ECCOMAS

European Community
on Computational Methods
in Applied Sciences

Award for the Best Ph.D Thesis of 2004 on Computational Methods in Applied Sciences and Engineering

The meeting of the Evaluation Committee for the ECCOMAS award for the best PhD thesis 2004 was held on June 13th., 2005 at CIMNE, Barcelona. The Committee was composed by: C. Mota Soares, B. Taylor, P. Wesseling, N.-E. Wiberg (chairman) and P. Díez (secretary).

As an answer to the call for tender, 18 theses were nominated by the ECCOMAS member associations.

After a detailed discussion, a secret voting was held in three phases in order to reduce the number of thesis from 18 to 8, then to 4 and then to 1. The outcome of this voting was very clear.

One thesis was ranking significantly higher than the remaining dissertations. Based on this result, the Committee decided unanimously to award **Dr. Wulf Georg Dettmer** (University of Wales Swansea, School of Engineering). This thesis is an outstanding work in Computational Methods for fluid structure interactions and free surface flows. The Award was handed over at the **II International Conference on Adaptive Modeling and Simulation – ADMOS 2005** (Barcelona, Spain) held on 8 – 10 September, 2005.

All nominees were recognized by a special diploma.

The list of finalists **selected by the local-regional ECCOMAS Associations is the following:**

Beirão da Veiga, Lourenço (APMTAC – Portugal): *Theoretical and numerical analysis of some problems in structural mechanics*
Bretti, Gabriella (SIMAI – Italy): *Modeling and numerics for porous media and traffic flows*
Breugem, Wim-Paul (Netherlands Mechanics Committee – Netherlands): *The influence of wall permeability on laminar and turbulent flows*
Capiez-Lernout, Evangéline (CSMA -)France: *Dynamique des structures tournantes à symétrie cyclique en présence d'incertitudes aléatoires. Application au désaccordage des roues aubagées*
Dettmer, Wulf Georg (ACME – UK): Finite element modelling of fluid flow with moving free surfaces and interfaces including fluid-solid interaction
Puntel, Eric (AIMETA – Italy): *Experimental and numerical investigation of the monotonic and cyclic behaviour of concrete dam joints*
Fragakis, Yannis (GRACM -): *High-performance solution methods for the static and dynamic analysis os structures discretized with finit elements*
Freßmann, Dirk (GACM – Germany): *On single - and multi-material arbitrary Lagrangian-Eulerian approaches with application to micromechanical problems at finite deformations*
Lelièvre, Tony (GAMNI – France): *Multiscale models for viscoelastic fluids*
Logg, Anders (NoACM - Nordic Association): *Automation of Computational Mathematical Modelling*
McGarry , John Patrick (ISSEC – Ireland): *Continuum mechanics modelling of adherent cell-substrate contact under mechanical loading conditions*
Miczek, Marcin (PACM – Poland): *Electronic properties of III-V semiconductor surfaces from computer-aided photoluminescence efficiency studies*
Parolini, Nicola (BFIT - Board of the Swiss Federal Institutes of Technology – Switzerland): *Computational fluid dynamics for naval engineering problems*

Peña Baquedano, Estefanía (SEMNI – Spain): *Biomechanical study of the healthy, injured and reconstructed human knee joint*

Ramšak, Matjaž (CEACM - Central Europe): *Multidomain boundary element metehod for two equiton turbulence models*

Rapún, María Luisa (SEMA – Spain): *Numerical methods for the study of the scattering of thermal waves*

van Hal, Bastiaan (Belgian National Committee for Theoretical and Applied Mechanics – Belgium): *Automation and performance optimization of the wave based method for interior structural-acoustic problems*

Vexler, Boris (GAMM – Germany): *Adaptive finite element methods for parameter identification problems*