

PUBLICATIONS – NIKLAS ANDERSSON

JOURNAL PUBLICATIONS

- [1] ANDERSSON, N. 2016 A Non-Intrusive Acceleration Technique for Compressible Flow Solvers Based on Dynamic Mode Decomposition. *Computers and Fluids* **133**, 32–42, <http://dx.doi.org/10.1016/j.compfluid.2016.04.018>.
- [2] HAFSTEINSSON, H., ANDERSSON, N., CUPPOLETTI, D. R. & GUTMARK, E. 2016 LES Study of Screech Mechanism and the Effect of Micro-Jet Injection. *Submitted for publication in AIAA Journal* .
- [3] LÄRUSSE, R., ANDERSSON, N. & ÖSTLUND, J. 2016 Investigation of a Separated Nozzle Flow with Transonic Resonance Using Dynamic Mode Decomposition. *Submitted for publication in AIAA Journal* .
- [4] ANDERSSON, N., ERIKSSON, L.-E. & NILSSON, M. 2015 Numerical Simulation of Stirling Engines Using a Quasi-One-Dimensional Approach. *ASME J. Fluids Eng.* **137**, <http://dx.doi.org/10.1115/1.4029396>.
- [5] HAFSTEINSSON, H., ERIKSSON, L.-E., ANDERSSON, N., CUPPOLETTI, D. R. & GUTMARK, E. 2015 Noise Control of Supersonic Jet with Steady and Flapping Fluidic Injection. *AIAA Journal* **53** (11), 3251–3272, <http://dx.doi.org/10.2514/1.J053846>.
- [6] ANDERSSON, N. & ERIKSSON, L.-E. 2008 Prediction of Flowfield and Acoustic Signature of a Coaxial Jet Using RANS-based Methods and Large-Eddy Simulation. *International Journal of Aeroacoustics* **7** (1), 23–40, (6 citations - Google Scholar 27 Jan 2016).
- [7] ANDERSSON, N., ERIKSSON, L.-E. & DAVIDSON, L. 2005a Large-Eddy Simulation of Subsonic Turbulent Jets and Their Radiated Sound. *AIAA Journal* **43** (9), 1899–1912, (67 citations - Google Scholar 27 Jan 2016).
- [8] ANDERSSON, N., ERIKSSON, L.-E. & DAVIDSON, L. 2005b Investigation of an Isothermal Mach 0.75 Jet and its Radiated Sound Using Large-Eddy Simulation and Kirchhoff Surface Integration. *International Journal of Heat and Fluid Flow* **26** (3), 393–410, (46 citations - Google Scholar 27 Jan 2016).

CONFERENCE CONTRIBUTIONS

- [9] ABOU-TAOUK, A., LÖRSTAD, D., ANDERSSON, N. & ERIKSSON, L.-E. 2016 CFD Analysis of a SGT-800 Burner in a Combustion Rig. In *ASME Turbo Expo*. Seoul, South Korea.
- [10] HAFSTEINSSON, H., ANDERSSON, N., MALLA, B. & GUTMARK, E. 2016 Acoustic Signature of a Supersonic Jet Emanating from a Rectangular C-D Nozzle. In *54th AIAA Aerospace Sciences Meeting*. San Diego, CA, USA.
- [11] LÄRUSSE, R., ANDERSSON, N. & ÖSTLUND, J. 2016 Hybrid RANS-LES Simulation of Separated Nozzle Flow. In *52th AIAA/ASME/SAE/ASEE Joint Propulsion Conference*. Salt Lake City, Utah, USA.
- [12] LEJON, M., ANDERSSON, N., GRÖNSTEDT, T., ELLBRANT, L. & MÅRTENSSON, H. 2016 Optimization of Robust Transonic Compressor Blades. In *ASME Turbo Expo*. Seoul, South Korea.

- [13] HAFSTEINSSON, H., ANDERSSON, N., CUPPOLETTI, D. & GUTMARK, E. 2015 Reduction of Supersonic Jet Noise using Micro-jets in the Diverging Part of a Conical CD-Nozzle. In *The International Conference on Jets, Wakes and Separated Flows (ICJWSF2015)*. Stockholm, Sweden.
- [14] LEJON, M., ANDERSSON, N., ELLBRANT, L. & MÅRTENSSON, H. 2015a CFD Optimization of a Transonic Compressor Stage with a Large Tip Gap. In *ISABE International Society for Air Breathing Engines*. Phoenix, AZ, USA.
- [15] LEJON, M., ANDERSSON, N., ERIKSSON, L.-E. & ELLBRANT, L. 2015b Simulation of Tip-Clearance Effects in a Transonic Compressor. In *ASME Turbo Expo 2015: Turbine Technical Conference and Exposition*. Montréal, Canada.
- [16] ANDERSSON, N. & ERIKSSON, L.-E. 2014 A Novel Solver Acceleration Technique Based on Dynamic Mode Decomposition. In *6th European Conference on Computational Fluid Dynamics (ECFD VI)*. Barcelona, Spain.
- [17] HAFSTEINSSON, H., ERIKSSON, L.-E., ANDERSSON, N., CUPPOLETTI, D., GUTMARK, E. & PRISELL, E. 2014a Near-Field and Far-Field Spectral Analysis of Supersonic Jet with and without Fluidic Injection. In *52nd Aerospace Sciences Meeting*, No. 0523 in AIAA 2014. National Harbor, Maryland, USA.
- [18] HAFSTEINSSON, H., ERIKSSON, L.-E., ANDERSSON, N., MORA, P., GUTMARK, E. & PRISELL, E. 2014b Exploration of Temperature Effects on the Far-field Acoustic Radiation from a Supersonic Jet. In *20th AIAA/CEAS Aeroacoustics Conference*. Atlanta, Georgia, USA.
- [19] LÄRUSSE, R., ANDERSSON, N., ERIKSSON, L.-E. & ÖSTLUND, J. 2014a Comparison of Eigenmode Extraction Techniques for Separated Nozzle Flows. In *50th AIAA/ASME/SAE/ASEE Joint Propulsion Conference*. Cleveland, Ohio, USA.
- [20] LÄRUSSE, R., HAFSTEINSSON, H., ANDERSSON, N. & ERIKSSON, L.-E. 2014b Investigation of Supersonic Jet Flow using Modal Decomposition. In *20th AIAA/CEAS Aeroacoustics Conference*. Atlanta, Georgia, USA, (1 citations - Google Scholar 27 Jan 2016).
- [21] HAFSTEINSSON, H., ERIKSSON, L.-E., ANDERSSON, N., CUPPOLETTI, D., GUTMARK, E. & PRISELL, E. 2013a Supersonic Jet Noise Reduction Using Steady Injection and Flapping Injection. In *19th AIAA/CEAS Aeroacoustics Conference*, No. 2144 in AIAA 2013. Berlin, Germany, (2 citations - Google Scholar 27 Jan 2016).
- [22] HAFSTEINSSON, H., ERIKSSON, L.-E., ANDERSSON, N., CUPPOLETTI, D., GUTMARK, E. & PRISELL, E. 2013b Supersonic Jet Excitation using Flapping Injection. In *American Physical Society, Division of Fluid Dynamics 66th Annual Meeting*. Pittsburgh, Pennsylvania, USA.
- [23] LÄRUSSE, R., ANDERSSON, N., ERIKSSON, L.-E. & ÖSTLUND, J. 2013 Linear Stability Analysis Using the Arnoldi Eigenmode Extraction Technique Applied to Separated Nozzle Flow. In *49th AIAA/ASME/SAE/ASEE Joint Propulsion Conference*. San Jose, California, USA, (1 citations - Google Scholar 27 Jan 2016).
- [24] ANDERSSON, N. & ERIKSSON, L.-E. 2006 Prediction of Flowfield and Acoustic Signature of a Coaxial Jet Using RANS-based Methods and Large-Eddy

- Simulation. In *10th CEAS-ASC Workshop, 1st Scientific Workshop of X3-Noise*. Trinity College, Dublin, Ireland.
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- [26] ANDERSSON, N., ERIKSSON, L.-E. & DAVIDSON, L. 2005*a* LES Prediction of Flow an Acoustic Field of a Coaxial Jet. In *The 11th AIAA/CEAS Aeroacoustics Conference*, No. 2884 in AIAA-2005. Monterey, California, USA, (39 citations - Google Scholar 27 Jan 2016).
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- [31] ANDERSSON, N., ERIKSSON, L.-E. & DAVIDSON, L. 2003 Large-Eddy Simulation of a Mach 0.75 Jet. In *The 9th AIAA/CEAS Aeroacoustics Conference*, No. 3312 in AIAA 2003. Hilton Head, South Carolina, USA, (36 citations - Google Scholar 27 Jan 2016).
- [32] ERIKSSON, L.-E., ANDERSSON, L., LINDBLAD, K. & ANDERSSON, N. 2003 Development of a Cooled Radial Flameholder for the F404/RM12 Afterburner. Part III: Afterburner Rumble Prediction and Suppression. In *The 16th ISABE (International Symposium on Airbreathing Engines) Conference*, No. 2060 in 2003. Cleveland, Ohio, USA, (5 citations - Google Scholar 27 Jan 2016).
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- [33] ANDERSSON, N. 2005 A Study of Subsonic Turbulent Jets and Their Radiated Sound Using Large-Eddy Simulation. PhD thesis, Department of Applied Mechanics, Chalmers University of Technology, Gothenburg, (23 citations - Google Scholar 27 Jan 2016).
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