First announcement and call for papers and contributions

The 8th AAC 2016 symposium will be held at Kolmården Wildlife resort (Vildmarkshotellet) near Norrköping City in Sweden. The symposium dates are:

Welcome reception – Sunday, June 19
Symposium – Monday, June 20 – Thursday lunch, June 23,
Farewell lunch – Thursday lunch, June 23

In addition to the main symposium there will be a pre-symposium tutorial covering both basics and emerging areas within Automotive Control and it will be organized at Linköping University Campus, Saturday, June 18 - Sunday, June 19. Transportation will be arranged from the pre-symposium to the Welcome reception.

Suggestions for topics and contributions are welcome.

Submission deadlines and time plan

Prospective authors are requested to submit their contributions as a pdf file in IFAC paper format through IFAC Paperplaza conference manuscript management system http://ifac.papercept.net. The templates for manuscripts are available at the website and the deadlines for submissions are shown below

Draft papers:	**October 1, 2015**		
Acceptance notification:	January 15, 2016	Draft program:	February 1, 2016
Final papers:	**February 15, 2016**	Final program:	March 15, 2016
Early registration:	January, 2016	Fee increase:	April 1, 2016

Information about the symposium will be announced on: http://tc.ifac-control.org/7/1/

About the venue

Vildmarkshotellet is the hotel of Kolmården, located by the wildlife park with an amazing view across the lake Bråviken. The venue will offer a one site for all symposium attendees, providing ample of opportunity to discuss, interact and network.

Scope of the Symposium

The symposium will cover a wide range of advanced automotive control, and includes but is not limited to the following topics.

1. Combustion Engine Control - Conventional Drive Train
    - Combustion Modeling and Control: Spark Ignition, Compression Ignition, Low Temperature Combustion
    - Exhaust Gas Aftertreatment: Catalyst and DPF models, Thermal Management, SCR control, Regeneration Control
    - Gas Exchange Processes: Turbocharging, Supercharging, Variable Valve Technology
    - Model-based Diagnostics
2. Alternative Power Systems
    - Energy Management
    - Energy Storage Systems: Electrochemical Systems, Supercapacitors, Hydrogen Storage, Charging and Infrastructure
    - Fuel-cells, Hydrocarbon Fuel Reforming, Hydrogen Combustion
    - Battery Model and Battery Control
    - XEV (HEV,EV,FCEV,etc.)/Solar-Powered Vehicles
    - Alternative Hybrid Vehicles: Hydraulic Hybrids, Air Hybrids, Kinetic Energy Hybrids (e.g. Flywheel)
3. Vehicle Dynamics and Control
    - Active Chassis Systems: Brake, Steering, Suspension Systems
    - Integrated Motion Control: Direct Yaw Control/Electronic Stability Control), 4 Wheel Steering,X-by-Wire, Active Suspensions and Roll Bars
    - Vehicle State Estimation: Sensor Development, Side Slip Angle Observation, Tire and Friction Estimation
4. Active Safety and Driver Assistance Systems
    - Adaptive Cruise Control, Heading Control, Lane Keeping, Driver Warning Systems, Systems Based on Car-to-X-communication
    - Autonomous Driving and Collision Avoidance: Sensor Fusion, Modelling of the Environment, Control Architectures
    - Intelligent Vehicles and Robotics Technology in Vehicles
    - Human Factors in Driver Dynamics or Driver Assistance Systems
5. Design and Engineering
    - Diagnosis
    - Functional Safety and Standardization
    - Hardware-in-the-loop Simulation
    - Model-based Calibration
    - Plant Modelling and System Identification
    - Rapid Control Prototyping
    - Security and Dependability
    - Vehicular Power Networks and Inter-Vehicular Networks

Looking forward to meeting You in Kolmården!

Lars Eriksson, Linköping University, Sweden - NOC, Chair
Tielong Shen, Sofia University, Japan - IPC, Chair
Per Tunestål, Lund University, Sweden - Editor