Cfm'09

www.cfm2009.cnrs-mrs.fr

To participate in conferences, you must fill a declaration of intent to submit a communication before December 1st. Acknowledgement: a receipt will be sent to you immediately by email, what will validate your statement. A second email message at the end of the submission period will contain your ID number and the instructions for submitting your article (6 pages).

Dear Colleagues,

We are pleased to invite you at the 19th French Congress on Mechanics (CFM'09) that will be held in Marseilles August 24-28, 2009. A large number of French and francophone scientists from Universities and Industries are expected.

This second edition of CFM in Marseilles, will be an opportunity to address all facets of Mechanics and various application fields. Young researchers are strongly invited to attend CFM'09, they will find an opportunity for presenting their work and to discuss with their elders.

This Congress consists of 32 sessions, two international symposia including an Euro-Mediterranean, two European conferences, two symposia which focus on industrial issues, a meeting on "Mathematics-Mechanics' and a workshop on New Technologies for Education.

All the training institutions from University and Engineering Schools of Provence are organizing partners of this major meeting that focus on nine Congress (CFM sessions and 8 Symposia). Such an event draws attention of researchers/industrialists from Europe and from Mediterranean countries in the field of Mechanical Engineering and Energy on Marseilles and on Mechanics.

The entertainments for the accompanying persons will focus on culture and tourism in Marseilles and its neighborhood. The banquet will held at "Le Mas de Peint" (http://www.masdepeint.com/), a nice location nearby a natural park what will provide us with a Camargue's atmosphere with its traditional life style, with bulls and horses rides.

SUBMISSION

Proposal of communications:

- 1. October 1st December 1st: pre-registration and declaration/intend of sending abstracts (title, authors, themes)
- 2. January1st March 1st: abstracts submission (6 pages)

IMPORTANT DATES

 $December \ 1^{st}: DEADLINE \ pre-registration \ / \ intent.$

March 1st: DEADLINE submission of communications.

March 30 : selection for the Journal "Mécanique & Industries"

April 15: response to authors

June 15: DEADLINE for booking hotel.

REGISTRATION (www.promosciences.com/cfm09)

Registration forms will be at disposal on the site of the Congress (from October 1st): www.cfm2009.cnrs-mrs.fr et www.promosciences.com/cfm09

	avant le 15-06	après le 15-06
Sénior AFM member :	350 euros	400 euros
Sénior non-member*:	400 euros	450 euros
Junior AFM member :	175 euros	200 euros
Doctorant non-member*:	190 euros	215 euros

^{*} Fees: 50 euros for enrolling at AFM (period 2009)

Grants possibilities for researchers members of laboratories from emerging countries outside Europe

CMF AWARDS (Prix de thèse, <u>arquis@enscpb.fr</u>)

Admission criteria: the PhD diploma must be dated within the period of 20 July 2007- July 17 2009. Candidates have to send their PhD defense report, CV and manuscript (two copies) to the chairman of Jury:

Professor Eric ARQUIS TREFLE Laboratory, ENSCPB 16 avenue Pey-Berland, 33607 PESSAC Cedex

HOTEL BOOKING (www.marseille-tourisme.com)

You have to book by your own as soon as possible. Information is at your disposal at

- A Tourist Information Desk: www.marseille-tourisme.com
- CFM'09 website (hotels list with agreements):

History - Impact

Mechanics is at the basis of the activities for most companies. They stand as the conditions for maintaining their competitiveness by facing up to fast technology changing and the international competition. For the leaders involved in scientific/technological and industrial production, it is therefore essential of measuring trends and identifying issues of research and innovation in this huge domain of sciences/technology.

With this in mind, French researchers/engineers on mechanics have organized a biannual congress in the main academic centers since 1973, with four objectives:

- To provide a place of expression and exchanges for members of this community, particularly for the youngest ones;
- To draw up an assessment on mechanics, industrial as well as academics, and to think about their prospects;
- To make visible the ongoing collaborations between Academics and Industry, and arouse new ones;
- To be accessed at European scientific problems, with international targets;

Marseilles has already had the honor of being designated to host CFM in 1981. Since then, Mechanics has changed in our city and in neighboring cities: academic institutions have evolved and institutes have regrouped on the site of "l'Etoile". A third Engineering school was established, Avignon and Toulon have become academic towns where Mechanics is well

represented. It is now time for Mechanics in Provence to host the AUM / AFM community in Marseille and to organize this event.

Poitiers, 1973	Toulouse, 1975	Grenoble 1977	Nancy, 1979	Marseille 1981
Lyon, 1983	Bordeaux, 1985	Nantes, 1987	Metz, 1989	Paris, 1991
Lille, 1993	Strasbourg, 1995	Poitiers, 1997	Toulouse, 1999	Nancy, 2001
Nice, 2003	Troyes, 2005	Grenoble, 2007	Marseille 2009	

Cities that have organized previous CFM: the names of those who received twice the CFM are highlighted in yellow.

The growth of the involvement of research and industry at this conference is significant: Poitiers - Toulouse 800, Nancy - Nice 1000, Troyes - Grenoble 1200. In Marseilles, we expect to welcome about 1500 participants.

The thematic sessions:

- S1 Acoustics
- S2 Fluid-Structure Interaction & Control
- S3 Naval Hydrodynamics
- S4 Biomechanics, Mechanical Life, Biomimetism
- **S5** Intensive Computing
- S6 Combustion, Reactive flow
- S7 Polyphasics and Granular Flow
- S8 Coupled and Interfacial Phenomena, Fluids and Solids
- S9 Instabilities and Transition, Flow Control
- S10 Dynamics of Eddy
- S11Turbulence, Turbulent Dispersion
- S12 Waves and Free Flow to Surface
- S13 Porous Media
- S14 Multiphysics Couplings
- S15 Heat / Mass Transfer
- S16 Calculation and Held of Structures
- S17 Dynamics of Structures
- S18 Behavior of Materials
- S19 Integrated Design and Production Systems
- S20 Damage Rupture
- S21 Contact and Tribology
- S22 Composite Materials
- S23 Manufacturing Process
- S24 NDC, Maintenance, Decision
- S25 Uncertainties, Reliability and Risk Control
- S26 Fields Measurement and Photo Identification
- S27 Nano/Micro-Fluidic (in honor and memory of Pierre Casal)
- S28 Micro and Nanosystems, MEMS
- S29 Fluids Dynamics in Geophysical and Astrophysical Fields
- S30 Rheology and Complex Fluids
- S31 Mechatronics
- S32 Mechanical Physics, Nano-objects & Small Scales

Other S33 ...

Specific Seminars:

- C1 European Colloquium "Post-critical behavior of composites"
- C2 LESTAC'09 "Large eddy simulation of turbulence, acoustic and combustion"
- C3 International Colloquium Alexandre Favre: "Turbulence in Geophysical Fluid"
- C4 Industrial Symposium with the assistance of EUROCOPTER "The helicopter, a concentrate of Mechanics"
- C5 Colloquium WOOD: "Wood and Biomechanics of the tree"
- C6 Euro-Mediterranean Symposium "Cooperation in Science, Engineering and Mechanical Technologies"
- C7 Educational Symposium "Online Teaching use of the TICE in Mechanics"
- C8 "Math/Meca:" Meeting: "Mathematical Modeling in Mechanics"

Plenary Conferences:

- René Fillit et Roland Fortunier: Local Multiphysic Analyses for Nanotechnology
- Xavier Garbet / Philippe Magaud: Challenges Materials/ Plasma for Fusion
- Charbel Farhat
- **Jean-Luc Garciaz et Bernard Quénée**: Contribution of Non-destructive testing Equipments to modeling Structural behavior of old buildings
- Patrick Le Quéré: On Numerical Simulation of Open Flows in Natural and Mixed Convection.
- Jean-Jacques Marigo: The variational approach to the Mechanics of the rupture process
- Frédéric Patat: Sounds and Ultrasound: an open window on the Human body
- Bernard Thibaud: Wood, from intelligent material of trees to Ecological Engineering
- Emmanuel Villermaux: Fragmentation of Liquids and Solids

Organisation Comity:

<u>Présidents</u>: DEBORDES Olivier (LMA), REY Claude (M2P2)

Members: CHABRAND Patrick (ISM), CORNELOUP Gilles (LCND), GARNIER Charles-Henri (ECM), HOCHART Christian (LMA), KHARIF Christian (IRPHE), LEBON Frédéric (LMA), LE PALEC Georges (IUSTI), ANGOT Philippe (LATP), MEDALE Marc (IUSTI), MORVAN Dominique (M2P2), NEEL Marie Christine (EMMAH), PIETRI Laurence (IRPHE), PONCET Sébastien (M2P2), REY Vincent (LSEET), SERRE Eric (M2P2), VIGLIANO Patrick (IUSTI), ZEITOUN David (IUSTI),

Scientific Comity:

Présidents:

BONTOUX Patrick (Marseille), CHRYSOCHOOS André (Montpellier)

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