Session Keynotes

Invited Sessions may include keynote papers whose presentation time is 40 minutes. These papers deal with survey of certain technical areas, state-of-the-art technologies, in-depth reviews, and detailed information of current advances. There are 17 keynote papers in the Congress.

Servo Control for Storage Systems and Precision Devices I   *MoA21*
HDD Servo Control Technologies - What We Have Done and Where We Should Go
Takashi Yamaguchi, Hitachi Global Storage Technologies,
Takenori Atsumi, Hitachi, Ltd.

Date	July 7 (Mon)
Time	10:30 - 11:10
Location	Room 321B, Conference Center, 3rd Floor

Advances in Higher Order Sliding Mode Control   *TuA03*
Homogeneous High - Order Sliding Modes
Arie Levant, Tel - Aviv University

Date	July 8 (Tue)
Time	10:30 - 11:10
Location	Room 304B, Conference Center, 3rd Floor

Radio Frequency Identification (RFID) Technology in Supply Chain Management I   *TuA23*
RFID Technology in Supply Chain Management: State of the Art and Perspectives
Alexandre Dolgui, Ecole des Mines de Saint Etienne,
Jean-Marie Proth, INRIA

Date	July 8 (Tue)
Time	10:30 - 11:10
Location	Room 323, Conference Center, 3rd Floor

Advances in Higher Order Sliding Mode Observation and Estimation   *TuB03*
High-Order Sliding-Mode Observation for Systems with Unknown Inputs
Leonid M. Fridman, Univ. of Mexico
Arie Levant, Tel - Aviv University,
Jorge Angel Davila Montoya, Unversity of Mexico (Universidad Nacional Autonoma de Mexico)

Date	July 8 (Tue)
Time	14:00 - 14:40
Location	Room 304B, Conference Center, 3rd Floor

Systems and Control Sciences in Social Systems Applications   *TuB16*
Applied System and Control Sciences to Social Systems: Globalization Age Paradigms
Georgi Marko Dimirovski, Dogus Univ of Istanbul

Date	July 8 (Tue)
Time	14:00 - 14:40
Location	Room 316, Conference Center, 3rd Floor

Hammerstein-Wiener System Identification   *WeA09*
Nonlinear System Identification under Various Prior Knowledge
Przemyslaw Sliwinski, Wrocław University of Technology,
Zygmunt Hasiewicz, Wrocław University of Technology,
Grzegorz Mzyk, Wrocław University of Technology

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 311C, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems I   *WeA21*

Architectures for Tracking Control in Atomic Force Microscopes
Jeffrey Austin Butterworth, University of Colorado,
Lucy Y. Pao, University of Colorado at Boulder,
Daniel Y. Abramovitch, Agilent Labs

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 321B, Conference Center, 3rd Floor

Industrial Applications of Real-Time Distributed Embedded Systems   *WeA23*
It's Time for a Change: The Sun Java Real-Time System for Automation Systems
Gregory Bollella, Sun Microsystems

Date	July 9 (Wed)
Time	10:30 - 11:10
Location	Room 323, Conference Center, 3rd Floor

Reachability Computations for Hybrid Systems   *WeB12*
Safety Verification and Reachability Analysis for Hybrid Systems
Herve Gueguen, SUPELEC,
Marie-Anne, SUPELEC,
Lefebvre and Othman Nasri, SUPELEC,
Janan Zaytoon, Univ of Reims

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 313, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems II   *WeB21*
Review of Feedforward Approaches for Nano Precision Positioning in High Speed SPM Operation
Santosh Devasia, University Of Washington

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 321B, Conference Center, 3rd Floor

New Trend in Decentralized Control   *WeB24*
Stabilization of Nonlinear Switched Continuous - Time Complex Systems
Lubomir Bakule, Academy of Sciences of Czech Republic
Manuel de la Sen, University del Pais Vasco

Date	July 9 (Wed)
Time	14:00 - 14:40
Location	Room 324, Conference Center, 3rd Floor

Dynamics and Control of Micro- and Nano-Scale Systems III   *WeC21*
Control and Systems Approaches to Atomic Force Microscopy
Murti V. Salapaka, University of Minnesota, Twin Cities,
Pranav Agarwal, University of Minnesota, Twin Cities

Date	July 9 (Wed)
Time	16:30 - 17:10
Location	Room 321B, Conference Center, 3rd Floor

Recent Advances in Intelligent Autonomous Systems   *ThA19*
A Tutorial Introduction to Autonomous Systems
Kevin L. Moore, Colorado School of Mines

Date	July 10 (Thu)
Time	10:30 - 10:50
Location	Room 320C, Conference Center, 3rd Floor

Semantic-Based Solutions for Enterprise Integration and Networking   *ThA24*

The Unified Enterprise Modelling Language - Overview and Further Work
Victor Anaya, Universidad Politecnica de Valencia,
Giuseppe Berio, University of Torino,
Mounira Harzallah LINA -University of Nantes,
Patrick Heymans, University of Namur (FUNDP)
Raimundas Matulevicius, University of Namur
Andreas L Opdahl, University of Bergen,
Herve Panetto, Nancy-University,
Maria Jose Verdecho, Universidad Politecnica de Valencia

Date	July 10 (Thu)
Time	10:30 - 11:10
Location	Room 324, Conference Center, 3rd Floor

Modeling and Control in the Behavioral Framework   ThB06
Linear Differential Behaviors Described by Rational Symbols
Jan C. Willems, K.U. Leuven,
Yutaka Yamamoto, Kyoto University

Date	July 10 (Thu)
Time	14:00 - 14:40
Location	Room 310A, Conference Center, 3rd Floor

Fractional Differentiation and Its Applications I   FrA06
An Overview of the CRONE Approach in System Analysis, Modeling and Identification, Observation and Control
Alain Oustaloup, Jocelyn Sabatier, Patrick Lanusse, Rachid Malti, Pierre Melchior, Mathieu Moze
Universite Bordeaux

Date	July 11 (Fri)
Time	10:30 - 11:10
Location	Room 310A, Conference Center, 3rd Floor

Non-Intrusive Human Monitoring   FrA30
Human Monitoring-Based Driving Support
Makoto Itoh, University of Tsukuba

Date	July 11 (Fri)
Time	10:30 - 11:10
Location	Room 330C, Conference Center, 3rd Floor