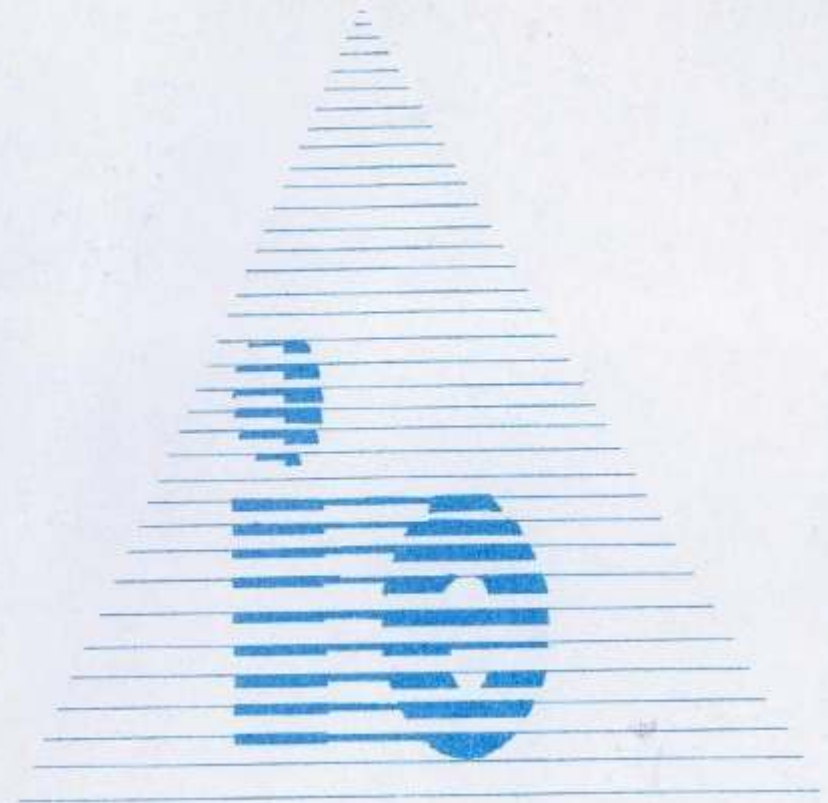
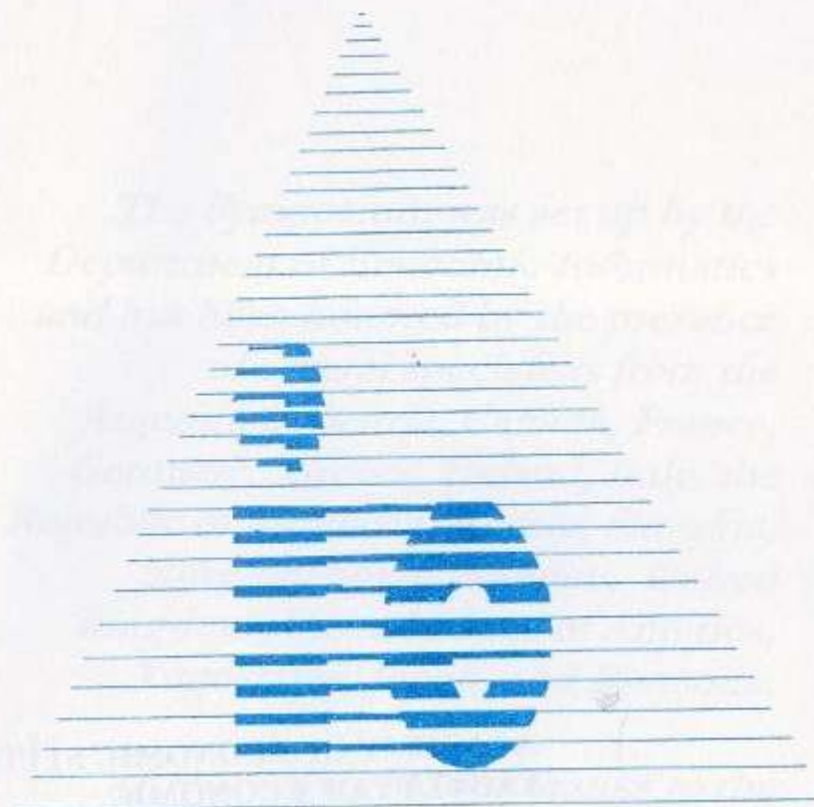




THE 4<sup>th</sup> INTERNATIONAL SYMPOSIUM  
ON ECONOMIC INFORMATICS  
BUCHAREST  
MAY 6-9, 1999

**PROGRAM**



THE 4<sup>th</sup> INTERNATIONAL SYMPOSIUM  
ON ECONOMIC INFORMATICS  
BUCHAREST  
MAY 6-9, 1999

PROGRAM



**ACADEMY OF ECONOMIC STUDIES  
FACULTY OF ECONOMIC  
CYBERNETICS, STATISTICS  
AND INFORMATICS**

**Economic Informatics Department**

15-17 Calea Dorobanților, Bucharest

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+(401)-311.20.66

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*The Symposium was set up by the  
Department of Economic Informatics  
and has been honored by the presence  
of several specialists from the  
Argentina, Austria, Canada, France,  
Germany, Greece, Ireland, Italy, the  
Republic of Moldavia, Russia, Slovakia,  
Slovenia, Spain, Sweden, United  
Kingdom, United States of America,  
Yugoslavia, Japan and Romania.*

*We give our thanks to the  
participants, sponsors, to the press,  
students, to the colleagues of the  
Academy of Economic Studies  
Bucharest, who, by their efforts, skills  
and understanding, contributed to the  
good of the Symposium.*



|                                                                                                                            |           |
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## GENERAL PROGRAM

May, 3-5, 1999, Academy of Economic Studies

16<sup>30</sup> - 19<sup>30</sup> Conferences and workshop for Master:  
*Environnement protection and economical growth,*  
 Finn Forsund, University of Oslo, Oslo, Norway, room 0122

May, 4, 1999, Academy of Economic Studies

18<sup>00</sup> - 20<sup>00</sup> Conferences and workshop for Master:  
*Integration problems in UE,*  
 Lennart Hjalmarsson, University of Gotteborg, Gotteborg, Sweden, room 605

May, 7, 1999, Academy of Economic Studies

9<sup>00</sup> - 11<sup>00</sup> Conferences and workshop for Master:  
*Environnement protection and economical growth,*  
 Finn Forsund, University of Oslo, Oslo, Norway, room 4107

## GENERAL PROGRAM

May, 6, 1999, Academy of Economic Studies

|                                     |                                                                                                                                                    |
|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 9 <sup>00</sup> - 10 <sup>30</sup>  | Official Opening, room 2201                                                                                                                        |
| 10 <sup>30</sup> - 11 <sup>30</sup> | Conference:<br><i>Many-valued Logic: from Coding Theory to Operator Algebras,</i><br>Daniele Mundici, University of Milan, Milan, Italy, room 2201 |
| 11 <sup>30</sup> - 12 <sup>00</sup> | Coffee break                                                                                                                                       |
| 12 <sup>00</sup> - 14 <sup>00</sup> | Proceedings papers                                                                                                                                 |
| 14 <sup>00</sup> - 15 <sup>30</sup> | Lunch                                                                                                                                              |
| 15 <sup>30</sup> - 17 <sup>00</sup> | Proceedings papers                                                                                                                                 |
| 17 <sup>00</sup> - 17 <sup>30</sup> | Coffee break                                                                                                                                       |
| 17 <sup>30</sup> - 19 <sup>00</sup> | Proceedings papers                                                                                                                                 |
| 19 <sup>00</sup> - 19 <sup>30</sup> | Meetings                                                                                                                                           |

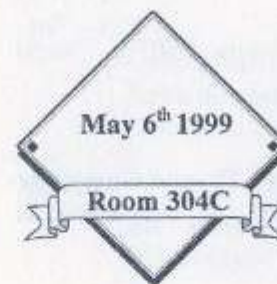
May, 7, 1999

|                                     |                         |
|-------------------------------------|-------------------------|
| 9 <sup>00</sup> - 10 <sup>30</sup>  | Proceedings papers      |
| 10 <sup>30</sup> - 11 <sup>00</sup> | Coffee break            |
| 11 <sup>00</sup> - 12 <sup>30</sup> | Proceedings papers      |
| 12 <sup>30</sup> - 13 <sup>00</sup> | Meetings                |
| 13 <sup>00</sup> - 14 <sup>00</sup> | Sponsors Communications |
| 14 <sup>00</sup> - 15 <sup>30</sup> | Lunch                   |
| 15 <sup>30</sup> - 17 <sup>00</sup> | Proceedings papers      |
| 17 <sup>00</sup> - 17 <sup>30</sup> | Coffee break            |
| 17 <sup>30</sup> - 19 <sup>00</sup> | Proceedings papers      |
| 19 <sup>00</sup> - 19 <sup>30</sup> | Meetings                |



## Activities Distribution (days/hours/rooms)

| No. | Section                                                                                    | Thursday<br>May, 6, 1999               |                                        |                                        | Friday<br>May, 7, 1999                |                                        |                                        |                                        |
|-----|--------------------------------------------------------------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|---------------------------------------|----------------------------------------|----------------------------------------|----------------------------------------|
|     |                                                                                            | 12 <sup>00</sup> -<br>14 <sup>00</sup> | 15 <sup>30</sup> -<br>17 <sup>30</sup> | 17 <sup>30</sup> -<br>19 <sup>00</sup> | 9 <sup>00</sup> -<br>10 <sup>30</sup> | 11 <sup>00</sup> -<br>12 <sup>30</sup> | 15 <sup>30</sup> -<br>17 <sup>30</sup> | 17 <sup>30</sup> -<br>19 <sup>00</sup> |
| 1   | Advanced methods, techniques and instruments for software and informatics systems building | 304                                    | 304                                    |                                        |                                       |                                        |                                        |                                        |
| 2   | Standards, protection and data quality                                                     | 307                                    | 307                                    | 307                                    | 307                                   |                                        | 308                                    |                                        |
| 3   | Teleworking, teleactivities, open systems, parallel processing                             | 305                                    | 305                                    | 305                                    | 305                                   |                                        |                                        |                                        |
| 4   | Project management                                                                         |                                        |                                        |                                        |                                       |                                        | 305                                    | 305                                    |
| 5   | Informatics systems for computer aided decisions in economics and administration           |                                        |                                        |                                        | 308                                   | 308                                    |                                        |                                        |
| 6   | Searching in solutions space; combinatorics                                                |                                        |                                        | 304                                    | 304                                   | 304                                    |                                        |                                        |
| 7   | Data bases and expert systems                                                              |                                        |                                        |                                        |                                       | 307                                    | 307                                    | 307                                    |
| 8   | Information and communication technology in order to increase the economic competitiveness | 308                                    | 308                                    |                                        |                                       |                                        |                                        |                                        |
| 9   | Algebra of logic and applications                                                          | 404                                    | 404                                    | 404                                    | 404                                   | 404                                    | 404                                    |                                        |



## Section 1

### Advanced Methods, Techniques and Instruments for Software and Informatics Systems Building

**Chairman:**  
Horia GEORGESCU

**Secretary:**  
Felix FURTUNĂ

12<sup>00</sup> - 12<sup>15</sup>

**Vers un analyseur syntaxique parallèle**, Isabelle DEBOURGES, Gaetan HAINS, Sylvie GUILLORE LIFO, Orleans, France, Eric de la CLERGERIE, INRIA Rocquencourt, Le Chesnay, France

12<sup>15</sup> - 12<sup>30</sup>

**Parallel Genetic Algorithms for Shared Memory Architectures**, Horia GEORGESCU, Cristina VERTAN, University of Bucharest, Bucharest, Romania

12<sup>30</sup> - 12<sup>45</sup>

**A Distributed Multimedia System of Presentations**, Georgeta DRULĂ, University of Bucharest, Bucharest, Romania

12<sup>45</sup> - 13<sup>00</sup>

**An Applet Server for Developing Java Multi-tier Applications**, Augustin MAN, Centrul de Informatică Aplicată, Cluj, Romania

13<sup>00</sup> - 13<sup>15</sup>

**Freeware Products From Education To Economy**, Tiberiu APA, Ministry of National Education, Bucharest, Romania

13<sup>15</sup> - 13<sup>30</sup>

**A License Manager in a UNIX Network**, Claudiu CHIRU, Naval Academy, Constanta, Romania

13<sup>30</sup> - 13<sup>45</sup>

**Practical Support for the Heuristic Evaluation of Human-Computer Interfaces**, Costin PRIBEANU, National Institute for Research and Developing in Informatics, Romania

13<sup>45</sup> - 14

**A Fast Solver For Linear Systems**, Constantin POPA, Adrian RABAEA, Monica RABAEA, "OVIDIUS" University, Constanța, Romania

14<sup>00</sup> - 15<sup>30</sup>

**B R E A K**

**Chairman:**  
Ioan Odăgescu

**Secretary:**  
Felix FURTUNĂ

15<sup>30</sup> - 15<sup>45</sup>

**An Evaluation of Three Methods for Arbitrarily Located Data Modeling**, Marius Dorian ZAHARIA, University POLITEHNICA, Bucharest, Romania

15<sup>45</sup> - 16<sup>00</sup>

**Solving Multi - Index Transportation Problem by Computer**, Eliodor CONSTANTINESCU, Institutul de Marină Civilă, Constanța, Romania

16<sup>00</sup> - 16<sup>15</sup>

**Object Oriented Model for Video Processing and Video Indexing**, Ion SMEUREANU, Marian DÂRDALĂ, Gabriel ȘUTAC, Academy of Economic Studies, Bucharest, Romania

16<sup>15</sup> - 16<sup>30</sup>

**New Approach of Image Restoration**, Luminița STATE, Pitești University, Romania, Cătălina COCIANU, Academy of Economic Studies, Bucharest, Romania

16<sup>30</sup> - 16<sup>45</sup>

**Collaborative Distributed System, Support For Virtual Trading Ring Implementation**, Cristina MÂNDRUȚĂ, University "OVIDIUS", Constanta, Romania

16<sup>45</sup> - 17<sup>00</sup>

**An Analogical Approach of Resolution**, Cristian KEVORCHIAN, University of Craiova, Craiova, Romania

17<sup>00</sup> - 17<sup>15</sup>

**Evolving Equivalent Parallel Programs**, Conor RYAN, Laur IVAN, University of Limerick, Limerick, Ireland





## Section 2

### Standards, Protection and Data Quality

**Chairman:**  
Dorin IRIMESCU

**Secretary:**  
Eugen POPOVICI

12<sup>00</sup> - 12<sup>15</sup>

**Increasing Competitive Capability Of Software Products Through Global Quality And Marketing**, Tudor BARON, Academy of Economic Studies, Bucharest, Romania, Michel TATOMIR, Siemens, Germany

12<sup>15</sup> - 12<sup>30</sup>

**Design for Testability of Software Products**, Viorel IONESCU, Military Technical Academy, Bucharest, Romania

12<sup>30</sup> - 12<sup>45</sup>

**Considerations About Application of Basic and Logarithmic Poisson Execution Time Models in Software Reliability Estimation**, Mihai POPESCU, Military Technical Academy, Bucharest, Romania

12<sup>45</sup> - 13<sup>00</sup>

**Development for and with Reuse**, Emilia STANCIU, Banc Post, Bucharest, Romania

13<sup>00</sup> - 13<sup>15</sup>

**ISO 9000 Series of Standards-Quality Frame in Software Development**, Laurentiu TEODORESCU, D.G.F.P.C.F.S Constanta, Romania

13<sup>15</sup> - 13<sup>30</sup>

**Increasing Efficiency of Lossless Data Compression Algorithms on Structured Files**, Daniel VERNIS, Pagini Auri, Bucharest, Romania

13<sup>30</sup> - 13<sup>45</sup>

**Optimizing the Economic Decisions Using the Fractal Theory**, Elena ZERFUS, SoftNet, Bucharest, Romania

13<sup>45</sup> - 14<sup>00</sup>

**Embedded Systems Issues on the Turn of the Century**, Dorin IRIMESCU, University "Politehnica", Bucharest, Romania

14<sup>00</sup> - 15<sup>30</sup>

**B R E A K**

**Chairman:**  
Ion IVAN

**Secretary:**  
Eugen POPOVICI

15<sup>30</sup> - 15<sup>45</sup>

**Features on Software Reliability**, Adrian COSTEA, Academy of Economic Studies, Bucharest, Romania

15<sup>45</sup> - 16<sup>00</sup>

**Data Quality Management**, Ion IVAN, Academy of Economic Studies, Bucharest, Romania

16<sup>00</sup> - 16<sup>15</sup>

**Metrics of Software Complexity Based on Instruction Dependency**, Alexandra KARADIMOU, University of Athens, Greece

16<sup>15</sup> - 16<sup>30</sup>

**Project of Optimale Network Topology**, Florian IONITA, Liviu LUNGULESCU, Ministry of Romanian Defense

16<sup>30</sup> - 16<sup>45</sup>

**An Empirical Approach of Determine Web Site Costs**, Paula APREUTESEI, Microsoft, Romania



16<sup>45</sup> - 17<sup>00</sup>

**Building Windows Applications for the Internet Age**, Constantin-Gelu APOSTOL, Academy of Economic Studies, Bucharest, Viorel LUPU, On Line Service SRL, Buzau, Romania

17<sup>00</sup> - 17<sup>30</sup>

**B R E A K**

**Chairman:**  
Victor PATRICIU

**Secretary:**  
Eugen POPOVICI

17<sup>30</sup> - 17<sup>45</sup>

**Audit Techniques for Accounting Computer Systems**, Ion Daniel MICUDA, PricewaterhouseCooper, Bucharest, Romania

17<sup>45</sup> - 18<sup>00</sup>

**Smart-Cards and E-commerce**, Victor PATRICIU, Ion BICA, Military Technical Academy, Romania

18<sup>00</sup> - 18<sup>15</sup>

**Adopting GQM-Based Measurement to Improve Software Processes Development at Information Departament**, Automobile Dacia S.A., Daniel DINU, Automobile Dacia S.A., Colibasi, Romania

18<sup>15</sup> - 18<sup>30</sup>

**The Balanced Scorecard - A Method for Developing and Implementing Performance Measures for Information Technology**, Gabriela Avram, AISTEDA, Alba-Iulia, Romania

18<sup>30</sup> - 18<sup>45</sup>

**The Optimisation of the Software Quality Cost Using Neural Networks**, Ion IVAN, Academy of Economic Studies, Bucharest, Romania

18<sup>45</sup> - 19<sup>00</sup>

**Web Spoofing**, Sergiu FUNIERU, GSI "Optica Romana", Bucharest, Romania



## **Section 2**

### **Standards, Protection and Data Quality**

**Chairman:**  
Mihai POPESCU

**Secretary:**  
Eugen POPOVICI

9<sup>00</sup> - 9<sup>15</sup>

**Principles and Techniques of Distribution of the Cryptographic Keys in Computer Network**, Eugen PETAC, "Ovidius" University of Constanta, Romania

9<sup>15</sup> - 9<sup>30</sup>

**Performability Estimation of Degradable Virtual Assembly Cells**, Alexandru CICORTAS, West University "Vasile Goldis" Arad, Romania

9<sup>30</sup> - 9<sup>45</sup>

**The Correlation Between Classes of Problems and Classes of Data Structures**, Traian IONESCU, Rhone-Poulenc, Romania

9<sup>45</sup> - 10<sup>00</sup>

**Optimisation Techniques for Object-Oriented Languages**, Petru CURTICAPLEANU, The National Bank of Romania, Tg-Mures Branch

**Chairman:**  
Ion IVAN

**Secretary:**  
Eugen POPOVICI

15<sup>30</sup> - 17<sup>00</sup>

**Workshop: WEB Based Business Solutions**



### Section 3

#### Teleworking, Teleactivities, Open Systems, Parallel Processing

**Chairman:**  
Adrian Toia

**Secretary:**  
Carmen STANCIU

12<sup>00</sup> - 12<sup>15</sup>

**TELEWORK In Romania – From Project To Implementation,** Adrian TOIA, WesternIQ, Bucharest, Romania

12<sup>15</sup> - 12<sup>30</sup>

**Statute Of Teleworkers,** Constanta MITU, National Research Institute for Labour, Romania

12<sup>30</sup> - 12<sup>45</sup>

**Distance Education and Internet Technology,** Floarea NASTASE, Academy of Economic Studies, Bucharest, Romania

12<sup>45</sup> - 13<sup>00</sup>

**Distance learning in Higher Education,** Mircea POPOVICI Jr., Norina POPOVICI, "OVIDIUS" University, Constanta, Romania

13<sup>00</sup> - 13<sup>15</sup>

**Broadband Multimedia For Tele-Education Via Satellite,** Ioan ROXIN, IUT Belfort-Montbéliard, France, Nabil AKROUT, California USA

13<sup>15</sup> - 13<sup>30</sup>

**Some Remarks On The Heterogeneous Systems With Applications To E-Commerce,** Ștefan I. NIȚCHI, Faculty of Economics, "Babes-Bolyai" University, Romania

13<sup>30</sup> - 13<sup>45</sup>

**Electronic Commerce: Growth And Impact On The Economy,** Carmen STANCIU, Academy Of Economic Studies, Bucharest, Romania

13<sup>45</sup> - 14<sup>00</sup>

**Multifunctional payment system MagiCash,** Nicolae CIUDIN, Moldova, Chisinau, MobiasBanca, Leonid LAVRENTEV, Moscow, NKT

14<sup>00</sup> - 15<sup>30</sup>

**B R E A K**

**Chairman:**  
Gheorghe DODESCU

**Secretary:**  
Carmen STANCIU

15<sup>30</sup> - 15<sup>45</sup>

**Moyens D'attenuer Les Barrieres Informationnelles Dans Les Entreprises Virtuelles,** Adriana SCHIOPOIU BURLEA, Universite de Craiova, Romania

15<sup>45</sup> - 16<sup>00</sup>

**Organization Of A Secured Information System For A Virtual Entreprise,** F. BIENNIER, J. FAVREL, PRISMa, INSA de Lyon, Lyon, France

16<sup>00</sup> - 16<sup>15</sup>

**Parallel Algorithms for Matrix Multiplication,** Gheorghe DODESCU, Academy for Economic Studies, Bucharest, Romania

16<sup>15</sup> - 16<sup>30</sup>

**Parallel Random Access Machine Model,** Madalina Aura RACEANU, Bucharest, Romania



16<sup>30</sup> - 16<sup>45</sup>

Scalability of Iterative Solutions for Large Linear Systems on Parallel Computers, Bogdan OANCEA, "Artifex" University, Bucharest, Romania

16<sup>45</sup> - 17<sup>00</sup>

Cluster Program A Means Of Determining Hierarchical Classifications Systems, Ion IARCA, Ploiești University, Romania

17<sup>00</sup> - 17<sup>30</sup>

**B R E A K**

Chairman:  
Valentin CRISTEA

Secretary:  
Carmen STANCIU

17<sup>30</sup> - 17<sup>45</sup>

A Parallel Algorithm for Numerical solutions of Growth Models, J. VIGO-AGUIAR, G. SANTOS-GARCIA, University of Salamanca, Salamanca, Spain

17<sup>45</sup> - 18<sup>00</sup>

Integration of Distributed Evolution Programs in Web Environments, Valentin CRISTEA, Gavril GROZA, Florentina POPOVICI, Andrei DRADOI, Sorin CRISTESCU, Ioana COSTEA, Politehnica University of Bucharest, Romania

18<sup>00</sup> - 18<sup>15</sup>

A QFD Approach To Web Site Planning, Adrian MIHALACHE, Ionut Codrin ZOLTI, 'POLITEHNICA' University of Bucharest, Romania

18<sup>15</sup> - 18<sup>30</sup>

Sistemes De Recherche De L'Information Sur Internet, Ion AMARFIU, Académie des Études Economique, Chișinău, République Moldova



### Section 3

**Teleworking, Teleactivities,  
Open Systems, Parallel Processing**

Chairman:  
Adrian VASILESCU

Secretary:  
Carmen STANCIU

9<sup>00</sup> - 9<sup>15</sup>

Secured Communication for Distributed Information System, I.W. KWON, F. BIENNIER, J. FAVREL, PRISMa INSA de Lyon, Informatique 502, France

9<sup>15</sup> - 9<sup>30</sup>

Analysis Of Experimental Data Obtained From The Study Of A LAN, Christos PAPANASTASIOU, Technological Educational Institution of Lamia, Department of Electrical Engineering, 35100 Lamia, Greece

9<sup>30</sup> - 9<sup>45</sup>

LAN Interconnection via an ATM backbone, Fergal DALY, IONA Technologies Ltd. Dublin, Ireland, Seamus O'SHEA, University of Limerick, Limerick, Ireland

9<sup>45</sup> - 10<sup>00</sup>

Multiprotocol Over ATM, Adrian VASILESCU, Academy Of Economic Studies, Bucharest, Romania

10<sup>00</sup> - 10<sup>15</sup>

A Trend in the near future: the transition to 64 - bit Technology and 64 - bit Operating Systems. Advantages and best applications, Radu MARSANU, Academy Of Economic Studies, Bucharest, Romania

10<sup>15</sup> - 10<sup>30</sup>

Proxy Server, Florin V. PILAT, Academy Of Economic Studies, Bucharest, Romania





## Section 4

### Project Management

**Chairman:**  
Marius GURAN

**Secretary:**  
Anton Crețu

15<sup>30</sup> - 15<sup>45</sup>

**Shared Services Center In Informatics and Management**, Dragoș CÂRTU, Price Waterhous Coopers Romania, Ștefan COJANU, ORACLE Romania, Marius GURAN, University Politehnica of Bucharest, Romania

15<sup>45</sup> - 16<sup>00</sup>

**Project Management – an IT topic?**, Mariana MOCANU, University Politehnica of Bucharest, Romania, Carmen SCHUSTER, Savings Banks Foundation for International Cooperation, Germany

16<sup>00</sup> - 16<sup>15</sup>

**Modelling Personnel Recruiting Activity**, Silvia SUMEDREA, "Transilvania" University Brașov, Brașov, Romania

16<sup>15</sup> - 16<sup>30</sup>

**Pollution and Development**, Mihai ROMAN, Monica ROMAN, Academy of Economic Studies, Bucharest, Romania

16<sup>30</sup> - 16<sup>45</sup>

**Building an Information System – Phases and Methodologies**, Doina ROȘCA, University of Craiova, Romania

16<sup>45</sup> - 17<sup>00</sup>

**Aspects of strategic management of the quality in the distributed information systems**, Mihaela CONSTANTINESCU, ROMTELECOM S.A., Bucharest, Romania

17<sup>00</sup> - 17<sup>30</sup>

**B R E A K**

**Chairman:**  
Constanța BODEA

**Secretary:**  
Anton CREȚU

17<sup>30</sup> - 17<sup>45</sup>

**Evolution et traitement des activités informationnelles économiques**, Tudor LEAHU, Université Cooperatiste-Commerciale de Moldova, Chișinău, Moldova

17<sup>45</sup> - 18<sup>00</sup>

**EVPRO – Le Systeme D'assistance Du Decision Dans Les Unites De Constructions**, Radu GAROFEANU, Energoconstructia S.A. Timisoara, Romania

18<sup>00</sup> - 18<sup>15</sup>

**Algorithm For A Budget Problem**, Tatiana TABIRCA, "Transilvania" University of Brasov, Romania

18<sup>15</sup> - 18<sup>30</sup>

**Informational Management – Administration Instrument of Informational Infrastructure in the Republic of Moldova**, Pavel CHIREV, Republican Centre of Informatics, Republic of Moldova, Tamara ZACON, Academy of Economic Studies, Republic of Moldova

18<sup>30</sup> - 18<sup>45</sup>

**TELE\_Project – Experimental Teleworking System for Software Application Development**, Radu COMȘA, MICS Software SRL Suceava, Romania





## Section 5

### Informatics Systems for Computer Aided Decisions in Economics and Administration

**Chairman:**  
Gheorghe SABĂU

**Secretary:**  
Petrișor OPREA

9<sup>00</sup> - 9<sup>15</sup>

An Informatic Application of the System Structure, Constantin BARON, Academy of Economic Studies, Bucharest, Romania, Mihai BARON, S&T Romania SRL Bucharest, Romania

9<sup>15</sup> - 9<sup>30</sup>

Some Considerations about Intelligent Assistants Application in Command Training Simulation Systems Development, Gherasim ZENOVIC, Academy of High Military Studies, Bucharest, Romania

9<sup>30</sup> - 9<sup>45</sup>

La modélisation de la décision commerciale en utilisant l'analyse bayésienne, Dorin LIXANDROIU, L'Université Transilvania, Brasov, Romania

9<sup>45</sup> - 10<sup>00</sup>

On the Budget Exercise Problem, Sabin TABIRCA, "Transilvania" University, Brasov, Romania

10<sup>00</sup> - 10<sup>15</sup>

Applying simulation to investment decisions, Florica LUBAN, Academy of Economic Studies, Bucharest, Romania

10<sup>15</sup> - 10<sup>30</sup>

Generalized Measures Of The Variability In Data Analysis, Gheorghe RUXANDA, Academy of Economic Studies, Bucharest, Romania

10<sup>30</sup> - 10<sup>45</sup>

The Risk Of Financial Stock Investment, Cătălin HUIDUMAC, Academy of Economic Studies, Bucharest, Romania

10<sup>45</sup> - 11<sup>00</sup>

**B R E A K**

**Chairman:**  
Virgil CHICHERNEA

**Secretary:**  
Petrișor OPREA

11<sup>00</sup> - 11<sup>15</sup>

Optimizing The Lines And Flows Of Integral-Type Of Production By Techniques And Methods Using The Concepts Of "Material Production Schedule" (Mps), Virgil CHICHERNEA, Alexandru TĂBUȘCĂ, Romanian-American University, Bucharest, Romania, Niculae RUSU, INFOSIT SA, Bucharest, Romania

11<sup>15</sup> - 11<sup>30</sup>

Critical aspects in Spatial Decision Support Systems in the framework of Public Administration, Angela IONITA, Research Institute for Informatics, Bucharest, Romania

11<sup>30</sup> - 11<sup>45</sup>

Single period selection of portfolio models for the small investor, Constanța Zoie RĂDULESCU, Research Institute for Informatics, Romania, Marius RĂDULESCU, Sorin RĂDULESCU, Centre of Mathematical Statistics, Bucharest, Romania

11<sup>45</sup> - 12<sup>00</sup>

System to forwarn the effects of disturbances factors in economy, Marcel STOICA, Carmen HARTULARI, Crisan ALBU, Academy of Economic Studies, Bucharest, Romania

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Computer Assisted Normative Global Model Of The Organization, Camelia RATIU-SUCIU, Academy of Economic Studies, Romania

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A software package for statistical analysis, Marian ZAHARIA, Academy of Economic Studies, Romania, Adrian HOSPODAR, ROMTELECOM, Romania, Cristian TROFINENCO, Polytechnic University, Bucharest, Romania

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On Line Analytical Processing and Neural Computing in Data-Driven Decision Support Systems, Gheorghe SABĂU, Constanța BODEA, Cristina IONIȚĂ, Anton CREȚU, Petrișor OPREA, Academy of Economic Studies, Romania



## Section 6

### Searching in Solutions Space. Combinatorics

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17<sup>45</sup> - 18<sup>00</sup>

On the Statistical Determinism of Genetic Search Schemes, Dorin BOCU, Faculty of Sciences, "Transilvania" University of Brasov, Romania

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Experiences with Evolutive Mutations for Job Shop Problems, Csaba FABIAN, Felix SIMION, Academy of Economic Studies, Bucharest, Romania

18<sup>15</sup> - 18<sup>30</sup>

Object Oriented Modeling for the Assembly Line Balancing Problem, Rodica MIHALCA, Carmen HARTULARI, Adina UTA, Academy of Economic Studies, Bucharest, Romania

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Algorithm of Minimising Time of Waiting for n Jobs for Prelucration on m Machines-Jobs, Ion DOBRE, Academy of Economic Studies, Bucharest, Romania

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Survey on Linear Programming Software for Personal Computers, Gabriela CONSTANTINESCU, Constanta, Romania





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### Searching in Solutions Space. Combinatorics

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**On Some Contraction Matroid Properties**, Laurențiu MODAN,  
Academy of Economic Studies, Bucharest, Romania

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**Connectivity in Directed Hypergraphs**, Daniela FERRERO, Spain,  
Universitat Politècnica de Catalunya, Barcelona, Spain

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**Some extremal properties of the degree distance of a graph**, Ioan Tomescu,  
University of Bucharest, Bucharest, Romania

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**The optimisation problems with probability distributions solutions**,  
Fevronia BULACU, Academic of Economics Studies, Bucharest, Romania,  
Marius BULACU, University of Bucharest, Romania

$10^{00} - 10^{15}$

**Remarks On The Erdos - Haynal Problem And On The Bell Numbers**,  
Eleonor CIUREA, "Transilvania" University of Brasov, Romania

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**On a global characteristic of a graph**, Moise COCAN, "Transilvania"  
University, Brasov, Romania

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**An Evolutionary Approach to Optimizing Functions with Linear Constraints**, Daniel DANCIU, Transilvania University, Brasov, Romania

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**Sur l'optimisation des horaires universitaires**, Werner SCHATZ, Conseil  
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**Grounding of Optimal Decision of Consumption and Investment**,  
Stelian STANCU, Academy of Economic Studies, Bucharest, Romania

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**Stability Analysis for Cybernetic Model of the Commercial Subsystem  
in Small Businesses**, Lucia RUSU, Cosmina IVAN, Goron SABIN,  
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Transportation Problems**, Sorina GRAMATOVICI, Academy of  
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**Mathematica-Examples of Langrangian for Analizing Optimization**,  
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### Databases and Expert Systems

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**Optimal Query Processing in Distributed Databases**, Florin RADULESCU, "Politehnica" University of Bucharest, Bucharest

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**Concurrency Control Algorithm for Database Systems**, Vasile LUNGU, Gheorghe PETRESCU, Automation and Computer Science Faculty, UPB, Bucharest

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**"NORMDATA" – Automized Normalisation for Relational Databases**, Cristina VLADAREAN, "Transilvania" University, Brasov, Romania

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**L'importance de la Gestion des Transactions pour le Maintien de la Qualite d'une Base de Donnees**, Emanuela-Mariana CHICHEA, Universite de Craiova, Romania

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**The Analysis of Optimization in Query Processing for Distributed and Parallel Database Systems**, Georgios KAPENEKAS, Technological Education Institute Halkida, Greece

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**Un agent de recherche intelligent pour la consultation d'informations et la veille technologique**, Jean – Claude BASSANO, Isabelle DEBOURGES, Sylvie GUILLORE, Joel NEGRIER, Gilles DESROCQUES, LIFO Universite d'Orleans, France

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**Applications of Recurrent Neural Networks to Time Series Forecasting**, Anca Umbrurescu, Costel BARBALATA, Research Institute for Informatics, Bucharest, Romania

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**Fuzzy Databases**, Gheorghe PETROV, Victoria IORDAN, Aurel STEPAN, West University of Timisoara, Timisoara, Romania

16<sup>00</sup> - 16<sup>15</sup>

**Some Remarks about Rules Learning by Genetic Algorithms Approach**, Mihaela M. OPREA, Department of Computer Science, University of Ploiesti, Ploiesti, Romania

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**Artificial Neural Networks a Complement or an Alternative to Conventional Computers**, Ozten CHELAI, "Ovidius" University of Constanta, Constanta, Romania

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**Expert Knowledge Systems**, Ion LINGA, A.E.S.M., Chisinau, Moldova

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**A Pattern of a Modern Expert and Outlooks of Using Prolog, the Language of Logic Programming**, Nicolae PELIN, Sergiu PELIN, University of Applied Sciences, Moldova



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**Branching Bisimulations and Schema Evolution Graphs**, Ioan DESPI ,  
West University of Timisoara , Timisoara, Romania

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**Multimedia Object Oriented Database in Tourism**, Monica MORAIT,  
Al. CHIROSCA ,Bucharest University ,Bucharest, Romania

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Florentin IPATE ,Romanian-American University , Bucharest, Romania

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**Database with Romanian Artists**, Vasile PETROVICI, Romsoft S.A.  
Bucharest , Romania

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**Bank Asset Liability Management System Architecture**, Lucian  
ANGHEL ,Romanian Commercial Bank, Bucharest, Romania

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**The Comparative Analysis Between the Dimensional Modeling and the  
Entity-Relation Modeling**, Ion LUNGU, Mihaela MUNTEAN ,Academy  
of Economic Studies, Bucharest, Romania



## **Section 8**

### **Information and Communication Technology in Order to Increase the Economic Competitiveness**

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**Methods of Implementation of the Informational Technologies'  
Flexibility in Ecology**, Ion BURLACU, Informational technologies and  
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**Software For Ship Administration**, Doina CARP, Costel STANCA,  
I.M.C. Constanta, Romania

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**Modern Communication Technologies - Support of an Optimal Infor-  
mational System in an Economic Agent**, Simona MATAACHE, Dana  
ȘERBAN, Academy of Economic Studies, Bucharest, Romania

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**The Environmental and Social Impacts of Telecommuting and  
Teleactivities**, Ion Gh. ROȘCA, Bogdan GHILIC-MICU, Marian  
STOICA, Academy of Economic Studies, Bucharest, Romania

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**Problem of the Computerization of the Agricultural Sectors in the Republic of Moldova**, Andrei ȘONȚU, Academy of Economy Studies, Chisinau, Republic of Moldova

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**Virtual Office**, Bogdan GHILIC-MICU, Academy of Economic Studies, Bucharest, Romania

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**PPCsm2e – a Production Planning and Control Solution for Manufacturing SMEs**, Constanta MANOLIU, Octavian CONSTANTINESCU, Gabriel NEAGU, National Institute for Research and Development in Informatics, Bucharest, Romania

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**Learning From Examples**, Vasile PODARU, Military Technical Academy, Bucharest, Romania

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**The Initial Transition Period to a Full Information Society**, Dumitru N. TODOROL, Republic of Moldova, Michael MULDER&Sufi NAZEM, UNO, Omaha, USA, Teodor JUCAN, Univ. 'Al.I.Cuza" at Iasi, Romania, Diana MICUSHA, Math. Inst. of AS of Moldova, Chisinau, Moldova

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**On the Intelligent Mobile Agents Used in Business**, Rodica Avram-NIȚCHI, "Babeș-Bolyai" University, Cluj-Napoca, Romania





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### Algebra of Logic and Applications

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*n*-Valued Connectives, Roberto CIGNOLI, Universidad de Buenos Aires, Buenos Aires, Argentina

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Quelques Remarques sur les Anneaux Chrysippiens  $\theta$ -Valents, Vlad BOICESCU, "Politehnica" University, Bucharest, Romania

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The Algebraic Counterpart of a Symbolic Logic of Problem Solving, Mircea SULARIA, "Politehnica" University, Bucharest, Romania

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On Postian Equations, Dragi BANKOVIĆ, University of Kragujevac, Kragujevac, Yugoslavia

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Three-valued Propositional Dynamic Logic, Laurențiu LEUȘTEAN, National Institute for Research and Development in Informatics, Bucharest, Romania

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Classical Models are Particular Cases of Probabilistic Models, Dan HERNEST, University of Bucharest, Romania

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Three Algebraic Representation Levels of the Language, Radu GRAMATOVICI, University of Bucharest, Bucharest, Romania

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Remarks on Mixalgebras, Gheorghe ȘTEFĂNESCU, University of Bucharest, Bucharest, Romania

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Automata for a Decidable Subset of Duration Calculus, Cătălin DIMA, University of Bucharest, Bucharest, Romania



## Section 9

### Algebra of Logic and Applications

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Analysing Choices and Decisions through Relation Algebras, Piero PAGLIANI, Research Group on Knowledge and Communication Models Rome, Italy

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Relations with Structural Induction, Mihail CHERCIU, University of Bucharest, Bucharest, Romania

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Tolerance Relations and Fuzzy Sets, Paul FLONDOR, "Politehnica" University, Bucharest, Romania

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Hennessy-Milner Properties in Boolean Dedekind Categories, Yasuo KAWAHARA and Masao MORI, Kyushu University, Fukuoka, Japan

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Roberto CIGNOLI

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Categories and Varieties of *MV*-algebras, Antonio Di NOLA, Università di Salerno, Salerno, Italy

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Subvarieties of the Variety of all *MV*-Algebras Properties, Ada LETTIERI, Università di Napoli, Napoli, Italy

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The Stable Topology for *MV*-algebras, L. P. BELLUCE, University of British Columbia, Vancouver, Canada, S. SESSA, Università di Napoli, Napoli, Italy

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Product *MV*-Algebras and *MV*\*-Algebras, Ioana LEUȘTEAN, University of Bucharest, Bucharest, Romania

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On the Probability Theory on Product *MV* Algebras, Beloslav RIEČAN, Slovak Academy of Sciences, Bratislava, Slovakia



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**Ordered Semirings and Rings**, Dragoş VAIDA, University of Bucharest, Bucharest, Romania

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**Pseudo-MV Algebras: a Noncommutative Extension of MV Algebras**, George GEORGESCU, Institute of Mathematics, Bucharest, Romania, Afrodita IORGULESCU, Academy of Economic Studies, Bucharest, Romania

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**On Partial Addition in Pseudo-MV Algebras**, Anatolij DVUREČENSKIJ, Slovak Academy of Sciences, Bratislava, Slovakia

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**On Algebras with Implications, Categorically Equivalent to Pseudo-MV Algebras**, Rodica CETERCHI, University of Bucharest, Bucharest, Romania

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**Pseudo-MV Algebras as Semigroups**, Cătălin IONITA, "Politehnica" University, Bucharest, Romania

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