THE LIST OF PUBLICATIONS

Tuomas Airaksinen

The post-print versions of my papers are found and downloadable as PDF file in JyX archive with links given below.

Books

1. Dissertation thesis: *Numerical methods for acoustics and noise control* (2010)

2. Pro gradu thesis (Finnish): *Numeerista virtauslaskentaa hila-Boltzmann-simulointimenetelmällä* (2006)

Articles in refereed scientific journals

1. T. Airaksinen, J. Toivanen, *An optimal local active noise control method based on stochastic finite element models,* Journal of Sound and Vibration Vol. 332, No. 26 (2013) 6924–6933

2. T. Airaksinen, E. Heikkola, *Multiobjective muffler shape optimization with hybrid acoustics modelling,* Journal of Acoustical Society of America, Vol. 130, No. 3 (2011) 1359–1369

3. T. Airaksinen, E. Heikkola, J. Toivanen, *Local control of sound in stochastic domains based on finite element models*, Journal of Computational Acoustics, Vol. 19, No. 2 (2011) 205–217

4. T. Airaksinen, A. Pennanen, J. Toivanen, *A damping preconditioner for time-harmonic wave equations in fluid and elastic material*, J. Comput. Phys. 228 (2009) 1466–1479

5. T. Airaksinen, S. Mönkölä, *Comparison between shifted-laplacian preconditioning and controllability method for computational acoustics*, J. Comput. Appl. Math. 234 (2010) 1796–1802

6. T. Airaksinen, E. Heikkola, A. Pennanen, J. Toivanen, *An algebraic multigrid based shifted-Laplacian preconditioner for the Helmholtz equation*, J. Comput. Phys. 226 (1) (2007) 1196–1210

Articles in scientific conference proceedings

1. Airaksinen, T., & Toivanen, J. (2012). *Quadratic least-squares formulation for a local active noise control with stochastic domain and noise source.* Proceedings of ECCOMAS 2012, Vienna

2. T. Airaksinen, E. Heikkola, *Multiobjective muffler shape optimization with hybrid acoustics modelling,* Proceedings of CAO2011, June 9-11,2011, Jyväskylä, Finland, pages 94–97

3. T. Airaksinen, E. Heikkola, *Äänenvaimentimien mallinnuspohjainen monitavotteinen muodonoptimointi*, Akustiikkapäivät 2011, Tampere, Finland 11th-12th May 2011, pages 171–176, ISSN & ISSN-L 1236-8202

4. T. Airaksinen, E. Heikkola, A. Pennanen, J. Toivanen, *An algebraic multigrid based shifted-Laplacian preconditioner for the Helmholtz equation*, Proceedings of Waves 2007, pages 355-357 University of Reading (2007).

Book chapters

1. T. Airaksinen, T. Aittokoski, *Multi-objective actuator placement optimization for local sound control evaluated in a stochastic domain, in Numerical Methods for Differential Equations, Optimization, and Technological Problems, pages 321–334, S. Repin, T. Tiihonen, T. Tuovinen (Eds.), Springer 2013*

Other publications

1. S. Mönkölä, T. Airaksinen, P. Makkonen, T. Tuovinen, P. Neittaanmäki, *Prospectives to tractor cabin design with computational acoustics tools,* ECMI Newsletter, No. 49 (2011), 16–19, ISSN 1013-9338