of one model and one biological neuron, *Biophysical Journal*, (in press) 2004.

Oprisan S.A., Task Oriented Functional Self-Organization of Mobile Agents Team: Memory Optimization Based on Correlation Feature, Lecture Notes in Computer Science, Springer, (in press) 2004.

Oprisan S.A., and C.C. Canavier, Stability criterion for a two-neuron reciprocally coupled network based on the phase and burst resetting curves, *Neurocomputing (in press)*, 2004.

Oprisan S.A., and C.C. Canavier, Stability analysis of entrainment by two periodic inputs with a fixed delay, *Neurocomputing* 52-54:59-63, 2003.

Oprisan S.A., V. Thirumalai, and Carmen C. Canavier, Dynamics from a time series: Can we extract the phase resetting curve from a time series?, *Biophysical Journal*, 2003, 84:2919-2928, 2003.

Oprisan S.A., and P.T. Frangopol, Self-organization of mobile agents team. The memory registers optimization using correlation feature, *Romanian Journal of Physics* 48:247-255, 2003.

Oprisan S.A., and P.T. Frangopol, Optimization of memory task allocation in stochastic functional self-organized sorting performed by cooperative autonomous mobile agents, *Romanian Journal of Physics*, 2003 48:247-255, 2003.

Oprisan S.A., An application of the least-squares method to system parameters extraction from experimental data, *Chaos*, 12 (1): 27-32, 2002.

Oprisan S.A., and Carmen C. Canavier, The influence of limit cycle topology on the phase resetting curve, *Neural Computation*, 14 (5), 2002.

Oprisan S.A., Theoretical approach on microscopic bases of stochastic functional self-organization. Quantitative measures of the organizational degree of the environment, *Journal of Physics A: Mathematical & General*, 34: 10013–10028, 2001.

Oprisan S.A., Optimization of the Memory Weighting Function in Stochastic Functional Self-Organized Sorting Performed by a Team of Autonomous Mobile Agents, *Complex Systems*, 13, no. 3: 205-225, 2001.

Oprisan S.A., and Carmen C. Canavier, Stability Analysis of Rings of Pulse-Coupled Oscillators: The Effect of Phase Resetting in the Second Cycle After the Pulse Is Important at Synchrony and For Long Pulses, *Differential Equations and Dynamical Systems* 9, no. 3-4, 243—258, 2001.

Oprisan S.A., and Frangopol P.T., Pattern formation in an electrochemical oscillatory system: an analytic and numerical survey, *Revue Roumaine de Chimie*, 11, 2001.

Oprisan S.A., A. Ardelean, and P.T. Frangopol, Self-organization and competition in the immune response to cancer invasion. A phase-orientated computational model of oncogenesis, *Bioinformatics*, 16(2): 96-100, 2000.

Giuraniuc C.V., and Oprisan S.A., Short range and long range coupling in stochastic functional self organization, *Physics Letters A* 259 (5): 334-338, 1999.

Amarie D., Oprisan S.A., and Margareta Ignat, Random walk systems behavior based on record function, *Physics Letters A* 254 (1-2): 112-118, 1999.

Oprisan S.A., and Frangopol P.T., A new model for metal-passivation process. The electrochemical interface of the Ni/H<sub>2</sub>SO<sub>4</sub> system investigated by nonlinear dynamics methods, *Revue Roumaine de Chemie*, 44 (4): 313-318, 1999.

Oprisan S.A., Convergence properties of the functional self-organization stochastic algorithm, *Journal of Physics A: Mathematical and General* 31, 8451-8463, 1998.

Oprisan S.A., Tarus B., and Frangopol P.T., The mesoscopic approach to chemical mechanism of tumor growth (III), *Romanian Journal of Physics*, 43 (1-2): 595-601, 1998.

Oprisan S.A., The analytic periodic solutions for domain-wall motion, *Physical Review B* 56 (1): 79-83, 1997.

Oprisan S.A., The classical gases in the Tsallis statistics using the generalized Riemann zeta functions, *Journal de Physique I France* 7, 853-862, 1997.

Oprisan S.A., Margareta Ignat, and C.St. Badescu, The Krylov Analytic Method Applied to Bloch Domain-Wall Periodic Motion, *Balkan Physics Letters*, 5 Suppl., p. 1586, 1997.

Oprisan S.A., The Markov Random Fields Formalism Applied to Lattice Dynamical Systems with Memory, *Balkan Physics Letters*, 5 Suppl., p. 1590, 1997.

Badescu C.St., Ignat Margareta, and Oprisan S.A., Some aspects of the nonlinear dynamics of magnetic domain wall, *Sensor and Actuators A-Physical* 59, 352-356, 1997.

Badescu C.St., Ignat Margareta, and Oprisan S.A., On the Chaotic Oscillations of Bloch Walls and Their Control, Chaos, *Solitons and Fractals*, 8 (1): 33-43, 1997.

Oprisan S.A., V. Holban, and B. Moldoveanu, Functional self-organization performing wide-sense stochastic processes, *Physics Letters A* 216, 303-306, 1996.

Oprisan S.A., and Margareta Ignat, The control of chaos by periodic perturbations. A theoretical approach, *Journal of Technical Physics* (former Acta Physica Polonica B), 37 (3-4): 399-403, 1996.

Oprisan S.A., The complete interaction mechanism for the heat conduction equation in canonical stochastic theory, *Romanian Journal of Physics* 39 (2): 123-132, 1994.

#### **OTHER PUBLISHED SCIENTIFIC PAPERS**

Oprisan S.A., and Carmen C. Canavier, The Structure of Instantaneous Phase Resetting in a Neural Oscillator, *InterJournal Complex Systems* (<http://www.InterJournal.org/>), manuscript 386, 2001.

Oprisan S.A., and Ana Oprisan, The convergence optimization technique applied to the functional self-organization algorithm, *Annals of "Al.I.Cuza" University Iasi*, XLIII - XLIV, fasc.2, Solid State and Theoretical Physics, (1997-1998).

Oprisan S.A., and Ana Oprisan, The saddle-node bifurcation and limit cycle transitions in the aquas environment metal passivation reaction, *Annals of "Al.I.Cuza" University Iasi*, XLIII - XLIV, fasc.2, Solid State and Theoretical Physics, (1997-1998).

Oprisan Ana, Oprisan S.A., and Margareta Ignat, The substrate interaction potential dependent thin film growth processes, *Annals of "Al.I.Cuza" University Iasi*, XLIII - XLIV, fasc.2, pp. 215-219, Solid State and Theoretical Physics (1997-1998).

Oprisan Ana, and Oprisan S.A., Monte Carlo simulation of the random and deterministic fractal growth processes, *Annals of the West University Timisoara*, XXXVIII, 1998.

Oprisan S.A., A pattern generation and recognition algorithm using random Markov fields, *Annals of the West University Timisoara*, XXXVI, 49-56, 1997.

Oprisan S.A., The theoretical analysis of convergence properties of the functional self-organization stochastic algorithm, Annals of the West University Timisoara, XXXVI, 57-67, 1997.

Oprisan S.A., The features method applied to clustering dynamics of stochastic functional self-organization model, Annals of the West University Timisoara, XXXVI, 68-83, 1997.

Oprisan S.A., Dynamic reconstruction of lattice structure using random walk with memory, Annals of the West University Timisoara, XXXVI, 57-67, 1997.

Oprisan S.A., About the Kullback entropy applied to the geometrization of the equilibrium thermodynamics, Annals of the West University Timisoara, XXXV, 16-25, 1996.

Oprisan S.A., The Metric Tensor for the Spin Systems in Equilibrium Thermodynamics, Annals of the West University Timisoara, XXXV, 26-32, 1996.

Oprisan S.A., Transition from type 1 to type 0 phase resetting curve in perturbed limit cycle behavior, Annals of "Al.I.Cuza" University Iasi, XLI - XLII, s.I.b. fasc 2 Solid State and Theoretical Physics, 141-146, 1995-1996.

Oprisan S.A., About the conservation equation in stochastic canonical theory, Annals of "Al.I.Cuza" University Iasi, XLI - XLII, s.I.b. fasc 2 Solid State and Theoretical Physics, 131-140, 1995-1996.

Oprisan S.A., Solutions of the Fisher equation in electric field, Annals of "Al.I.Cuza" University Iasi, XLI - XLII, s.I.b. fasc 2 Solid State and Theoretical Physics, 147-152, 1995-1996.

Oprisan S.A., Deterministic description of the stochastic motion, Annals of "Al.I.Cuza" University Iasi, XL, s.I.b. fasc 2 Solid State and Theoretical Physics, 89-92, 1994.

Oprisan S.A., The Kramers-Moyal expansion for the Fokker Planck equation, Annals of "Al.I.Cuza" University Iasi, XL, s.I.b. fasc 2 Solid State and Theoretical Physics, 85-88, 1994.

### **PROFESSIONAL MEETING TALKS AND INVITED LECTURES**

Can coherent macroscopic behavior emerge from random microscopic motion? An agent-based model of swarm intelligence, Lecture at Physics Department, University of New Orleans, New Orleans, April 4, 2002 (invited lecture).

Advantages and limits of biologically inspired models in artificial intelligence. Stochastic functional self-organized sorting in autonomous mobile agents dynamics, Lecture at Electrical Engineering and Computer Science Department, Tulane University, New Orleans, February 1, 2002 (invited lecture).

From neuron to behavior. An artificial neural network model of quadrupedal locomotion. Lecture at the Psychology Department, University of New Orleans, September 2000 (invited lecture).

The Structure of Instantaneous Phase Resetting in a Neural Oscillator, International Conference on Complex Systems (ICCS), May 21-26, 2000 in Nashua, NH, U.S. (plenary lecture).

Global dynamic of tumor growth via mesoscopic dynamics, The first International Biosciences Days, Antalya, Turkey, 20-24 April 1999 (invited lecture).

The control of chaos by periodic perturbations. A theoretical approach, International Conference on Nonlinear Dynamics, Chaotic and Complex Systems, Zakopane, Poland, 7-12 November, 1995 (plenary lecture).

Contributions to professional meetings with published abstracts

Oprisan S.A., Astrid A. Pinz, and C.C. Canavier, Prediction of the phase relationships in and stability of 1:1 phase-locking of reciprocally inhibitory hybrid circuits of two bursting neurons, 34rd Annual Meeting of the Society for Neuroscience, San Diego, California, 23-27 October, 2004.

Oprisan S.A., and C.C. Canavier, Stability criterion for a two-neuron reciprocally coupled network based on the phase and burst resetting curves, Annual Computational Neuroscience Meeting, Baltimore, MD, July 18-20, 2004.

Oprisan S.A., Astrid A. Pinz, and C.C. Canavier, Prediction of the phase relationships in and stability of 1:1 phase-locking of reciprocally inhibitory hybrid circuits of two bursting neurons, 16th Annual Neuroscience Retreat LSUHSC Neuroscience Center of Excellence, New Orleans, April 19, 2004.

Oprisan S.A., and C.C. Canavier, A geometric model for the phase resetting induced by strong inhibitory and excitatory inputs to a bursting neuron, 33rd Annual Meeting of the Society for Neuroscience, New Orleans, Louisiana, 8-12 November, 2003.

Oprisan S.A., and C.C. Canavier, Phase resetting induced by hard presynaptic perturbations, Seventh International Conference on Cognitive and Neural Systems, Boston University, May 28 - 31, 2003.

Oprisan S.A., Astrid A. Pinz, Eve Marder, and C.C. Canavier, Recurrent Maps Method used to predict the Phase-locked Modes in a Hybrid Circuit based on the Phase Resetting Curve, 15th Annual Neuroscience Retreat LSUHSC Neuroscience Center of Excellence, New Orleans, March 1, 2003.

Oprisan S.A., A. Prinz, E. Marder, and C.C. Canavier, Predicting Phase-locked Modes in a Hybrid Circuit from the Phase Resetting Curve, 27<sup>th</sup> Annual Meeting of the Society for Neuroscience, Orlando, Florida, 2-10 November 2002.

Oprisan S.A., V. Thirumalai, E. Marder, and C. C. Canavier, Phase Resetting in Neural Oscillators as a Component of Circuit Analysis, The second Joint Meeting of the IEEE Engineering in Medicine and Biology Society and the Biomedical Engineering Society (<http://www.embs-bmes2002.org/>), 23-26 October 2002, Houston, Texas, U.S.

Oprisan S.A. and C.C. Canavier, Stability Analysis of Entrainment by Two Periodic Inputs With a Fixed Delay, The Annual Computational Neuroscience Meeting (<http://www.neuroinf.org/CNS.shtml> and full paper at <http://www.computersciencepreprints.com>), Chicago, Illinois, July 21-25, 2002.

Oprisan S.A., V. Thirumalai, E. Marder and C.C. Canavier, The phase resetting curve induced by hard perturbations of neural oscillators: A computational method for PRC recovery from a time series, 14<sup>th</sup> Annual Neuroscience Retreat, LSUHSC Neuroscience Center of Excellence, New Orleans, March 3, 2002.

Oprisan S.A., Memory registers optimization in stochastic functional self-organized sorting performed by a team of autonomous mobile agents (<http://ias7.cs.umn.edu/>), The 7th International Conference on Intelligent Autonomous Systems (IAS-7), March 25-27, 2002, Marina del Rey, California, U.S.

Ana Oprisan, Oprisan S.A., and J. Hegseth, Computational solution of liquid-gas interface shapes from the refractions of a defocused grid (<http://www.aps.org/meet/MAR02/>), Annual American Physical Society March Meeting 2002, March 18 - 22, 2002, Indianapolis, Indiana, U.S..

Ana Oprisan, and Oprisan S.A., Fractal measure of compactness in thin film growth process modeled by Metropolis algorithm (<http://www.aps.org/meet/MAR02/>), Annual American Physical Society March Meeting 2002, March 18 - 22, 2002, Indianapolis, Indiana, U.S.

Oprisan S.A., Quantitative measures of organizational degree induced by mobile agents (manuscript available at <http://rutcor.rutgers.edu/~amai/>), Seventh International Symposium on Artificial Intelligence and Mathematics, January 2-4, 2002, Fort Lauderdale, Florida, U.S.



Oprisan S.A., V. Thirumalai, E. Marder, and C.C. Canavier, Phase Resetting Predicted from Time Series Data, 26<sup>th</sup> Annual Meeting of the Society for Neuroscience, San Diego, California, November 2001.

Oprisan S.A. and C.C. Canavier, Analysis of central pattern generator circuits using phase resetting, 25<sup>th</sup> Annual Meeting of the Society for Neuroscience, New Orleans, Louisiana, November 2000.

Oprisan S.A. and C.C. Canavier, A Topological Approach on the Phase Resetting Curve Construction, International Conference on Complex Systems (ICCS) May 21-26, 2000 in Nashua, NH, U.S.

Oprisan S.A., The theory of stochastic functional self-organization, International Conference on Complex Systems (ICCS) May 21-26, 2000 in Nashua, NH, U.S.

Oprisan S.A. and C.C. Canavier, Phase Response Curve via Multiple Time Scale Analysis of Limit cycle Behavior of Type I and Type II Excitability, *Biophysical J.* 78: 218A, 2000.

D. Amariei, Oprisan S.A., and M. Ignat, Stochastic mechanism of functional self-organization, National Physics Conference, Constanta, Romania, 12-14 October 1998.

C. St. Badescu, M. Ignat, and Oprisan S.A., The domain-wall motion with analytic periodic solution, 3<sup>rd</sup> General Conference of the Balkan Physics Union, Cluj, Romania, 2-5 September 1997.

Oprisan S.A., M. Ignat, and C. St. Badescu, The domain-wall motion with analytic periodic solution, 3<sup>rd</sup> General conference of the Balkan Physics Union, Cluj, Romania, 3-5 September 1997

Oprisan S.A., M. Ignat, and C. St. Badescu, The Krylov analytic domain applied to Bloch domain wall periodic motion, 3<sup>rd</sup> General Conference of the Balkan Physics Union, Cluj, Romania, 2-5 September 1997.

Oprisan S.A., Functional Self-Organization Mechanism. A Pattern Generation and Recognition Model, 15th IMACS World Congress 1997 on Scientific Computation, Modelling and Applied Mathematics, August 24-29, 1997, Berlin, Germany.

Oprisan S.A., The Construction of the Analytic Periodic Solution in the Framework of the Multiple Time Scale Method, (<http://www.siam.org/meetings/archives/ds97/ps1.htm>) Fourth SIAM Conference on Applications of Dynamical Systems, May 18-22, 1997, Snowbird, Utah, SUA.

C. St. Badescu, Oprisan S.A., and M. Ignat, Some aspects of the nonlinear dynamics of magnetic domain walls, *The First European Magnetic Sensors and Actuators Conference*, Iasi, Romania, 22-24 July 1996.

Oprisan S.A., Control and synchronization of chaotic oscillations, National Conference of Military Academy *H.Coanda*, Brasov, Romania, Nov. 1996.

Oprisan S.A., and M. Ignat, *The control of chaos by periodic perturbations. A theoretical approach*, International Conference on Nonlinear Dynamics, Chaotic and Complex Systems, Zakopane, Poland, 7-12 November, 1995

## **OTHER PROFESSIONAL MEETINGS**

Ana Oprisan, Oprisan S.A., and M. Ignat, The influence of background interaction potential during thin film growth, Scientific Symposium “*Al.I.Cuza University days*”, Iasi, Romania Oct.1998.

Oprisan S.A., and M. Ignat, Stochastic pattern analysis using features, Scientific Symposium “*Al.I.Cuza University days*”, Iasi, Romania, 19-25 October 1997.

Oprisan S.A., and M. Ignat, The dynamics of self-organizing stochastic systems, Scientific Symposium “*Al.I.Cuza University days*”, Iasi, Romania, 19-25 October 1997.

Oprisan S.A., C. St. Badescu, and M. Ignat, Periodic analytic solution for the domain walls motion, Scientific Symposium “*Al.I.Cuza University days*”, Iasi, Romania, Nov.1996.

Badescu C. St., M. Ignat, and Oprisan S.A., On the chaotic oscillations of Bloch walls and their control, *Symposium on Physics and Technical Physics*, Iasi, Romania, July, 1995.