7th International Conference on Computational Mechanics for Spatial Structures

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Editors:
A. Ibrahimbegovic, S. Dolarevic, M. Hrasnica, M. Madzarevic and M. Zlatar
IASS-IACM 2012: 7th International Conference on Computational Mechanics for Spatial Structures:

EDITORIAL

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Abstract: IASS-IACM 2012 is the seventh in series of International Conferences that allow very fruitful exchange of ideas between the members of two scientific communities with very active associations, IASS: International Association for Shell and Spatial Structures and IACM: International Association for Computational Mechanics. This conference is organized jointly by Ecole Normale Supérieure-Cachan (represented by LMT-Cachan), France and University of Sarajevo (represented by GF Sarajevo), Bosnia and Herzegovine.

1 OBJECTIVES OF IASS-IACM 2012

It is fair to say that the challenge of constructing spatial structures (including the primadonnas among them, the shells) was initially the main driving force for scientific developments and creation of IASS (by Eduardo Torroja in 1959) and of IACM (by Olek Zienkiewicz in 1981). Nowadays, these fields have expanded tremendously beyond what was initially meant, thanks to the success of powerful computational tools and methods (interestingly enough, there is still not a perfect shell element, even for linear problems!). It is also fair to say that many of the same people, who initially contributed to early developments, were among those who first recognized the potential of the developed tools for tackling different application fields outside of the initial scope. In fact, the current scientific research is very much driven by the applications and many challenging problems that the society at large thrusts upon the scientists and engineers to solve are very much interdisciplinary (e.g. structure durability problem that involves structural mechanics, fluids, heat transfer, optimization, identification, probability …).

The main goal of IASS-IACM 2012 Conference is to provide a critical assessment of the current knowledge and indicate new challenges in the computational modelling of spatial structures, which is in general the most important component of any particular inter-disciplinary problem we might be interested in. Here can be presented the research on spatial structures coming form a number of domains of application: Aerospace, Civil or Mechanical Engineering, or yet Material Science (very much like various domains of expertise of co-organizer, Laboratory of Mechanics and Technology-Cachan). The common ground for all problems of this kind from the viewpoint of scientific contents, which also justifies putting them on the same basis and addressing them within the same meeting, is provided by the computational methods, be they destined for analysis, design or testing.

The IASS-IACM 2012 will also address the issue on what is the role of a spatial structure specialist in the present inter-disciplinary scientific research? Moreover, a special session/debate will be organized on what is the best educational/ training program for nurturing the next generation of specialists.
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3 INTERNATIONAL SCIENTIFIC COMMITTEE
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4 LOCAL ORGANIZING COMMITTEE
Lecturers GF Sarajevo: Curic Jelena, Hajdo Emina, Ademovic Naida,
Imamovic Ismar, Skejic Adis, Balic Anis and Medic Senad

5 IASS-IACM 2012 TOPICS
The papers for any of Conference themes are dealing with topics such as: structural models (cables, beams, plates, shells); finite element technology; innovative analysis methods; structural and multi-body dynamics; instability and buckling; contact with structures; fracture and localized failure; constitutive material models; fabrics, laminates and composites; reinforced-concrete structures; metallic structures; inflatable and deployable structures; structure-fluid interaction problems; structural optimization and form-finding; mathematical foundations; biomechanics structures; industrial applications ...

6 IASS-IACM 2012 CONFERENCE VENUE

Fig. 1 – Conference venue/ exact address: GF-Sarajevo, ulica patriotske lige 30
6 Sponzoring Organizations and Institutions of IASS-IACM 2012:

International Association for Shell and Spatial Structures

International Association for Computational Mechanics

Computational Structural Mechanics Association

Association Calcul de Structures et Modélisation

Ecole Normale Supérieure Cachan

The University of Sarajevo/ Faculty of Civil Engineering

dgik BiH Society of Structural Engineers BiH
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