Complas 2007

Barcelona, 5-7 September 2007

Conference Secretariat

International Center for Numerical Methods in Engineering
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An ECCOMAS Thematic Conference

COMPLAS 2007 is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS) www.eccomas.org
COMPLAS 2007 is also an IACM Special Interest Conference. More information about IACM on: www.iacm.info

Location

The conference will take place at the Technical University of Catalonia (UPC), Vertex Building, Plaza Eusebi Güell 6, 08034 Barcelona, Spain

Registration Fees

The registration fees, including social events, with early registration applicable if received before 1st June 2007 are:

	Early	Late
Delegates	480 €	550 €
Students	250 €	290 €

ECCOMAS members will have a 10% reduction on the delegates fees.
The delegate fees will include:

- Conference Proceedings
- Attendance at all scientific sessions
- Coffee breaks, reception and banquet

Social Programme

A social programme for delegates will be arranged, including a reception and a banquet at a local place of interest, as well as a social programme for accompanying persons.

Accommodation

Block reservations at preference rates will be arranged by the organizers. Detailed information will be available on the Conference site, on the link "Accommodation".

Supporting Organisations

- European Community on Computational Methods in Applied Sciences (ECCOMAS)
- International Association for Computational Mechanics (IACM)
- International Center for Numerical Methods in Engineering (CIMNE), Barcelona, Spain
- Universitat Politécnica de Catalunya (UPC), Barcelona, Spain

ECCOMAS Thematic Conference

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IX International Conference on Computational Plasticity

Fundamentals and Applications

Barcelona, 5-7 September 2007

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Objectives

Previous meetings in the COMPLAS series were held in Barcelona in 1987, 1989, 1992, 1995, 1997, 2000 2003 and 2005. COMPLAS 2005 attracted some 400 participants. COMPLAS 2007 will address both the theoretical bases for the solution of plasticity problems and the numerical algorithms necessary for efficient and robust computer implementation. The ability to provide numerical simulations for increasingly complex problems is advancing rapidly due to both remarkable strides in computer hardware development and the improved maturity of computational procedures for non-linear systems. Significant advances have been made in the formulation and implementation of algorithms for static and dynamic problems involving finite strains, complex contact interaction laws, constitutive material behaviours including multi-physics or multi-scale effects, progressive large scale fracturing, etc.. Such advances, however, demand a closer interaction between numerical analysts and material scientists in order to produce theoretical models which provide a response in keeping with fundamental material principles and experimental observations. Numerical techniques, and in particular finite element and discrete element methods, are now extensively employed in non-linear deformation predictions and very often offer the only means of solution for practical engineering problems. It is therefore essential to ascertain that such techniques can be reliably employed in industrial and R&D applications.

COMPLAS 2007 aims to act as a forum for practitioners in the field to discuss recent advances and identify future research directions.

Sessions related to specific topics of the conference will be introduced by a Keynote Lecture in the field. These Keynote Lectures will be complemented by Invited Sessions organised by recognised experts in targeted research areas, as well as by contributed papers received from the general Call for Papers.

Conference Topics

- Multi-fracturing solids
- High velocity impact
- Composites
- Damage, fracture & fatigue
- Multi-physics problems
- Multi-scale material models
- Parallel processing computations
- Environmental and Geosciences
- Multi-body and non-linear dynamic
- Forming process simulations
- Contact problems
- Biomechanics
- Granulation processes
- Advanced material models
- Innovative computational models (FEM discrete element methods, meshless methods, etc)
- Industrial applications
- Nano-mechanics

Conference Chairmen

D. R. J. Owen University of Wales Swansea, UK
E. Oñate Universitat Politècnica de Catalunya, Spain

Conference Manager

B. Suárez Universitat Politècnica de Catalunya, Barcelona, Spain

Technical Advisory Panel

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N.-E. Wiberg, *Sweden*
K. Willam, *USA*
P. Wriggers, *Germany*
G. Yagawa, *Japan*
N. Zabarras, *USA*
O.C. Zienkiewicz, *UK*

Important Dates

Deadline for presenting one page abstract	**15 th January 2007**
Acceptance of the contributions and instructions for writing an extended abstract	**15 th February 2007**
Deadline for submitting an extended abstract and early payment	**1st June 2007**
Booking of hotel accommodation	**available on the congress site**

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How to register and submit contributions

Authors are invited to submit their contributions on any of the conference topics. Submission of contributions and conference registration should be performed electronically via the conference web site.

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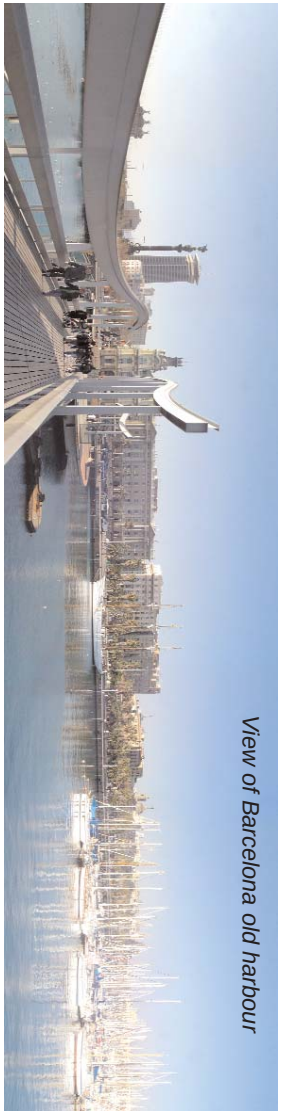

View of Barcelona old harbour