

First Announcement and Call for Papers

## IASS Symposium 2007

### Architectural engineering - Toward the future looking to the past

3 - 6 December 2007

Venezia, Italy

#### OBJECTIVES

Free - form design of shells and spatial structures, strongly influenced by modern IT resources, requires: technological innovation (know-how), to be driven by a confident conceptual design (know what) in a scientific engineering scenario (know why) addressed to re-set the design process reliability assessment due to innovation and complexity of new architectural morphologies.

In fact new architectural design trends, giving prevalence to aesthetic over the static rationality, will land to a future of generalized "free-form-buildings" (FFB) in contrast with the scientific philosophy inherited from Torroja, Maillart, Nervi and others, who designed quite sure that the observing static laws is "per se" a guarantee for achieved aesthetic results.

In the frame of the actual inter-trans and multidisciplinary design process between architecture and structural engineering, 2007 Venetian Symposium invites professionals, researchers and academics to update the "State of the Art" concerning the classic scientific and technical themes of the IASS.

#### THEMES

The scope of the symposium covers all aspects of shell and spatial structures and will include following topics:

- *Conceptual Design:*  
Design of Shell and Spatial Structures: state of the art and future applications; Informatics Technology in Morphology; Form Finding and Optimization Design; Innovative Design and Construction Methods; Ethics & Esthetics in Modern Design Tendencies; Structural Architectural Typology
- *Mechanics and Structural Modelling:*  
Stability and fracture behaviors; Geometric and Material Nonlinear Analyses; Static and Dynamic Non Linear Structural Response; Wind & Earthquake Engineering ; Thin-Walled or Thin-Shell Structures; Sensitivity and Reliability analysis; Structural Optimization
- *Materials:*  
New Structural Materials; Material Modelling, Plasticity, Fracture, Damage, Fatigue; Smart Materials
- *Experimental Analysis and Control Methods:*  
AI and expert systems; Digital or smart structures; Automation and monitoring techniques; Repair and retrofit; Control & dynamic identification techniques; Failure and collapse diagnosis
- *Case Studies:*  
Tensegrity, Membrane and Cable Structures;

Spatial Structures; Free- form structures; Innovative Structures; Bridge Engineering; Planning, Financing and Maintenance,

#### CALL FOR PAPERS

Authors are welcome to submit abstracts of about 400 words on anyone of above-mentioned topics.

The full address, fax number and e-mail address of the principal author(s) should be given.

Only papers registered and approved by the Scientific Board will be included in the Symposium Proceedings.

#### DATE AND VENUE

December 3-6, 2007 Venezia - Italy

#### LANGUAGE

English will be the official language for both oral and written presentation and no simultaneous translation will be provided for the technical sessions.

#### PROCEEDINGS

The proceedings of the symposium will be published in book or CD-ROM and will be available at the time of registration.

#### TIME SCHEDULE

Submission of abstracts:	January 15, 2007
Notification of preliminary acceptance:	April 2, 2007
Submission of final papers:	May 31, 2007
Notification of final acceptance:	July 26, 2007

#### KEYNOTES AND INVITED SPEAKERS

A number of distinguished academics and engineers will be invited to deliver lectures related to the above-mentioned topics.

#### PRELIMINARY REGISTRATION

Those interested in participating in the Symposium are invited to contact the Secretariat.

#### CORRESPONDENCE

Secretariat IASS 2007

Prof. Enzo Siviero – Mrs. Graziana Tommasella

University IUAV of Venice

Department of Architectural Construction

Campus Terese - Dorsoduro 2206

30123 Venezia - Italy

Tel: 00 39 041 2571307-2571309

Fax: 00 39 041 5223627

e-mail: [siviero@iuav.it](mailto:siviero@iuav.it)

in short the e-mail for symposium correspondence will

be: [iass2007@iuav.it](mailto:iass2007@iuav.it)

Web Site: *Under Construction*