

Tuesday, August 3, 2004

09:00 – 17:00

Hall D

**Symposium on Anticipative and Predictive Models  
in Systems Science**

**- Invited Papers - Part I –**

Chairs: Daniel M. Dubois, Stig C Holmberg

**Inference of Gene Expression Patterns by Using a Hybrid System Formulation : An Algorithmic Approach to Local State Transition Matrices**

by Dr. J. Gebert, Dr. H. Öktem, Dr S.W. Pickl, Dr. N. Radde, Dr. G.-W.Weber,  
Department of Mathematics, University of Cologne, Cologne, Germany

**On Categorical and Logical Modeling in Multiagent Systems**

by Prof. Jochen Pfalzgraf, Department of Computer Science,  
University of Salzburg, Salzburg, Austria

**A Formal Model of Tripartite Intentional Synapses and a View to Implementation in Multiagent Systems**

by Dr B.Mitterauer, Prof. J.Pfalzgraf, Department of Computer Science,  
University of Salzburg, Salzburg, Austria

**Software Version Space and Incursivity**

by Dr Juan Jesús Torres Carbonell, Secretaría de Estado de Telecomunicaciones y para la  
Sociedad de la Información. Ministerio de Ciencia y Tecnología, Madrid. Spain.

**Algorithmized Theories as Tools for Simulation of Anticipatory Systems**

by Prof. Evzen Kindler, University of Ostrava, Ostrava, Czech Republic

LUNCH BREAK 12:00 –14:00

**Systemic Challenges in Anticipating Anticipation**

by Prof. Stig C Holmberg, Informatics, Mid Sweden University, Östersund, Sweden

**Anticipatory Systems and Modeling in Analytical Dynamics**

by Dr. Péter Béda, HAS-BUTE Research Group on Dynamics of Machines and Vehicles,  
Budapest University of Technology and Economics, Budapest, Hungary

**Some Mathematical Models for Anticipative Systems**

by Prof. Constantin Corduneanu, The University of Texas, Arlington, USA

**What the Functional Calculus Tells About the Possibilities to Express the Future Evolution of a System**

by Dr. Eufrosina Otlacan, Romanian University of Sciences and Arts "Gheorghe Cristea",  
Bucharest, Romania

**Incursive Predictive Control for Stabilizing Chaos Maps**

by Dr Daniel M. Dubois, asbl CHAOS, Centre for Hyperincursion and Anticipation in  
Ordered Systems, Institute of Mathematics, University of Liège, Belgium

Wednesday, August 4, 2004

09:00 – 16:45

Hall D

**Symposium on Anticipative and Predictive Models**  
**in Systems Science**

**- Invited Papers - Part II –**

Chairs: Daniel M. Dubois, Stig C Holmberg

**Philosophical Fundamentals in Creating Scientific Models:**

**Science of Science Popularisation,**

by Prof. Wiktor Adamkiewicz, Gdańsk University of Technology, and  
Gdynia Maritime Academy, Gdynia/ Gdańsk, Poland

**Which Systems Theory is Able to Support a Requisitely Holistic Anticipation and Prediction?**

by Prof. Matjaz MULEJ, Dr Vojko POTOČAN, Dr Bojan ROSI, University of Maribor,  
Faculty of Economics and Business, Maribor, Slovenia

**Applications of Thermodynamic Analysis to Metallurgical Systems**

by Prof. Lidia Cristea, University Politehnica, Bucharest, Romania

**Active Shape Control - A System-Level Nanoscale Inquiry  
for Feasible Biomimetic Modeling**

by Dr Salvatore Santoli, INT – International Nanobiological Testbed Ltd., Rome, Italy

**Application of Double-Cusp Catastrophe Theory to the Physical Evolution of Qualia:  
Implications for Paradigm Shift in Medicine and Psychology**

by Dr Richard Amoroso, Noetic Advanced Studies Institute - Physics Lab, Orinda, USA,

LUNCH BREAK 12:00 –14:00

**Order and Disorder in Atomic Nuclei**

by Dr Domitian G. Popescu, Lab. de Physique Théorique Fondamentale de Paris, France

**A New Relativistic Model of the Gravitational Red Shift in a Strong Gravitational Field,**

by Prof. Branko Novakovic, Dr Dario Novakovic, Dr Alen Novakovic,  
FSB - University of Zagreb, Zagreb, Croatia

**The Gravitational Quantum Theory**

by Dr Gilles Nibart, Laboratoire de Physique Théorique Fondamentale de Paris,  
Coursegoules, France

**Wave Packets, Particles, and Waves : A Granular Conceptual Representation**

Dr Karl Erich Wolff, Mathematics and Science Faculty, Darmstadt University of Applied  
Sciences, Ernst Schröder Center for Conceptual Knowledge Processing, Darmstadt, Germany

**Spatiotemporal Relevant Logic as the Logical Basis for Anticipative and Predictive  
Models in Systems Science**

by Prof. Jingde Cheng, Department of Information and Computer Sciences,  
Saitama University, Saitama, Japan