

Publications en revues avec comité de lecture (parues ou soumises)

- C. Farhat, Ajaykumar Rajasekharan and B. Koobus, *A Dynamic Variational Multiscale Method for Large Eddy Simulations on Unstructured Meshes*, accepted for publication in Computer Methods in Applied Mechanics and Engineering.
- B. Koobus and C. Farhat, *A Variational Multiscale Method for the Large Eddy Simulation of Compressible Turbulent Flows on Unstructured Meshes - Application to Vortex Shedding*, Computer Methods in Applied Mechanics and Engineering, Vol. 193, pp. 1367-1383, 2004.
- P.-H. Cournède, B. Koobus and A. Dervieux, *Positivity statements for a Mixed-Element-Volume scheme on fixed and moving grids*, submitted for publication to La Revue Européenne des Eléments Finis.
- S. Camarri, M.V. Salvetti, B. Koobus and A. Dervieux, *Bluff-body flow simulation by an hybrid RANS/LES approach*, submitted for publication to Wind & Structures.
- M. Vazquez, B. Koobus and A. Dervieux, *Aeroelastic coupling in sonic boom optimization of a supersonic aircraft*, submitted for publication to Engineering computations, International Journal for Computer-Aided Engineering and Software.
- S. Camarri, M.V. Salvetti, B. Koobus, A. Dervieux, *Large-eddy simulation of a bluff-body flow on unstructured grids*, International Journal for Numerical Methods in Fluids, 40:1431-1460, 2002.
- E. Schall, C. Viozat, B. Koobus and A. Dervieux, *Computation of Low Mach Thermal Flows with Implicit Upwind Methods*, International Journal of Heat and Mass Transfer, 46:3909-3926, 2003.
- S. Camarri, B. Koobus, M.V. Salvetti, A. Dervieux, *A low-diffusion MUSCL scheme for LES on unstructured grids*, Computers & Fluids, 33:1101-1129, 2004.
- E. Schall, D. Leservoisier, A. Dervieux and B. Koobus, *Mesh adaptation as a tool for certified computational aerodynamics*, International Journal for Numerical Methods in Fluids, Vol. 45, pp. 179-196, 2004.
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- B. Koobus, H. Tran, and C. Farhat, *Computation of Unsteady Viscous Flows Around Moving Bodies Using the $k - \epsilon$ Turbulence Model on Unstructured Dynamic Grids*, Computer Methods in Applied Mechanics and Engineering, Vol. 190, pp. 1441-1466, 2000.
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- N. Marco, B. Koobus and A. Dervieux, *An Additive Multilevel Optimization Method and its application to unstructured meshes*, Journal of Scientific Computing, Vol.12, No 3, 1997.

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- C. Farhat, B. Koobus and H. Tran, *Simulation of Vortex Shedding Dominated Flows Past Rigid and Flexible Structures*, Computational Methods for Fluid-Structure Interaction, ed. T. Kvamsdal, I. Enevoldsen, K. Herfjord, C. B. Jenssen, K. Mehr and S. Norsett, Tapir, pp. 1-30, 1999.
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- C. Farhat, A. Rajasekharan and B. Koobus, *A Dynamic Variational Multiscale Method for Large Eddy Simulations on Unstructured Meshes*, FEF05, Thirteenth Conference on Finite Elements for Flow Problems, April 2005, Swansea, Wales, UK.
- F. Courty, T. Roy, M. Vazquez, B. Koobus, and A. Dervieux, *Continuous error analysis for P1-exact schemes*, FEF05, Thirteenth Conference on Finite Elements for Flow Problems, April 2005, Swansea, Wales, UK.
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- M. Vazquez, B. Koobus, A. Dervieux and F. Courty, *Sonic Boom Reduction of Supersonic Aircrafts by Aeroelastic Optimization*, European Congress on Computational Methods in Applied Sciences and Engineering, July 2004, Jyväskylä (Finland).
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Séminaires

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- Séminaire au CERFACS (Toulouse): LES, VMS-LES et LNS pour la simulation d'écoulements compressibles en maillages non structurés: application à des écoulements tourbillonnaires autour d'obstacles, 2005.