nttp://congress.cimne.com/complas2015/



for Numerical Methods in Engineering

#### Location

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

Barcelona is a cosmopolitan city on the North Fast coast of Spain. within easy access to some splendid holiday resorts such as those on the Costa Brava. Barcelona itself is fascinating place, and has a unique blend of historical tradition, exciting architecture, nightlife and haute cuisine.

## Preliminary Registration Fees

Registration fees are expressed in Euro. Early registration applicable if paid until May 16, 2015.

|           | Early Fees<br>If paid by<br>May 16, 2015 | Late Fees<br>If paid after<br>May 16, 2015 |
|-----------|------------------------------------------|--------------------------------------------|
| Delegates | 490 €                                    | 590 €                                      |
| Students  | 350€                                     | 410 €                                      |

ECCOMAS and IACM members will have a 5% reduction on the delegate fees.

Registration fees include: Conference proceedings, attendance at all scientific sessions, coffee breaks, reception and banquet.

## Supporting Organizations:

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





# **COMPLAS XIII**

XIII International Conference on Computational Plasticity. Fundamentals and Applications

1 - 3 September 2015, Barcelona, Spain





## Objectives

Previous meetings in the COMPLAS series were held in Barcelona in 1987 1989 1992 1995 1997 2000 2003 2005 2007 2009 2011 and 2013. The first twelve conferences in the series were technically and academically successful and these meetings have become established events in the field of computational plasticity. We intend to make of COMPLAS XIII a step forward in the history of the COMPLAS conferences.

The ever increasing rate of development of new engineering materials required to meet advanced technological needs poses fresh challenges in the field of constitutive modelling. The complex behaviour of such materials demands a closer interaction between numerical analysts and material scientists in order to produce thermodynamically consistent models which provide a response. while keeping with fundamental micromechanical principles and experimental observations. This necessity for collaboration is further highlighted by the continuing remarkable developments in computer hardware which makes the numerical simulation of complex deformation responses increasingly possible.

The objectives of COMPLAS XIII are to address both the theoretical bases for the solution of plasticity problems and the numerical algorithms necessary for efficient and robust computer implementation. COMPLAS XIII aims to act as a forum for practitioners in the field to discuss recent advances and identify future research directions

COMPLAS XIII is one of the Thematic Conferences of the Furopean Community on Computational Methods in Applied Sciences (ECCOMAS). It is also an International Association for Computational Mechanics (IACM) Special Interest Conference.

## **Important Dates**

| Deadline for presenting a one page abstract                              | January 15, 2015  |
|--------------------------------------------------------------------------|-------------------|
| Acceptance of the contributions                                          | February 18, 2015 |
| Deadline for submitting the full paper (not mandatory) and early payment | May 16, 2015      |

#### Conference Co-Chairmen

**Eugenio Oñate**, Universitat Politècnica de Catalunya, Spain

Roger Owen, Swansea University, United Kingdom

Djordje Peric, Swansea University, United Kingdom

Michele Chiumentti, Universitat Politècnica de Catalunya, Spain

#### Scientific Committee

- C. Agelet de Saracibar, Spain
- O Allix France
- C Andrade Spain
- F Armero USA
- F. Artioli, Italy
- A. H. Barbat, Spain
- K-J Bathe USA
- 7. Bazant, USA
- Y. Bazilevs, USA
- N Bicanic UK
- M. Bischoff, Germany
- R. Boria, USA
- P-O Bouchard France
- I. Carol, Spain
- M Cervera Spain
- J. César de Sá, Portugal
- J. S. Chen, USA
- J. L. Chenot, France
- F Chinesta France
- D. Coutellier, France
- J. Crawford, USA
- E. Cueto, Spain
- R. de Borst, Netherlands
- A de Jesus Portugal
- L. de Lorenzis, Germany
- R. A. de Sousa, Portugal
- F. Dufour, France
- E. Dvorkin, Argentina
- J. Fberhardsteiner, Austria
- A Eskandarian USA
- R. Feiioo, Brazil
- · A. Gens, Spain
- J. M. Goicolea, Spain
- · Ch. Hellmich, Austria
- G. Holzapfel, Austria
- A. Huerta, Spain
- · T. R. J. Hughes, USA
- A. Ibrahimbegovic, France
- T. lizuka, Japan
- T. Jefferson, UK
- M. Kleiber, Poland
- T. Kuboki, Japan
- P. Ladevèze, France
- T. Laursen, USA
- M-G. Lee, Korea
- · Ch. Linder, Germany
- L-E. Lindgren, Sweden

- W K Liu USA
- G Maier Italy
- H Mang Austria
- P Marovic Croatia
- H. Matthies, Germany
- C. Miehe, Germany
- I Mihai UK
- N. Moës, France
- J. Mosler, Germany
- H Naceur France
- R. Natal, Portugal
- C. F. Niordson, Denmark
- R. Ohavon, France
- J. Oliver, Spain
- S Oller Spain
- M Ortiz USA
- M. Papadrakakis, Greece
- M. Pastor, Spain
- R. H. J. Peerlings, Netherlands
- G. Pijaudier-Cabot, France
- F. Pires, Portugal
- J-Ph. Ponthot, Belaium
- P. Prat. Spain
- F Ramm Germany
- A. Reali, Italy
- B. D. Reddy, South Africa
- P. Roca, Spain
- T. Rodic, Slovenia
- · A. Rodriguez-Ferran, Spain
- J Roth USA
- K. Runesson, Sweden
- B. Schrefler, Italy
- B. Suarez, Spain
- S. W. Sloan, Australia
- L. Stainier, France
- E. Stein, Germany
- R. L. Taylor, USA
- K. Terada, Japan
- V. Tvergaard, Denmark
- R. A. F. Valente, Portugal
- M. Vaz, Brazil
- I. Vladimirov, Germany
- D. Weichert, Germany
- N. E. Wiberg, Sweden
- Y. Wu, USA
- P. Wriggers, Germany
- G. Yaqawa, Japan

### **Conference Topics**

- Advanced Material Models
- Biomechanics and Bio-Medicine
- Composites
- Contact Problems
- Damage, Fracture and Fatigue
- Environmental and Geosciences
- Forming Processes Simulations
- Granulation Processes
- High Velocity Impact
- Industrial Applications
- Innovative Computational Methods (FFM, Discrete Flement)
- Particle-based Methods Meshless Methods etc.)
- Multi-Body and Non-Linear Dynamics
- Multi-Fracturing Solids
- · Multi-Physics Problems
- Multi-Scale Material Models
- Nano-Mechanics
- Parallel and Real Time Computing Techniques

## **ECCOMAS** and IACM Support

COMPLAS XIII is one of the Thematic Conferences of the European Community in Computational Methods in Applied Sciences (ECCOMAS)

#### www.eccomas.org

www.iacm.info

COMPLAS XIII is a Special Interest Conference of the International Association for Computational Mechanics (IACM)

