Michel Visonneau

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Current position

Research scientist 1st class, CNRS

Education

Engineer, Ecole Centrale de Nantes (1980) Specialised engineer in Naval Hydrodynamics, Ecole Centrale de Nantes (1981) Diplôme d'Etudes Approfondies Dynamique des Fluides et Transferts Thermiques(1981) Ph. D. Ecole Centrale de Nantes (France) (1985)

Research Interests

Computational Fluid Dynamics. Turbulence modelling for high-Re multifluid flows Unstructured Finite volume discretisation for Reynolds Averaged Navier-Stokes Equations Flow-motion coupling and a posteriori error estimation Automatic grid adaption Shape optimization and flow control

Career

Habilitation à diriger les recherches, Ecole Centrale de Nantes (France), 2001 Head of Computational Fluid Dynamics team, Fluid Mechanics Laboratory (1995-2005) Research scientist, CNRS, 1985-2005

Honors and awards

2nd Cray Prize for CFD (1991)

Professional activities

Editorial boards

Deputy editor of Journal of Marine Science and Technology (2005-2007) Member of Editorial committee of Journal of Marine Science and Technology (2004-2005)

University services

Recruiting board of the Ecole Centrale de Nantes since 1998

Summary of journal publications

Journal	Impact factor	Number of papers
Computers and Fluids	1,48	4
International Journal for Numerical Methods in Engineering	1,69	1
International Journal for Numerical Methods in Fluids	0.55	3
Journal of Fluids and Structures	0,79	2
Journal of Marine Science and Technology	0,5	1
Other papers in refereed journals		26

Selected publications (max. 5)

R. Duvigneau and M. Visonneau, ``Optimization of a Synthetic Jet Actuator for Aerodynamic Stall Control", Computers & Fluids, 2005

A. Leroyer, M. Visonneau, `Interaction between fluid and self-propelled fish-like body motion", Journal of Fluids and Structures, 2005.

- R. Duvigneau, M. Visonneau & GB Deng, ``On the role played by turbulence closures for hull shape optimization at model and full scale", J. Marine Science and Technology, Vol.153, N°8, 2003.
- R. Duvigneau, M. Visonneau, ``Hybrid genetic algorithms and artificial neural networks for complex design optimization in CFD", Int. J. for Numerical Methods in Fluids, Vol.44/11, pp.1257-1278, 2004.
- G.B. Deng, J. Piquet, X. Vasseur & M. Visonneau, ``A New Fully Coupled Method for Computing Turbulent Flows', Computers & Fluids, Vol. 30-4, pp. 445-472, 2001