WORKSHOP ON EMBEDDED OPTIMIZATION EMBOPT 2014
September 8-9, 2014
Cappella Guinigi – Complesso di San Francesco
Via della Quarquonia 1/a - Lucca

DAILY SCHEDULE

**DAY 1**  MONDAY, SEPTEMBER 8

9.00 – 10.00 am  **Stephen Boyd,**  *Stanford University*
A Splitting Method for Embedded Optimal Control

10.00 – 11.00 am  **Pontus Giselsson,**  *Stanford University*
Preconditioning in First Order Optimization Methods

>>>Coffee break<<<

11.30 am – 12.30 pm  **Panagiotis Patrinos,**  *IMT Institute for Advanced Studies Lucca*
Splitting Envelopes: Accelerated Second-order Proximal Methods

12.30 – 01.00 pm  **Andrea Suardi,**  *Imperial College, London*
Fast FPGA Prototyping with Software Development Kit for FPGA (SDK4FPGA)

>>>Lunch<<<

02.00 – 03.00 pm  **Edward Hartley,**  *University of Cambridge*
Model Predictive Control on an FPGA: Aerospace & Spacecraft Scenarios

03.00 – 04.00 pm  **Arvind U. Raghunathan,**  *MERL - Mitsubishi Electric Research Laboratories*
ADMM Algorithm for General Convex QP - Optimal Step-Size Selection, Infeasibility Detection and Convergence Acceleration

>>>Coffee break<<<

04.30 – 05.30 pm  **Alexander Domahidi,**  *ETH Zürich*
Embedded Optimization for Mixed Logic Dynamical Systems
DAY 2 TUESDAY, SEPTEMBER 9

09.00 – 10.00 am  Yuri Nesterov, CORE/INMA, UCL
Primal-dual Subgradient Method with Dual Coordinate Update

10.00 -11.00 am  Ion Necoara, Politehnica University of Bucharest
Iteration Complexity Analysis of Dual Gradient Methods: Applications to Embedded and Distributed MPC

>>>Coffee break<<<

11.30 am -12.30 pm  Mikael Johansson, KTH Royal Institute of Technology
Asynchronism and Convergence Rates in Distributed Optimization

12.30 – 01.00 pm  Milan Vukov, KU Leuven
Fast Solvers for Nonlinear Optimal Control and Estimation

>>>Lunch<<<

02.00 – 03.00 pm  Alberto Bemporad, IMT Institute for Advanced Studies Lucca
Embedded Convex Quadratic Optimization for Model Predictive Control

03.00 – 04.00 pm  Stefano Di Cairano, MERL - Mitsubishi Electric Research Laboratories
Multiplicative fixpoints for convex quadratic programs

>>>Coffee break<<<

04.30 – 05.30 pm  Nikolaos Freris, NYU Abu Dhabi
Optimal Data Mining on Compressed Data

05.30 – 06.30 pm  Giuseppe Notarstefano, University of Salento
Constraint-exchange Methods for Distributed Optimization in Asynchronous Networks