2016 3rd Conference on Control and Fault-Tolerant Systems (SysTol 2016)

Barcelona, Spain
7-9 September 2016
Technical Program for Wednesday September 7, 2016

WeA2 S01
Fault Diagnosis and Fault-Tolerant Control for Mobile Application (Invited Session)

Chair: Witczak, Marcin  Univ. of Zielona Gora
Co-Chair: Theilliol, Didier  Univ. of Lorraine
Organizer: Theilliol, Didier  Univ. of Lorraine
Organizer: Witczak, Marcin  Univ. of Zielona Gora

10:30-10:50  WeA2.1
Robust Flocking Control Design for a Fleet of Autonomous Agents (I), pp. 1-6.
BELKADI, Adel  Univ. De Lorraine
Theilliol, Didier  Univ. of Lorraine
CIARLETTA, Laurent  Univ. De Lorraine, Loria
Ponsart, Jean-Christophe  Univ. De Lorraine

10:50-11:10  WeA2.2
A Fault Hiding Approach for the Sliding Mode Fault-Tolerant Control of a Non-Holonomic Mobile Robot (I), pp. 7-14.
Stancu, Alexandru  Univ. Pol. De Catalunya (UPC)
CODRES, EDUARD  THE Univ. OF MANCHESTER ALEXANDRU
Puig, Vicenç  Univ. Pol. De Catalunya (UPC)

11:10-11:30  WeA2.3
Witczak, Piotr  Univ. of Zielona Gora
Pazera, Marcin  Inst. of Control and Computation Engineering
Witczak, Marcin  Univ. of Zielona Gora
Korbicz, Jozeif  Univ. of Zielona Gora
Theilliol, Didier  Univ. of Lorraine

11:30-11:50  WeA2.4
Fault-Tolerant Cooperative Control of WMRs under Actuator Faults Based on Particle Swarm Optimization (I), pp. 21-26.
Kamel, Mohamed A.  Concordia Univ
Yu, Xiang  Concordia Univ
Zhang, Youmin  Concordia Univ

11:50-12:10  WeA2.5
FDD and FTC for Ramp-Type Actuator Fault Using Intelligent-Output-Estimator (I), pp. 27-32.
Al Younes, Younes  Higher Coll. of Tech
RABHI, ABDELHAMID  MIS
NOURA, Hassan  United Arab Emirates Univ
El hajaji, ahmed  Univ. of Picardie Jules Verne

WeA3 S04
Robotics (Regular Session)

Chair: Reppa, Vasso  Supelec
Co-Chair: Rotondo, Damiano  Univ. Pol. De Catalunya (UPC)

10:30-10:50  WeA3.1
Multiple-Model Based Actuator Fault Compensation for Two Linked 2WD Mobile Robots, pp. 33-38.
MA, Yajie  Nanjing Univ. of Aeronautics and Astronautics
Cocquempot, Vincent  Lille 1 Univ
Maan, El Badaoui El Najjar  Univ. Lille, CRISTAL
Jiang, Bin  NUAA

10:50-11:10  WeA3.2
Freddi, Alessandro  Univ. Degli Studi Ec
Longhi, Saso  Univ. Pol. Delle Marche
Monteriù, Andrea  Univ. Pol. Delle Marche
Ortenzi, Davide  Univ. Pol. Delle Marche

11:10-11:30  WeA3.3
jaiem, lotfi  Montpellier Univ. Lab. D'informatique Robotique Et
lapierre, lionel  LIRMM
godary-dejean, karen  LIRMM
crestani, didier  LIRMM

11:30-11:50  WeA3.4
Modified Robust Panel Method for Mobile Robot Path Planning in Partially Unknown Static and Dynamic Environments, pp. 51-58.
Ibrahimović, Belma  Faculty of Electrical Engineering, Sarajevo
Velagić, Jasmin  Univ. of Sarajevo

11:50-12:10  WeA3.5
Irfan, Jabandžić  Faculty of Electrical Engineering, Sarajevo
Velagić, Jasmin  Univ. of Sarajevo

WeA4 S02
Set-Invariance Approaches Applied to Fault Diagnosis and Fault-Tolerant Control (Invited Session)

Chair: Ocampo-Martinez, Carlos  Tech. Univ. of Catalonia (UPC)
Co-Chair: Martinez Molina, John Jairo  Gipsa-Lab, Grenoble-INP
Organizer: Reppa, Vasso  Supelec
Organizer: Ocampo-Martinez, Carlos  Tech. Univ. of Catalonia (UPC)
Organizer: Martinez Molina, John Jairo  Gipsa-Lab, Grenoble-INP

10:30-10:50  WeA4.1
Xu, Feng  Tsinghua Univ
Tan, Junbo  Tsinghua Univ
Wang, Xueqian  Tsinghua Univ
Puig, Vicenç  Univ. Pol. De Catalunya (UPC)
Liu, Houde  Tsinghua Univ
Liang, Bin  Tsinghua Univ
Recoverable Set Computation for Post-Fault/failure Quadrotors Based on Sum of Squares (SOS) (I), pp. 73-78.

Characterization of the Minimum Detectable Fault of Interval Observers by Using Set-Invariance Theory (I), pp. 79-86.


Switching-Stable Control Mechanism in the Presence of Guaranteed Detectable Sensor Faults (I), pp. 93-98.

Kalman Filtering and Zonotopic State Bounding for Robust Fault Detection (I), pp. 99-104.

Velocity Tracking Control of AUVs in Horizontal Motion, pp. 105-110.


Modelling and Control of a Coaxial Helicopter UAV in an Indoor Laboratory, pp. 117-124.

Experimental Evaluation of an Active Fault-Tolerant Control Scheme for Multirotor UAVs, pp. 125-132.


Velocity Tracking Controller for Planar Motion of Underwater Vehicles, pp. 139-144.


Model-Based Fault Detection and Diagnosis for Centrifugal Chillers, pp. 158-163.


A Combined Diagnosis System Design Using Model-Based and Data-Driven Methods, pp. 177-182.
Jung, Daniel Linköping Univ Ng, Kok Yew Monash Univ. Malaysia Frisk, Erik Linköping Univ Krysander, Mattias Linköping Univ

A Framework for Unsupervised Fault Detection and Diagnosis Based on Clustering Assisted Kriging Observer, pp. 183-188.
Ardakani, Mohammad UPC Hamed Abdelaleem Taha Zied, Univ. Pol. De Catalunya Ahmed Shokry Gerard, Escudero UPC Graells, moises UPC Espuña, Antonio Tech. Univ. of Catalonia


Askti, Tarek LGIPM Hajiev, Zied LGIPM Univ. Paul Verlaine Metz reezg, nidhal Univ. Paul Verlaine Metz

Performances Evaluation and Optimization of Production System with Free Shipping Option, N/A.
Turki, Sadok LGIPM / Univ. De Lorraine, Ile Du Saulcy, 57045 Metz Prokopenshyna, Anastasiia International Univ. of Logistics and Transport
Famularo, Domenico  
Fedele, Giuseppe  
Franze', Giuseppe'  
Manna, Cristina

18:30-18:50 WeC3.4  

Lan, Jianglin  
Patton, Ron J.

18:50-19:10 WeC3.5  
Model-Free Active Fault-Tolerant Cooperative Control in an Offshore Wind Farm (I), pp. 269-274.

Badihi, Hamed  
Zhang, Youmin  
Hong, Henry

19:10-19:30 WeC3.6  
Two-Layer Observer-Based FDI with Application to NREL 5 MW Wind Turbine Model (I), pp. 275-280.

Schulte, Horst  
Gauterin, Eckhard

WeC4  
Computational Intelligence (Regular Session)

Chair: Korbicz, Jozef  
Co-Chair: Tornil-Sin, Sebastian

17:30-17:50 WeC4.1  
Nonlinear Predictive Control of Temperature in Long Duct Using Specially Designed Neural Model, pp. 281-286.

Lawrynczuk, Maciej

17:50-18:10 WeC4.2  
Temporal-Difference Q-Learning in Active Fault Diagnosis, pp. 287-292.

Skach, Jan  
Puncochar, Ivo  
Lewis, Frank L.

18:10-18:30 WeC4.3  
Design of Iterative Learning Control by the Means of State Space Neural Networks, pp. 293-298.

Czajkowski, Andrzej  
Patan, Maciej  
Patan, Krzysztof

18:30-18:50 WeC4.4  
A Neural Network-Based Simultaneous State and Actuator Fault Estimation under Unknown Input Decoupling, pp. 299-304.

Witczak, Piotr  
Patan, Krzysztof  
Witczak, Marcin  
Pazera, Marcin

18:50-19:10 WeC4.5  

Li, BEN  
Khilf Bouassida, Manel  
Toguyenci, Armand

LI, BEN  
Khlif Bouassida, Manel  
Toguyenci, Armand
**Technical Program for Thursday September 8, 2016**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:20</td>
<td>ThA1.1</td>
<td>Leaks&amp;Dapos; Detection in Water Distribution Networks with Demand Patterns (I), pp. 313-318.</td>
<td>Quiñones-Grueiro, Marcos CUJAE Verde, Cristina Inst. De Ingenieria, UNAM Prieto Moreno, Alberto Inst. Superior Pol. José Antonio Ec. Cujae</td>
</tr>
<tr>
<td>10:00-10:20</td>
<td>ThA1.4</td>
<td>A Methodology of Leakage Detection and Location in Water Distribution Networks - the Case Study (I), pp. 331-336.</td>
<td>Moczulski, Wojciech Silesian Univ. of Tech Wyczółkowski, Ryszard Silesian Univ. of Tech Ciupke, Krzysztof Silesian Univ. of Tech Przytulak, Piotr Silesian Univ. of Tech Tomaszik, Piotr Silesian Univ. of Tech Wachla, Dominik Silesian Univ. of Tech</td>
</tr>
<tr>
<td>10:20-10:40</td>
<td>ThA1.5</td>
<td>Fault Detection Data Creation Using an Experimental Water Distribution System (I), pp. 337-342.</td>
<td>Guenther, Markus Graz Univ. of Tech Steffelbauer, David Bernhard Graz Univ. of Tech Fuchs-Hanusch, Daniela Graz Univ. of Tech</td>
</tr>
<tr>
<td>10:40-11:00</td>
<td>ThA1.6</td>
<td>Fitness Landscapes and Distance Metrics for Model-Based Leakage Localization (I), pp. 343-348.</td>
<td>Steffelbauer, David Bernhard Graz Univ. of Tech Fuchs-Hanusch, Daniela Graz Univ. of Tech</td>
</tr>
<tr>
<td>09:00-09:20</td>
<td>ThA2.1</td>
<td>A Self-Healing Control Method for Satellite Attitude Tracking Based on Simultaneous Fault Estimation and Control Design, pp. 349-354.</td>
<td>Zhou, Meng Harbin Inst. of Tech Wang, Zhenhua Harbin Inst. of Tech Thelliol, Didier Univ. of Lorraine Shen, Yi Harbin Inst. of Tech Rodrigues, Mickael Univ. CLAUDE BERNARD LYON 1</td>
</tr>
<tr>
<td>09:40-10:00</td>
<td>ThA2.3</td>
<td>Passive Fault-Tolerant Control of an Octorotor Using Super-Twisting Algorithm: Theory and Experiments, pp. 361-366.</td>
<td>Saied, Majd Univ. of Tech. of Compiègne - Lebanese Univ Lussier, Benjamin Univ. of Tech. of Compiègne Fantoni, Isabelle Univ. De Tech. De Compiègne Shraim, Hassan Consulting Company Francis, Clovis Lebanese Univ</td>
</tr>
<tr>
<td>09:00-09:20</td>
<td>ThA3.1</td>
<td>State and Fault Estimation of Singular Delayed LPV Systems Via Proportional-Integral Observer, pp. 381-386.</td>
<td>Hassanabadi, Amir Hossein Amirkabir Univ. of Tech Shafiee, Masoud Amirkabir Univ. of Tech Puig, Vicenç Univ. Pol. De Catalunya (UPC)</td>
</tr>
<tr>
<td>09:20-09:40</td>
<td>ThA3.2</td>
<td>Observer-Based Causal Ordering Graph Models for Fault Detection, N/A</td>
<td>aitallah, manel ENIG Rafika, Elharabi MACS-ENIG</td>
</tr>
</tbody>
</table>
Precomputable Kalman-Based Filter for Markov Jump Linear Systems, pp. 393-398.

Structural Analysis for Robust Diagnosis Via Kalman Filters, pp. 399-406.


"From Fault Diagnosis to Reconfigurable Control: A Unified Concept" Jan Lunze (Plenary Session)

Model-Based Prognosis Algorithms with Uncertainty Propagation: Application to Fatigue Crack Growth (I), pp. 458-465.

Guaranteed State Estimation and Fault Detection Based on Zonotopes for Differential-Algebraic-Equation Systems
ThB3
Fault Diagnosis 2 (Regular Session)

Chair: Pulido, Belarmino
Co-Chair: Jung, Daniel

14:00-14:40

ThB3.1
Fault Detection From Structural Analysis to Observer-Based Residual Generation for Fault Detection, pp. 491-498.

Lunze, Jan
Pröll, Sebastian
Jarmolowitz, Fabian

14:20-14:40

ThB3.2
Faster and More Accurate FDI for Hybrid Systems Using Hybrid Possible Conflicts, pp. 499-504.

Bregon, Anibal
Alonso, Carlos
Pulido, Belarmino

14:40-15:00

ThB3.3
Integration of Techniques and Alarm Sequences for Fault Detection and Diagnosis, pp. 505-510.

Agudelo, Carlos
Morant, Francisco
Quiles, Eduardo
Garcia, Emilio

15:00-15:20

ThB3.4
Active Fault Detection Based on a Statistical Test, pp. 511-518.

Sekunda, André
Niemann, Henrik
Poulsen, Niels Kjelstad

15:20-15:40

ThB3.5
A Generalized Fault Isolability Matrix for Improved Fault Diagnosability Analysis, pp. 519-524.

Jung, Daniel

15:40-16:00

ThB3.6
Accounting for Modelling Errors in Model-Based Diagnosis by Using Gaussian Process Models, pp. 525-530.

Dolenc, Bostjan
Stepancic, Martin
Junič, Dani
Kocijan, Jus
Pianese, Cesare
Marra, Dario

ThC1
Energy Conversion & Distribution (Regular Session)

Chair: Aitouche, Abdel
Co-Chair: HOBLOS, Ghaleb

16:30-16:50

ThC1.1
Data Fusion for Fault Diagnosis in Smart Grid Power Systems, N/A

Kordestani, Mojtaba
Saif, Mehrdad

16:50-17:10

ThC1.2
Model-Based Broken Rotor Bars Fault Detection and Diagnosis in Squirrel-Cage Induction Motors, pp. 537-539.

Duvvuri, SSSR Sarathbabu
Detroja, Ketan

17:10-17:30

ThC1.3
Fault Diagnosis of Active Magnetic Bearings Based on Gaussian GLRT Detector, pp. 540-547.

Nagel, Leon
Galeazzi, Roberto
Voigt, Andreas
Santos, Ilmar

17:30-17:50

ThC1.4
Fault Detection and Isolation Methodology Using Interval Predictors with Application to DC-DC Buck Converters, pp. 548-553.

THABET, RIHAB EL HOUDA
Chafouk, Houcine

17:50-18:10

ThC1.5
Modeling Approach and Fault Index Analysis of a Voltage-Source Brushless DC Motor, pp. 554-559.

Alameh, kawthar
Ginzarly, Riham
HOBLOS, Ghaleb
BARAKAT, Georges

18:10-18:30

ThC1.6
Harmonic Fault Diagnosis in Power Quality System Using Harmonic Wavelet, N/A

Kordestani, Mojtaba
Safavi, Ali Akbar
Saif, Mehrdad

18:30-18:50

ThC2
Health Management (Regular Session)

Chair: Provan, Gregory
Co-Chair: Sarrate, Ramon

16:30-16:50

ThC2.1
A Graphical Framework for Stochastic Model-Based Diagnosis, pp. 566-571.

Provan, Gregory

16:50-17:10

ThC2.2
Reliability Importance Measures for Availability Enhancement in Drinking Water Networks, pp. 572-578.

Salazar, Jean C.
Nejjar, Fatima
Sarrate, Ramon
Weber, Philippe

17:10-17:30

ThC2.3
Fault Detection on Bearings Coupled to Permanent Magnet...
DC Motors by Using a Generalized Takagi-Sugeno PI Observer, pp. 579-584.
Martínez García, Citlaly  
Osorio-Gordillo, Gloria-Lilia  
Astorga-Zaragoza, Carlos  
Puig, Vicenç  

Photovoltaic Module Health Monitoring and Degradation Assessment, pp. 585-592.
Iaayouj, nabil  
Jamouli, Hicham  
El Hall, M.Amine  

Supporting the Shift towards Continuous Pharmaceutical Manufacturing by Condition Monitoring, pp. 593-598.
Schenkendorf, René  

Model-Based Prognostic Algorithm for Online RUL Estimation of PEMFCs, pp. 599-604.
Polverino, Pierpaolo  
Pianese, Cesare  

LMI-Based Design of Cascade Reconfiguration Control Structures, pp. 605-610.
Krokavec, Dusan  
Filasova, Anna  
Liščinský, Pavol  

A Receding Horizon Control of Markov Jump Linear Systems with Imperfect State Information and Probabilistic State Constraints, pp. 611-617.
Chitragnet, Shaikhshavali  
Aberkane, Samir  
Aubrun, Christophe  

Chaber, Patryk  
Lawrynczuk, Maciej  

Pinou, Pierre-Yves  
Faure, Jean-Marc  
Lesage, Jean-Jacques  

Model-Free Control for Unknown Delayed Systems, pp. 630-635.
Doublet, Maxime
### Technical Program for Friday September 9, 2016

**FrA1**

**Wind and Wave Turbines (Regular Session)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:20</td>
<td>FrA1.1</td>
<td>Passive Fault Tolerant Control Strategy in Controlled Wind Turbines</td>
<td>Acho, Leonardo (Univ. Pol. De Catalunya-EUETIB), Rodellar, Jose (Tech. Univ. of Catalonia), Tutivén, Christian (Univ. Pol. De Catalunya), Vidal, Yolanda (Univ. Pol. De Catalunya)</td>
</tr>
<tr>
<td>09:20-09:40</td>
<td>FrA1.2</td>
<td>Adaptive Nonlinear Filters for Joint Fault Estimation and Accommodation of a Wind Farm Benchmark</td>
<td>Simani, Silvio (Univ. Ferrara), Castaldi, Paolo (Univ. of Bologna), Bonfe, Marcello (Univ. Di Ferrara)</td>
</tr>
<tr>
<td>09:40-10:00</td>
<td>FrA1.3</td>
<td>Condition Monitoring of Permanent Magnet Synchronous Generator for Wind Turbine Applications</td>
<td>Ibrahim, Raed (Loughborough Univ), Watson, Simon (Loughborough Univ)</td>
</tr>
<tr>
<td>10:00-10:20</td>
<td>FrA1.4</td>
<td>Estimation of Wave Excitation Force for Wave Energy Converters</td>
<td>Abdelrahman, Mustafa (Univ. of Hull), Patton, Ron J. (Univ. of Hull), Guo, Bingyong (Univ. of Hull), Lan, Jianguo (Univ. of Hull)</td>
</tr>
<tr>
<td>10:20-10:40</td>
<td>FrA1.5</td>
<td>Control of a DC-AC Inverter in a Wind Energy Generation System Using T-S Fuzzy Modeling</td>
<td>Harrabi, Nazih (Lab-STA/ENIS), Souissi, Mansour (Engineering School of Sfax, Tunisia), Atouche, Abdel (CRISTAL/HEI), Chaabane, Mohamed (National Engineering School of Sfax, Tunisia)</td>
</tr>
</tbody>
</table>

**FrA2**

**Fault Diagnosis and Fault Tolerant Control for Aerospace Systems (Invited Session)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:20</td>
<td>FrA2.1</td>
<td>Hierarchical Fault-Tolerant Control of a Quadrotor Based on Fault Severity (1)</td>
<td>MERHEB, Abdel-Razzak (LIU), Bateman, François (Lab Des Sci. Des Systèmes D&amp;oslash;info), NOURA, Hassan (United Arab Emirates Univ), Al Younes, Younes (Higher Coll. of Tech)</td>
</tr>
<tr>
<td>09:20-09:40</td>
<td>FrA2.2</td>
<td>Adaptive FTC Based on Control Allocation and Fault Accommodation for Satellite Reaction Wheels (1)</td>
<td>Baldi, Pietro (Univ. of Bologna)</td>
</tr>
</tbody>
</table>

**FrA3**

**Fault Tolerant Control 2 (Regular Session)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00-09:20</td>
<td>FrA3.1</td>
<td>State-Feedback H Infinity Stabilization of State-Dependent Jump Linear Systems</td>
<td>Chitra, Shaikeyshami (Amrita Vishwa Vidyapeetham), Aberkane, Samir (Uhp, Nancy 1), Aubrun, Christophe (Univ. of Lorraine)</td>
</tr>
<tr>
<td>09:40-10:00</td>
<td>FrA3.3</td>
<td>Sensor Fault Tolerance in Output Feedback Nonlinear Model Predictive Control</td>
<td>Knudsen, Brage Rugstad (Norwegian Univ. of Science and Tech), Alessandretti, Andrea (Inst. Superior Técnico - Ecole Pol. Fédérale De Lausanne)</td>
</tr>
<tr>
<td>10:00-10:20</td>
<td>FrA3.4</td>
<td>Fault Tolerance Evaluation of Nonlinear Systems Using Viability Theory</td>
<td>Ghaniee Zarch, Majid (Iran Univ. of Science and Tech), Puig, Vicenç (Univ. Pol. De Catalunya (UPC)), Poshtan, Javad (Iran Univ. of Science and Tech)</td>
</tr>
</tbody>
</table>
Fault Tolerant Control System Based on Subspace Predictive Control and Multiple Model Predictive Control, pp. 724-729.
QU, Zukun LAAS-CNRS Dahhou, Boutaieb LAAS-CNRS Roux, Gilles LAAS-CNRS

Model-Based Fault Diagnosis for Wind Turbines – Can It Work in Practice? Michel Kinnnaert (Seminal Session)
Chair: Schulte, Horst HTW-Berlin, Univ. of Applied Sciences
11:30-12:15 FrSP5.1

Model-Based Fault Diagnosis for Wind Turbines - Can It Work in Practice?, pp. 730-734.
Kinnnaert, Michel Univ. Libre De Bruxelles Rakoto, Laurent Univ. Libre De Bruxelles (ULB)

FrB1
Networked Control Systems (Regular Session)
Chair: Sauter, Dominique Lorraine Univ Co-Chair: Boem, Francesca Imperial Coll. London
14:00-14:40 FrB1.1

Plug-And-Play Diagnosis of Locally Interconnected Systems with Limited Model Information, pp. 735-742.
Bodenburg, Sven Ruhr-Univ. Bochum Lunze, Jan Ruhr-Univ. Bochum
14:20-14:40 FrB1.2

Fault-Tolerant Control of Networked Systems with Re-Distribution of Control Tasks in Case of Faults, pp. 743-749.
Schenk, Kai Ruhr-Univ. Bochum Lunze, Jan Ruhr-Univ. Bochum
14:40-15:00 FrB1.3

Rhouma, Taouba Univ. of Gabes, ENIG, MACS Keller, Jean-Yves Univ. Henri Poincaré, CRAN Chabir, Karim ENIG Sauter, Dominique Lorraine Univ Abdelkim, Mohamed Naceur National Engineering School of Gabes, Tunisia. Res. Unit Of
15:00-15:20 FrB1.4

Tranninger, Markus Graz Univ. of Tech Haid, Timo TU Graz / Posche AG Stetinger, Georg VIRTUAL VEHICLE Res. Center Benedikt, Martin Virtual Vehicle Res. Center Horn, Martin Graz Univ. of Tech
15:20-15:40 FrB1.5

Sensor Placement Algorithm for Distributed Fault Diagnosis, pp. 763-770.
Gupta, Vikas UPC Puig, Vicenç Univ. Pol. De Catalunya (UPC)
15:40-16:00 FrB1.6

Decentralized Fault Diagnosis for Heterogeneous Multi-Agent Systems, pp. 771-776.
Boem, Francesca Imperial Coll. London Sabattini, Lorenzo Univ. of Modena and Reggio Emilia Secchi, Cristian Univ. of Modena

FrB2
RECONFIGURE FP7 Project for Advanced Real-Time FDD and FTC for Civil Aircraft: Contributions and Results (Invited Session)
Chair: Kerr, Murray DEIMOS Space SLU Co-Chair: GOUPIL, Philippe AIRBUS Operations S.A.S Organizer: Kerr, Murray DEIMOS Space SLU Organizer: GOUPIL, Philippe AIRBUS Operations S.A.S
14:00-14:20 FrB2.1

RECONFIGURE FP7 Project Preliminary Results and Contributions (I), pp. 777-782.
Kerr, Murray Lawrence DEIMOS Space SLU GOUPIL, Philippe AIRBUS Operations S.A.S BOADA BAUXELL, JOSEP AIRBUS Rosa, Paulo Andre Nobre Inst. for Systems and Robotics - Inst. Superior Recupero, Cristina Elecnor Deimos Space
14:20-14:40 FrB2.2

Enhancing Flight Control in Case of Total Angle of Attack Sensor Loss (I), pp. 783-789.
Joos, Hans-Dieter German Aerospace Center (DLR) Ossmann, Daniel Aerospace Engineering and Mechanics
14:40-15:00 FrB2.3

A Recursive Estimation Algorithm to Track Aircraft Model Parameters (I), pp. 790-797.
Hardier, Georges ONERA the French Aerospace Lab Ferreres, Gilles Onera / Dcsd Seren, Cedric ONERA - the French Aerospace Lab
15:00-15:20 FrB2.4

Adaptive Control of a Civil Aircraft through On-Line Parameter Estimation (I), pp. 798-804.
Ferreres, Gilles Onera / Dcsd Hardier, Georges ONERA the French Aerospace Lab Seren, Cedric ONERA - the French Aerospace Lab
15:20-15:40 FrB2.5

Development and Evaluation of Sliding Mode Schemes for the RECONFIGURE Benchmark Problem (I), pp. 805-810.
Bharani Chandra, Kumar Univ. of Leicester Pakki Chen, Lejun Univ. of Exeter Alwi, Halim Univ. of Exeter Edwards, Christopher Univ. of Exeter

FrB3
Fault Accommodation (Regular Session)
Chair: Witczak, Marcin Univ. of Zielona Gora Co-Chair: Ponsart, Jean-Christophe
14:00-14:20 FrB3.1
Distributed Fault Diagnosis Using Minimal Structurally Over-Determined Sets: Application to a Water Distribution Network, pp. 811-818.

Gupta, Vikas  
Puig, Vicenç  
14:20-14:40  
FrB3.2

Sensor Location for Fault Accommodation Problem, pp. 819-824.

Zhirabok, Alexey  
Shumsky, Alexey  
Zuev, Alexander  
Bobko, Evgeniy  
14:40-15:00  
FrB3.3

Fault-Tolerant Control and Diagnosis for LPV System with H-Infinity Virtual Sensor, pp. 825-830.

Luzar, Marcel  
Witczak, Marcin  
15:00-15:20  
FrB3.4

Virtual Actuator-Based FTC for LPV Systems with Saturating Actuators and FDI Delays, pp. 831-837.

Rotondo, Damiano  
Ponsart, Jean-Christophe  
Nejjari, Fatiha  
Theilliol, Didier  
Puig, Vicenç  
15:20-15:40  
FrB3.5


Chitraganti, Shaikshavali  
Aberkane, Samir  
Aubrun, Christophe  
15:40-16:00  
FrB3.6


Buciakowski, Mariusz  
Witczak, Marcin  
2015-15:40  
FrB3.5


Nejjari, Fatiha  
Theilliol, Didier  
Puig, Vicenç  
15:40-16:00  
FrB3.6