

Prague
Czech Republic
June 6-10, 2011

FVCA VI

6th International Symposium on Finite Volumes for Complex Applications

- Problems and Perspectives -

Objectives

The FVCA VI symposium goal is to bring together mathematicians, physicists and engineers concerned with finite volumes and related techniques in a wide context of fluid dynamics, magnetohydrodynamics, structural analysis or nuclear and plasma physics.

A closer look reveals many interesting phenomena and mathematical or numerical and physical difficulties, such as true error analysis and adaptivity, stiff terms in convection/diffusion equations and sources, techniques of turbulence modelling (RANS, LES, DES, DNS), complex physical problems in complex geometries, validation of numerical simulations. To overcome existing problems and to find solution methods for future applications many efforts and new developments are necessary.

The main issue of this symposium is thus a critical look at the subject. New ideas may be presented, even if they have not yet shown full success. The demonstration of limits or drawbacks of methods is explicitly welcomed. Contributions may put main emphasis on theoretical as well as applied topics. Most welcomed are contributions, concerned with unsolved or not yet fully solved problems and possible new attempts as well as contributions demonstrating advanced options as well as limits of numerical simulations of complex problems.

The symposium program includes also the benchmark session on 3D anisotropic problems.

Topics of Main Interest

Among the wide range of topics main emphasis is put on

- New schemes and methods
- New fields of application
- Non homogeneous systems
- Convergence and stability analysis
- Global error analysis
- Purely multidimensional difficulties
- Complex geometries and adaptivity
- Complexity, efficiency and large-scale computations
- Multiphase problems and fitting
- Climate and ocean modelling, atmospheric pollution
- Water waves
- Turbulent flow
- Porous media
- Plasma
- Biomechanics
- Comparisons with experimental results

Confirmed Invited Speakers

- Daniele DI PIETRO, IFP Energies nouvelles, Reuil-Malmaison, France
- Jérôme DRONIOU, University Montpellier, France
- Alexandre ERN, Paris-Est University, France
- Bernard GEURTS, University of Twente, Netherlands
- Jean-Claude LATCHÉ, IRSN, France
- Jinghai LI, Chinese Academy of Science, China
- Richard LISKA, CTU Prague, Czech Republic
- Mohammed SEAID, University of Durham, UK

Conference Proceedings

Full papers are selected according to review process. The proceedings are issued as a hardcover book at well known publisher (e.g. Wiley) and distributed at registration.

Important Dates

February 1, 2011 - Submission of full version of papers

February 1, 2011 - Submission of papers for benchmark session

March 1, 2011 - Notice of (conditional) paper acceptance

March 5, 2011 - Early registration for participating delegates (low rate)

April 1, 2011 - Submission of final version of the paper

April 15, 2011 - Notice of acceptance of the final version of the paper

April 15, 2011 - Deadline registration for authors

May 5, 2011 - Deadline registration for participating delegates

Conference Fee (including lunches and conference dinner)

Industry early registration (prior to March 5, 2011)	360 EUR
Industry regular registration (after March 5, 2011)	400 EUR
University early registration (prior to March 5, 2011)	270 EUR
University regular registration (after March 5, 2011)	300 EUR
Student* early registration (prior to March 5, 2011)	160 EUR
Student* regular registration (after March 5, 2011)	180 EUR

* a copy of student ID card is required

Benchmark Session

For more information see http://www.latp.univ-mrs.fr/latp_numerique/?q=node/4

Accommodation

For accommodation see the conference web pages <http://fvca6.fs.cvut.cz>

Organizing Committee

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Conference Secretary

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Supporting Organizations

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