# ENIEF 2009

## XVII Congress on Numerical Methods and their Applications
### *Tandil, Argentina, November 3-6, 2009*

This congress is being organized by the PLADEMA Institute at the National University of the Center of Buenos Aires (UNCPBA), Argentina. The first ENIEF Congress took place in 1983. Since then seventeen ENIEF and eight MECOM (Argentine Congress on Computational Mechanics) have been organized by AMCA.

*Conference Topics:* Application of numerical methods in engineering problems, including the following topics: Fluid mechanics, Heat and mass transfer, Solid mechanics, Structural analysis, Multiphysics problems, Multiscale modeling, Biomechanics, Algorithms and software development, Computational mathematics, Computational geometry, Mesh generation and error estimation, High performance computing, Innovative computational methods, Inverse problems, Control and optimization, Industrial applications.

# ENIEF 2008

## XVII Congress on Numerical Methods and their Applications
### *10 - 13 November 2008, San Luis, Argentina*

*Figure 1:
Opening ceremony.
Carlos Zuppa, congress organizer;
Victorio Sonzogni, president of
AMCA; Jorge Pellegrini, vice-
governor of San Luis;
José L. Riccardo, rector of UNSL;
Félix Nieto, dean of the Faculty;
and Alberto Cardona,
congress organizer.*

A new edition of the *Congress on Numerical Methods and their Applications* of the *Argentine Association of Computational Mechanics (AMCA)* was held from November 10th to November 13th, 2008 in San Luis, Argentina. *ENIEF 2008* has been the seventeenth edition of the congress, which was this time organized jointly by the Mathematics Department, Faculty of Physics, Mathematics and Natural Sciences of the National University of San Luis (UNSL) and the International Center for Computational Methods in Engineering (CIMEC-INTEC) from National University of Littoral (UNL) and the National Council for Scientific and Technological Research (Conicet). The congress was attended by more than 250 delegates, mainly from Argentina, but also from Brazil, Bolivia, Chile, Colombia, Mexico, Paraguay, Spain, United States, Uruguay, and Venezuela.

Full length papers were submitted to a review process prior to publication. From them, 228 papers have been accepted and included in the XXVII Volume of the AMCA Series "Mecánica Computacional". The editors of this volume were Alberto Cardona, Mario Storti and Carlos Zuppa. The papers



*Figure 2:
Participants at ENIEF 2008*

*Important Dates*:

> Deadline for presenting a one-page abstract: May 8, 2009
> Acceptance of the one-page abstract: May 22, 2009
> Deadline for submitting the full length paper: July 10, 2009
> Acceptance of the full length paper: August 10, 2009
> Deadline for early payment: August 28, 2009

*Organizing Committee* - Presided by: Pablo A. Lotito, Marcelo J. Vénere

Tandil is a hilly nice city located at the center of the Buenos Aires State (350km from Buenos Aires City and 150km from Mar del Plata) at the time of the conference the spring weather is warm and the landscape is characterized by large crop fields on the valleys.

*Further Information:* **www.pladema.net/enief2009**
E-Mail: **enief2009@gmail.com** ●



of "Mecánica Computacional" are publicly available at the website: **http://www.cimec.org.ar/ojs/inex.php/mc/issue/archive** .

The event lasted four days and took place at the Main Building of the National University of San Luis. The technical program included five plenary lectures given by Professors Francisco Armero, Carlos Felippa, Raynald Löhner, Alan Needleman, and Xavier Oliver. A total of twenty one sessions, covering Fluid Mechanics; Turbulent Flow Simulation; Water Resources and Environmental Engineering; Acoustics; Multiphysics; Solid Mechanics; Structural Analysis and Design; Material Constitutive Modeling; Stability and Nonlinear Structures Behavior; Fracture, Fatigue and Failure Material Modeling; Heat Transfer; Structural Dynamics; Mathematical Fundamentals of Finite Elements and Meshless Methods; Interdisciplinary Mathematical Models; Inverse Problems and Applications; Optimization; High Performance Computing in Computational Mechanics; Computational Geometry; Aerospace Technology; Numerical Methods for Simulation and Analysis en Bioengineering; and Industrial Applications were run in parallel in four rooms.



*Figure 3:*
*Some of the lecturers:*
*S. Idelsohn, A. Needleman,*
*R.Löhner and his wife*
*and C. Felippa.*

Eleven undergraduate students received scholarships covering living expenses at San Luis to assist to the congress. An undergraduate student posters competition was also carried out. The best papers received special prizes consisting in books kindly donated by Springer publisher editorial.

A cocktail reception was organized on Monday, with the very beautiful environment of Potrero de los Funes hotel. The ordinary annual assembly of AMCA was held on Tuesday. The Congress Banquet took place on Wednesday at the Quintana hotel, during which the 2008 AMCA prizes and best undergraduate papers were awarded.

The congress received support from National Council for Scientific and Technological Research (CONICET), National Agency of Scientific and Technological Promotion (ANPCyT), San Luis province government, National University of San Luis, Faculty of Physics, Mathematics and Natural Sciences (UNSL), Department of Mathematics (UNSL), Springer publishers, Intel Argentina Software Development Center (Intel ASDC), KB Engineering S.R.L. and ESSS - Engineering Simulation and Scientific Software Ltda. ●



*Figure 4:*
*Relax time at a typical resto.*
*Carlos Zuppa and Gloria*
*Simonetti, from the local*
*organizing comittee.*