

Executive Program for Scientific and Technical Cooperation between Italy and Serbia



University of Cagliari

Department of Electrical
and Electronic Engineering



*Ministero degli Affari Esteri
e della Cooperazione Internazionale*



University of Belgrade

School of Electrical Engineering
Signals and Systems Department

RObst **D**ecentralised **E**stimation **f**Or large-scale systems (*RODEO*)

Work-in-Progress Meeting

Belgrade, November 21st 2014

Computer Center of the School of Electrical Engineering - Bulevar Kralja Aleksandra, 73

Preliminary Program

- 9:00 - Participant registration
- 9:15 - Welcome
- 9:30 - *Data-driven design of fault-tolerant control systems*
(Prof. Steven Ding - University of Duisburg)
- 10:30 - *Model based FDI via sliding modes*
(Alessandro Pilloni, Elio Usai – University of Cagliari)
- 11:00 - Coffee break
- 11:20 - *New trends in diagnosis of electrical machines: Present and Future*
(Prof. Rubén Puche Panadero – Technical University of Valencia)
- 12:20 - *FDD based on data-driven approach*
(Aleksandra Marjanović, Željko Đjurović – University of Belgrade)
- 12:40 - *Particle filters in the frame of FDI algorithms*
(Predrag Tadić – University of Belgrade)
- 13:00 - Lunch break
- 14:30 - *State and parameter estimation in PEM-Fuel cells: a sliding mode approach*
(Elio Usai, Julio Alberto Luna Pacho – University of Cagliari)
- 14:50 - *Predictive maintenance based on control diagrams: case study of coal mills*
(Emilija Kisić – University of Belgrade)
- 15:10 - *Statistical approach to data-driven FDD for electric motors*
(Francesco Ferracuti, Gianluca Ippoliti - Polytechnic University of Marche)
- 15:30 - Round table
Can integration of Data-Driven and Model-Based approaches improve estimation and diagnosis performances?
- 16:30 - Coffee break
- 17:00 - *Online Model-Based Fault Detection - Application in Water Distribution Systems*
(Estefania Etcheves Miciolino – Biomedical Campus University in Rome)
- 17:20 - Round table
Estimation and diagnosis problems in Large-Scale-Systems
- 18:20 - Meeting end