Anca BELME

Personal Information

Birthday: 9 December 1984 (Oradea, Romania)
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Education

- 2008–present: **PhD. student at INRIA Sophia Antipolis**, advisors **Dr. Alain Dervieux** and **Dr. Frédéric Alauzet**, title: **"Adjoint method and Unsteady Aerodynamics"**
- 2007–2008: Master's degree: **Applied Mathematics, University of Montpellier II, France**, dissertation **" Investigation of a new mass matrix scheme with high-order numerical dissipation for the discretisation of three-dimensional turbulent flows "**
- 2006–2007: Bachelor's degree in Mathematics and Informatics, University of Oradea, Faculty of Science, Romania
- 2005-2006: 3rd year Licence in Mathematics and Informatics, University of Oradea, Faculty of Science, Romania
- 2004-2005: 2nd year Licence in Mathematics and Informatics, University of Oradea, Faculty of Science, Romania
- 2003–2004: 1st year of Licence in Mathematics and Informatics, University of Oradea, Faculty of Science, Romania

Conferences and Workshops

- **Application of anisotropic goal-oriented unsteady mesh adaptation to Aerodynamics and Aeroacoustics**, A. Belme, A. Dervieux, F. Alauzet, Adaptive Modelling and Simulation **ADMOS**, Paris, June 2011
- **A priori anisotropic goal-oriented estimates for mesh adaptation in compressible CFD**, A. Belme, F. Alauzet. A. Dervieux, A. Loseille, 16th International Conference on Finite Elements in Flow Problems **FEF**, Munich, March 2011
- **Application of Hybrid and VMS-LES turbulent models to aerodynamic simulations**, A.Belme, A.Dervieux, B.Koobus, S.Wornom, M.V.Salvetti, International Council of the Aeronautical Sciences **ICAS**, Nice, September 2010
- **Mesh-adaptive computation of linear and non-linear acoustics**, A. Belme, A. Dervieux, F. Alauzet, Trilateral Seminar **"Computational experiment in aeroacoustics"**, Svetlogorsk, Russia, September 2010
- **Goal-oriented anisotropic mesh adaptation for unsteady flows**, A. Belme, A. Dervieux and F. Alauzet, Fifth European Conference on Computational Fluid Dynamics **ECCOMAS CFD**, Lisbonne, June 2010
- **6th Non-Deterministic Simulation for CFD-based design methodologies (NODESIM-European Project) meeting**, Trieste, Italy, May 2009
- **Correcteurs des erreurs numerique par linearisations**, A.Belme, Colloque de la Societe des Mathematiques Appliquees et Industrielles **SMAI**, La Colle sur Loup, France, Mai 2009
- **5th Non-Deterministic Simulation for CFD-based design methodologies (NODESIM-European Project) meeting**, Brussels, Belgium, September 2009
- **4th Non-Deterministic Simulation for CFD-based design methodologies (NODESIM-European Project) meeting**, Barcelone, Spain, November 2008

Articles and Research Reports

- **Time Accurate Anisotropic Goal-Oriented Mesh Adaptation for Unsteady Flows**, A. Belme, A. Dervieux, F. Alauzet, **International Journal for Numerical Methods in Fluids**, (to appear)
- **AD-based perturbation methods for uncertainties and errors**, M. Martinelli, A. Dervieux, L. Hascoet, V. Pascal, A. Belme, **International Journal Engineering Systems Modelling and Simulation**, 2010, vol.2, No. 1/2, pp. 65-74
- **Combining a Mass Matrix formulation and a high order dissipation for the discretisation of turbulent flows**, A.Belme, H.Ouvrard, Rapport Recherche INRIA, http://hal.inria.fr (electronic version), 2008

Teaching Experience

- September 2008- January 2011: Teaching assistant at Polytechnical School of University of Nice, classes of Numerical Algorithms
- September 2006-December 2006: Teaching assistant at Emanuel Gojdu high school, Oradea, Romania, classes of Mathematics and Informatics
- February 2007- April 2007: Teaching assistant at Traian Vuia high school, Oradea, Romania, classes of Informatics

Computer skills and competences

- Programming languages: Fortran, Pascal, C, C++, Matlab, Html, Mpi, Use of various softwares : Microsoft Office, Ansys, Latex, ParaView.

Personal skills and competences

- Mother tongue: Romanian
- Other languages: **French** (**DELF B2** diploma), **English** (**TOEFL** diploma), **Italian** (beginner)