

## **List of the participants and their contributions**

<b>Ladislav Jirsa (CZ)</b>	
Opening Lecture: Who Caused It? .....	i
<b>Nikola Kaspříková (CZ):</b>	
Bayesian Networks: Applications in Economics .....	1
<b>Květoslav Belda (CZ):</b>	
Kinematics and Dynamics of Parallel Structures for Control Design .....	2
<b>Andrej Rakar (SLO):</b>	
Fault Diagnosis of a Gas Conditioning Unit by Means of Mixture Modelling .....	3
<b>Ladislav Kašpárek (CZ):</b>	
Literate Programming at Secondary School .....	4
<b>Jiří Dohnal (CZ):</b>	
The Identification of Dynamic Systems by Neural Networks .....	5
<b>Antonín Malík (CZ):</b>	
Mixture Models for Learning Text Document Classifiers .....	6
<b>Radim Javůrek (CZ):</b>	
Animation and Coding of Facial Sequences Based on Models of Objects .....	7
<b>Martin Rožánek (CZ):</b>	
Electro-Acoustic Analogy Used to Model the Human Respiratory System .....	8
<b>Bohdan Hejna (CZ):</b>	
Generalized Formula of Physical Channel Capacities .....	9
<b>Erzsébet Németh (HU):</b>	
Prediction-Based Diagnosis Using Coloured Petri Nets .....	10
<b>Attila Magyar (HU):</b>	
Lotka-Volterra Representation of Process Systems for Stability Analysis .....	11
<b>Barna Pongrácz (HU):</b>	
Stability Analysis Techniques for Process Models in DAE Form – - the Effect of Algebraic Equations .....	12
<b>Piroska Ailer (HU):</b>	
LPV-Analysis and Control Design of a Low-Power Gas Turbine .....	13
<b>Dejan Tinta (SLO):</b>	
Monitoring the Quality of Commutation in Universal Electrical Motors .....	14
<b>Damir Vrančić (SLO):</b>	
Improving Closed-Loop Tracking and Disturbance Rejection Performance .....	15
<b>Gregor Kandare (SLO):</b>	
Code Generation for Programmable Logic Controllers .....	16
<b>Uroš Benko (SLO):</b>	
Fault Detection of Vacuum Cleaner Motors through Motor Sound Recorded During Motor Run-Down .....	17
<b>Sebastjan Zorzut (SLO):</b>	
Manufacturing Performance Indicators for Improving Enterprise Efficiency .....	18

<b>Ferdinand Kraffer (CZ):</b>	
Algebraic Realization of the Empty Matrix Concept for System-Theoretic Applications	19
<b>Jan Kracík (CZ):</b>	
Can Control Theory Help Democracy? .....	20
<b>Petr Gebouský (CZ):</b>	
Towards Quantitative Evaluation of Lymphoscintigraphy of Upper Limbs .....	21
<b>Li He (CZ):</b>	
Bayesian Modelling and Estimation of ARMAX Model and its Finite Mixtures .....	22
<b>Lenka Pavelková (CZ):</b>	
Influence of Prior Knowledge on Structure Estimation .....	23
<b>Josef Andrášek (CZ):</b>	
Control of a Simple Non-Linear System Using Probabilistic Mixtures .....	24
<b>Kamil Ekštejn (CZ):</b>	
Detection of Relevant Speech Features Using Driven Spectral Analysis .....	25
<b>Roman Mouček (CZ):</b>	
Utterance Models in Dialogue Systems .....	26
<b>Miroslav Novák (CZ):</b>	
Adaptive LQG Controller Tuning .....	27
<b>Ludvík Tesař (CZ):</b>	
Bayesian Estimation of the Amount of Local Extremes in Parameter Estimation .....	28
<b>Łukasz Hładowski (PL):</b>	
Generalized Pass Controllability of Discrete Linear Repetitive Processes .....	29
<b>Martin Rusko (SK):</b>	
Spline Based Continuous Time MPC with Polytopic Terminal Sets .....	30
<b>Jan Vachálek (SK):</b>	
Practical Experiments with Data Warehousing Based Identification of Linear Systems	31
<b>Pavla Němcová (CZ):</b>	
Mixture Filtration of Outliers .....	32
<b>Tomáš Vyhlídal (CZ):</b>	
True Finite Order Approximation of Time Delay System .....	33
<b>Gunca Garajayewa (CZ):</b>	
Fault Detection by Markov Chain – Application to Heating System .....	34