

- 8.30** *Registrazione*
- 9.15** *Saluti di benvenuto*
- 9.40 - 10.40** *Robust Control*  
**Auditorium Sant'Agostino**  
 Chairman: *Franco Garofalo*
- 9.40 "Optimal Input Design for Direct Data-Driven Tuning of Model-Reference Controllers"  
*S. Formentin, A. Karimi and S. Savaresi*
- 10.00 "DFK Control Design for Nonlinear Systems"  
*C. Novara, L. Fagiano and M. Milanese*
- 10.20 "Variable Robustness Control: Principles and Algorithms"  
*M. Campi and S. Garatti*
- 10.40 - 11.40** *Sessioni interattive con pausa caffè*  
**Sala Arechi II e Sala Traiano**
- 11.40 - 13.00** *Nonlinear Systems*  
**Auditorium Sant'Agostino**  
 Chairman: *Riccardo Scattolini*
- 11.40 "Design of Observers for Lipschitz Nonlinear Systems Based on Input-to-State Stability"  
*A. Alessandri*
- 12.00 "Moving-Horizon State Estimation for Nonlinear Systems Using Neural Networks"  
*A. Alessandri, M. Baglietto, G. Battistelli and M. Gaggero*
- 12.20 "Controllo Robusto, Osservazione dello Stato ed Identificazione Parametrica per Sistemi Incerti di Ordine non Intero. Risultati Recenti, Analisi in Corso e Prospettive Future"  
*A. Pisano, E. Usai and M. R. Rapaic'*
- 12.40 "Prescribed Performance Adaptive Control of Uncertain Systems Using Neural Networks: An LMI Approach"  
*M. L. Fravolini and G. Campa*
- 13.00 - 14.40** *Pausa pranzo*

[Mercoledì **12** settembre **2012**]



- 14.40 - 16.20 Applications**  
**Auditorium Sant'Agostino**  
 Chairman: *Sauro Longhi*
- 14.40 "A Novel Space-Dependent Recursive Algorithm for Simultaneous Filtering and Deblurring of 3-D Images"  
*F. Conte, A. Germani and G. Iannello*
- 15.00 "Rotor Speed Sensor Fault Detection in Induction Motors: Application to the Fault-Tolerant Control of Electric Vehicles"  
*C. M. Verrelli, R. Marino, P. Tomei and S. Scalzi*
- 15.20 "A Quasi-Sliding Mode Approach for Robust Control and Speed Estimation of PM Synchronous Motors"  
*M. L. Corradini, G. Ippoliti, S. Longhi and G. Orlando*
- 15.40 "Simultaneous Boundary Partitioning and Cameras Synchronization for Optimal Video Surveillance"  
*F. Zanella, F. Pasqualetti and F. Bullo*
- 16.00 "Robust Vehicle Lateral Stability Control Design with Driver Intent Analysis"  
*A. Carvalho, G. Palmieri, E. H. Tseng, L. Glielmo and F. Borrelli*
- 16.20 - 17.00 Sessioni interattive con pausa caffè**  
**Sala Arechi II e Sala Traiano**
- 17.00 - 18.40 Complex Systems and Networks, I**  
**Auditorium Sant'Agostino**  
 Chairman: *Luigi Fortuna*
- 17.00 "Distributed Coordination-by-Constraint Strategies for Multi-Agent Networked Systems"  
*F. Tedesco, A. Casavola and E. Garone*
- 17.20 "Sincronizzazione Remota in Reti Complesse"  
*M. Frasca*
- 17.40 "Distributed Global Connectivity Maintenance for Multi-Robot Systems"  
*L. Sabattini, C. Secchi, C. Fantuzzi, N. Chopra and A. Gasparri*
- 18.00 "A Decentralized Controller-Observer Scheme for Multi-Agent Weighted Centroid Tracking"  
*G. Antonelli, F. Arrichiello, F. Caccavale and A. Marino*
- 18.20 "Distributed Control of Mobile Robots for Connectivity Maintenance"  
*F. Arrichiello, G. Antonelli and S. Chiaverini*



**9.00 - 10.40 Robotics**  
**Auditorium Sant'Agostino**  
Chairman: *Paolo Valigi*

- 9.00 "On-Line Estimation of Variable Stiffness in Flexible Robot Joints"  
*F. Flacco, A. De Luca, I. Sardellitti and N. Tsagarakis*
- 9.20 "A Discriminative Approach for Appearance Based Loop Closing"  
*T. Ciarfuglia, G. Costante, E. Ricci and P. Valigi*
- 9.40 "A Novel Architecture for Observation and Interpretation of Human Manipulation"  
*A. Cavallo, G. De Maria, P. Falco, C. Natale and S. Pirozzi*
- 10.00 "Hierarchical Formations of Nonholonomic Vehicles"  
*L. Consolini, F. Morbidi, D. Prattichizzo and M. Tosques*
- 10.20 "Modeling and Control of a Flying Robot Interacting with the Environment"  
*L. Marconi, R. Naldi and L. Gentili*

**10.40 - 11.40 Sessioni interattive con pausa caffè**  
**Sala Arechi II e Sala Traiano**

**11.40 - 13.00 System Identification and Fault Detection**  
**Auditorium Sant'Agostino**  
Chairman: *Sergio Savaresi*

- 11.40 "A Distributed Estimation Method for Sensor Networks Based on Pareto Optimization"  
*F. Boem, Y. Xu, C. Fischione and T. Parisini*
- 12.00 "Kernel-Based Non-Asymptotic Parameter Estimation of Continuous-time Systems"  
*G. Pin, A. Assalone, M. Lovera and T. Parisini*
- 12.20 "An Algebraic Approach for Fault Diagnosis of Elastodynamic Distributed Parameter Systems"  
*R. Ferrari, T. Parisini and M. Polycarpou*
- 12.40 "The Carleman Approximation for Nonlinear Systems: a Powerful Tool for State Estimation Problems"  
*F. Cacace, A. Germani, C. Manes, G. Mavelli and P. Palumbo*

**13.00 - 14.40 Pausa pranzo**

[ **Giovedì 13 settembre 2012** ]

**14.40 - 16.20** *Complex Systems and Networks, II*  
**Auditorium Sant'Agostino**

Chairman: *Maria Pia Fanti*

- 14.40 "Controllo e Modellistica per Sistemi di Ordine non Intero: Risultati Recenti e Prospettive Future"  
*R. Caponetto*
- 15.00 "Fractional Order Controllers: Novel Design and Tuning Methods and Approximation Techniques"  
*G. Maione and P. Lino*
- 15.20 "A Bayesian Approach to Sparse Dynamic Network Identification"  
*A. Chiuso and G. Pillonetto*
- 15.40 "Fault Tolerant Stabilizability of MIMO Multi-Hop Control Networks"  
*F. Smarra, A. D'Innocenzo and M. D. Di Benedetto*
- 16.00 "Discrete Consensus for Gossip-Based Distributed Load Balancing"  
*M. Franceschelli, A. Giua and C. Seatzu*

**16.20 - 17.00** *Sessioni interattive con pausa caffè*  
**Sala Arechi II e Sala Traiano**

**17.00 - 18.20** *Model Predictive Control and Hybrid Systems*  
**Auditorium Sant'Agostino**

Chairman: *Giuseppe De Nicolao*

- 17.00 "Plug-and-Play Decentralized Model Predictive Control"  
*S. Riverso, M. Farina and G. Ferrari-Trecate*
- 17.20 "Disturbance-Driven Model Predictive Control by Means of Youla-Kučera Parameter Switching with an Application to Drainage Canal Control"  
*F. Blanchini, F. A. Pellegrino and S. Miani*
- 17.40 "Memory Adaptation in Switching Supervisory Control"  
*G. Battistelli and P. Tesi*
- 18.00 "Stabilization and Tracking for Switching Linear Systems under Unknown Switching Sequences"  
*M. Baglietto, G. Battistelli and P. Tesi*

**20.30** *Cena presso Hotel "Il Molino"*