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Time: 09:00 - 10:00  
Room: Room 1  
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<sup>1</sup>*Apator Metrix, Poland; <sup>2</sup>Gdansk University of Technology, Poland; <sup>3</sup>Synopsis Poland Sp. z.o.o., Poland*

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<sup>1</sup>*Hochschule Konstanz University of Applied Sciences, Germany; <sup>2</sup>Kendrion Industrial Magnetic Systems, Germany; <sup>3</sup>Technische Universität Berlin, Germany*

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Date: Thursday, August 27, 2015  
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<sup>1</sup> <i>Institute of Mathematics of National Academy of Sciences of Belarus, Belarus; </i> <sup>2</sup> <i>Silesian University of Technology, Poland</i>	

<b>On the Attainability of an Estimate of a Number of Perron Exponents for Discrete Linear Diagonal Systems with Bounded Coefficients .....</b>	<b>994</b>
Alexander Konyukh, Michal Niezabitowski <i>Silesian University of Technology, Poland</i>	

## C2L-C **Scheduling II**

Date: Thursday, August 27, 2015  
Time: 10:00 - 11:00  
Room: Room 3  
Chair: Mieczyslaw Wodecki

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<b>New Features of the Cyclic Job Shop Scheduling Problem.....</b>	<b>1000</b>
Czeslaw Smutnicki <i>Wroclaw University of Technology, Poland</i>	

<b>An “on/off” Model for Energy-Efficient Scheduling of Workflow Applications in Computational Grids.....</b>	<b>1006</b>
Marek Mika <i>Poznan University of Technology, Poland</i>	

<b>Scheduling Automated Guided Vehicle with Battery Constraints .....</b>	<b>1010</b>
Ezzeddine Fatnassi <sup>1</sup> , Jouhaina Chaouachi <sup>2</sup>	

<sup>1</sup>*Higher Institute of Management Of Tunis, Tunisia; <sup>2</sup>Institut des Hautes Etudes Commerciales de Carthage, Tunisia*

## C2L-D **Fault Detection II**

Date: Thursday, August 27, 2015  
Time: 10:00 - 11:00  
Room: Room 4  
Chair: Marcin Witczak

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<b>Intelligent Fault Detection and Diagnosis of a Rotary Cutoff in a Corrugator .....</b>	<b>1016</b>
Jerzy Kasprzyk <sup>2</sup> , Stanislaw Musielak <sup>1</sup>	

<sup>1</sup>*BHS Corrugated Maschinen- Und Anlagenbau GmbH, Germany; <sup>2</sup>Silesian University of Technology, Poland*

<b>Construction of Diagnostic Features Space Using Volterra Kernels Moments.....</b>	<b>1022</b>
Oleksandr Fomin, Vitaliy Pavlenko <i>Odessa National Polytechnic University, Ukraine</i>	

## C3P-F **Poster Session V**

Date: Thursday, August 27, 2015  
Time: 10:00 - 12:00  
Room: Poster Area  
Chair: Vadim Kaparin

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<b>Decision Support Model Based on the GMDH Method for Implementing Business Strategies in Polish Manufacturing Enterprises (DS-BSI) .....</b>	<b>1028</b>
Justyna Patalas-Maliszewska <sup>2</sup> , Irene Krebs <sup>1</sup>	

<sup>1</sup>*Brandenburg University of Technology Cottbus-Senftenberg, Germany; <sup>2</sup>University of Zielona Góra, Poland*

<b>Virtual Commissioning for the Control of the Continuous Industrial Processes - Case Study .....</b>	<b>1032</b>
Michał Frątczak <sup>2</sup> , Paweł Nowak <sup>2</sup> , Tomasz Kłopot <sup>2</sup> , Jacek Czeczoł <sup>2</sup> , Szymon Bysko <sup>1</sup> , Bartosz Opilski <sup>1</sup>	

<sup>1</sup>*PROPOINT SP. Z O.O. SP. K., Poland; <sup>2</sup>Silesian University of Technology, Poland*

<b>Chosen Properties of a Dynamic Model of Crankshaft Assembly with Three Degrees of Freedom.....</b>	<b>1038</b>
Adrian Chmielewski, Robert Gumiński, Stanisław Radkowski <i>Warsaw University of Technology, Poland</i>	
<b>Pipeline System for Heat Transportation from Nuclear Power Plant - an Optimizing Approach .....</b>	<b>1044</b>
Piotr Hirsch, Michał Grochowski, Kazimierz Duzinkiewicz <i>Gdansk University of Technology, Poland</i>	
<b>Autonomous Operation of a Doubly Fed Induction Generator Driven by a Wind Turbine.....</b>	<b>1050</b>
Mohammed L'Hadj Said <sup>2</sup> , Samir Moulahoum <sup>2</sup> , Mohamed Bounekhl <sup>1</sup> , Nadir Kabache <sup>2</sup> , Hamza Houassine <sup>2</sup> <sup>1</sup> <i>university of Blida, Algeria; <sup>2</sup>University of Medea, Algeria</i>	
<b>Preliminary Results on the Linux Libpcap Model Identification .....</b>	<b>1056</b>
Michał Karpowicz, Piotr Arabas <i>NASK Research Institute, Poland</i>	
<b>Analysis of Simple Anti-Windup Compensation in Approximate Pole-Placement Control of a Second Order Oscillatory System with Time-Delay .....</b>	<b>1062</b>
Talar Sadalla, Dariusz Horla <i>Poznań University of Technology, Poland</i>	
<b>Application of Computer Aided Tools and Methods for Unmanned Cargo Aircraft Design.....</b>	<b>1068</b>
Roman Czyba, Michał Hecel, Karol Jabłonski, Marcin Lemanowicz, Krzysztof Platek <i>Silesian University of Technology, Poland</i>	
<b>Cross-Platform Real-Time Nuclear Reactor Basic Principle Simulator.....</b>	<b>1074</b>
Tomasz Karla, Jarosław Tarnawski, Kazimierz Duzinkiewicz <i>Gdansk University of Technology, Poland</i>	
<b>Experimental Modeling of a Deoiling Hydrocyclone System .....</b>	<b>1080</b>
Mads Bram, Abdiladif Hassan, Dennis Hansen, Petar Durdevic, Simon Pedersen, Zhenyu Yang <i>Aalborg University Esbjerg, Denmark</i>	
<b>Nonlinear System Identification Using Memetic Algorithms.....</b>	<b>1086</b>
Lukasz Malinski, Jaroslaw Figwer <i>Silesian University of Technology, Poland</i>	

#### **C4L-A    Robotics IV**

Date: Thursday, August 27, 2015  
 Time: 11:20 - 13:00  
 Room: Room 1  
 Chair: Edward Jezierski

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<b>Distributed, Reconfigurable Architecture for Robot Companions Exemplified by a Voice-Mail Application .....</b>	<b>1092</b>
Maksym Figat, Tomasz Kornuta, Marcin Szlenk, Cezary Zielinski <i>Warsaw University of Technology, Poland</i>	
<b>Automated Generation of Component System for the Calibration of the Service Robot Kinematic Parameters .....</b>	<b>1098</b>
Tomasz Winiarski, Konrad Banachowicz <i>Warsaw University of Technology, Poland</i>	

<b>Finite-Gain L<sub>2</sub> Stability for Position/Force Control of Robot Manipulators with Constraint Uncertainties.....</b>	<b>1104</b>
Mitsuru Kanamori, Keigo Iwagami	
<i>National Institute of Technology, Maizuru College, Japan</i>	
<b>Customization of Low-Cost Hexapod Robots Based on Optimal Design Through Inverse Dynamics Computation.....</b>	<b>1110</b>
Pasquale Cirillo, Giuseppe De Maria, Ciro Natale	
<i>Seconda Università degli Studi di Napoli, Italy</i>	

## C4L-B Optimization

Date: Thursday, August 27, 2015  
Time: 11:20 - 13:00  
Room: Room 2  
Chair: Elzbieta Ferenstein

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<b>Design of Controllers for Decoupled TITO Systems Using Different Decoupling Techniques .....</b>	<b>1116</b>
Maher Ben Hariz, Faouzi Bouani	
<i>National Higher Engineering School of Tunis, Tunisia</i>	
<b>Parallel Packing Procedure for Three Dimensional Bin Packing Problem.....</b>	<b>1122</b>
Wojciech Bozejko <sup>2</sup> , Lukasz Kacprzak <sup>2</sup> , Mieczyslaw Wodecki <sup>1</sup>	
<sup>1</sup> <i>University of Wrocław, Poland; <sup>2</sup>Wrocław University of Technology, Poland</i>	
<b>Fuel-Optimal Combined Driving Strategy and Energy Management for a Parallel Hybrid Electric Railway Vehicle .....</b>	<b>1127</b>
Maik Leska, Harald Aschemann	
<i>University of Rostock, Germany</i>	
<b>Robust Output Prediction of Differential - Algebraic Systems - Application to Drinking Water Distribution System .....</b>	<b>1133</b>
Arkadiusz Ciminski, Kazimierz Duzinkiewicz	
<i>Gdansk University of Technology, Poland</i>	
<b>Optimisation of Digraphs Creation for Parallel Algorithm for Finding a Complete Set of Solutions of Characteristic Polynomial .....</b>	<b>1139</b>
Krzysztof Hryniów, Konrad Markowski	
<i>Warsaw University of Technology, Poland</i>	

## C4L-C Signal Processing III

Date: Thursday, August 27, 2015  
Time: 11:20 - 13:00  
Room: Room 3  
Chair: Witold Mickiewicz

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<b>Fast Vignetting Reduction Method for Digital Still Camera.....</b>	<b>1145</b>
Andrzej Kordecki, Henryk Palus, Artur Bal	
<i>Silesian University of Technology, Poland</i>	
<b>Congestion Feedback Control for Computer Networks with Bandwidth Estimation .....</b>	<b>1151</b>
Slawomir Grzyb, Przemyslaw Orlowski	
<i>West Pomeranian University of Technology, Poland</i>	
<b>Active Buffer Design Method for Networked Control Systems.....</b>	<b>1157</b>
Wojciech Grega, Andrzej Tutaj	
<i>AGH University of Science and Technology, Poland</i>	

**C4L-D Fractional Order Systems III**

Date: Thursday, August 27, 2015

Time: 11:20 - 13:00

Room: Room 4

Chair: Krzysztof Latawiec

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<b>The Effect of the Order Selection on the Fractional Potential.....</b>	<b>1163</b>
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<i>Lodz University of Technology, Poland</i>	
<b>Application of Fractional Order Transfer Functions to Modeling of High - Order Systems .....</b>	<b>1169</b>
Krzysztof Oprzedkiewicz <sup>1</sup> , Wojciech Mitkowski <sup>1</sup> , Edyta Gawin <sup>2</sup>	
<sup>1</sup> AGH University of Science and Technology, Poland; <sup>2</sup> High Vocational Scholl in Tarnow, Poland	
<b>A Variant of Adams - Bashforth - Moulton Method to Solve Fractional Ordinary Differential Equation .....</b>	<b>1175</b>
Marek Blasik	
<i>Czestochowa University of Technology, Poland</i>	
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