

List of publications of Tuomas Antero Airaksinen

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, E. Heikkola, [Multiobjective muffler shape optimization with hybrid acoustics modelling](#), Journal of Acoustical Society of America, Vol. 130, No. 3 (2011) 1359–1369
2. 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
3. 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
4. T. Airaksinen, S. Mönkölä, [Comparison between shifted-laplacian preconditioning and controllability method for computational acoustics](#), J. Comput. Appl. Math. (2008) 234 (2010) 1796–1802
5. 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. T. Airaksinen, E. Heikkola, [Multiobjective muffler shape optimization with hybrid acoustics modelling](#), Proceedings of CAO2011, June 9-11, 2011, Jyväskylä, Finland, pages 94–97
2. T. Airaksinen, E. Heikkola, [Äänenvaimentimien mallinnuspohjainen monitavoitteinen muodonoptimointi](#), Akustikkapäivät 2011, Tampere, Finland 11th-12th May 2011, pages 171–176, ISSN & ISSN-L 1236-8202
3. 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).

Pre-prints

1. T. Airaksinen, T. Aittokoski, [Multi-objective actuator placement optimization for local sound control evaluated in a stochastic domain](#), Reports of the Department of Mathematical Information Technology / University of Jyväskylä 10/2011

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