

# 5th IFAC Conference on **Nonlinear Model Predictive Control**



# September 17-21, 2015. Seville, Spain

#### **PLENARY SPEAKERS**

David Q. Mayne. Imperial College (UK)

Panagiotis D. Christofides. Univ. California (USA)

Rolf Findeisen. Otto-von-Guericke Univ. (GER)

David Angeli. Imperial College (UK)

#### **SEMIPLENARY SPEAKERS**

J. Lygeros, ETHZ (CH)

L.T. Biegler, CMU (USA)

R.D. Braatz, MIT (USA)

E.F. Camacho, U. Sevilla (SP)

J.H. Lee, KAIST (KR)

L. Magni, U.Pavia (IT)

A. Bemporad, IMT Lucca (IT)

M. Alamir, U. Grenoble (FR)

J.E. Normey, U. Sta. Catarina (BR)

D.E. Quevedo, U. Newcastle (AU)

E.C. Kerrigan, Imperial College (UK)

G. Pannocchia, U. Pisa (IT)

M. Lazar, TU Eindhoven (NL)

*L. Fagiano*, ABB (CH)

R. González, ISA (SP)

M. Muller, U. Stuttgart (GER)

C. de Prada, U. Valladolid (SP)

# ORGANIZING COMMITTEE:

# **Conference Chairs:**

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F. Arista. CEPSA. (Spain)

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T. Alamo, I. Alvarado, J.M. Bravo, C. Bordons,

M. Pereira, M.R. Arahal, C. Ocampo-Martinez.

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S. Di Cairano . Mitsubishi Electric (USA)

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#### **CONFERENCE SCOPE:**

The triennial IFAC Conference on Nonlinear Model Predictive Control aims at bringing together researchers in the area of MPC, from both academia and industry in order to establish the current state-ofthe-art and focus the future development of the MPC field towards relevant directions. NMPC'15 is sponsored by the IFAC Technical Committee on Non-Linear Control Systems.

#### **TOPICS:**

Stability and recursive feasibility of nonlinear model predictive control, robust MPC, stochastic MPC, Hybrid MPC, distributed MPC, multiobjective MPC, dedicated hardware implementation of MPC, dedicated optimization solvers for model predictive control, applications of model predictive control.

#### **CONFERENCE WEBSITE:**

http://disa.us.es/nmpc15/

# **REGISTRATION AND CONFERENCE SITE:**

The conference will be hosted at the NH Collection Sevilla, a 4 star Hotel located in the downtown of Seville. The registration will include the assistance to the conference as well as 4 nights full board and conference banquet. Registration will be done through the conference website.



SEVILLE, SPAIN: Seville is the 2000-year-old artistic, cultural, and financial capital of Andalusia in southern Spain. Situated on the plain of the Guadalquivir River, the city is unique for its Andalusian culture, with historical and artistic richness, flamenco music and dances, lovely weather and tasty gastronomy. Its Old Town, the third largest in Europe with an area of 4 square kilometres, contains three UNESCO World Heritage Sites: the Alcázar palace complex, the Cathedral and the General Archive of the Indies. The city also features the largest wooden structure in the world, Metropol Parasol (which is shown in the banner).



IMPORTANT DEADLINES	
Submission of draft papers	April 15, 2015
Acceptance/rejection notification	June 15, 2015
Submission of final papers	July 1, 2015
Final program available	Aug. 1, 2015

















#### **CALL FOR CONTRIBUTIONS:**

Contributors are invited to submit papers that, if accepted, will be scheduled for oral or poster presentation. All accepted papers will appear in the preprints of the meeting and will be hosted on-line on the IFAC-PapersOnLine.net website. All papers presented will be recorded as an IFAC Publication. When preparing the paper manuscript the authors should adhere to the IFAC style files for conference paper.

#### **INDUSTRIAL SESSION TRACK:**

An industrial session track has been organized to analyze the predictive control technique from the industry point of view. Companies such as Honeywell, Mitsubishi Electrics or Cybernetica will participate. Companies interested in participating in this session track, please contact with the National Organizing Committee.

#### PRECONFERENCE MEETINGS AND WORKSHOPS:

The conference brings a nice framework for organizing events related with predictive control, such as workshops or project meetings. If you are interested, please, contact with the National Organizing Committee before June 1.

#### **GUIDELINES**

The submission portal for NMPC'15 will open on March 1st, 2015. The submission deadline for contributions to NMPC'15 is April 15, 2015. All submissions must be done through the IFAC Conference Manuscript Management System website at <a href="http://ifac.papercept.net/">http://ifac.papercept.net/</a>.

**Contributions:** Only regular papers are accepted at NMPC'15 which can have a length of up to 8 pages at intial submission. Accepted papers are limited to 6 pages in the conference preprints and on-line proceedings at no extra charge; up to two extra pages are allowed for a charge (quantity to be determined).

**Support for Authors:** Author's kits with style (.cls) files for LaTeX and templates (.dot) for MS-Word are available from the submission website. Go to http://ifac.papercept.net/ and select "Support" for these files and example files, or directly go to the support page. Please do not change the formatting in any way.

#### NMPC15 SUBMISSION AND REGISTRATION POLICIES

All papers submitted to NMPC'15 must be written in English and formatted in the standard IFAC 2-column format provided on the IFAC Conference Management System website (see the item "Support for Authors" above).

For initial submissions, all papers are limited to eight (8) pages. The submission website will not permit longer papers to be uploaded.

For the final upload all papers are limited to six (6) pages at no extra charge. Authors may upload longer manuscripts up to a maximum of eight (8) pages total. However, each page in excess of six (6) will incur a charge (quantity to be determined).

For each accepted paper at least one of the authors should have a full registration in order to have the paper included in the preprints and the post-conference on-line proceedings at IFAC-PapersOnLine. A single full registration allows to upload one (1) paper.

## **COPYRIGHT CONDITIONS**

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(http://www.ifac-control.org/events/organizersguide/PublicationEthicsGuidelines.pdf/view).

Accepted papers that have been presented at an IFAC meeting, will be published in the proceedings of the event using the open-access IFAC-PapersOnLine (<a href="http://www.ifac-papersonline.net/">http://www.ifac-papersonline.net/</a>). To this end, the author(s) must confer the copyright to IFAC when they submit the final version of the paper through the paper submission process. See also <a href="http://www.ifac-papersonline.net/static/copyright.html">http://www.ifac-papersonline.net/static/copyright.html</a> for the personal permission rights to reproduce the published paper on a personal or institutional www-site.