

## Michaela M. Logue

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- CONTACT INFORMATION Department of Aerospace and Mechanical Engineering  
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- RESEARCH INTERESTS Aeroacoustics, fluid-structure interaction, structural acoustics, aeroelasticity, engineering education
- EDUCATION **The University of Notre Dame**, Notre Dame, Indiana, USA  
Ph.D., Aerospace and Mechanical Engineering, May 2010
  - Dissertation Title: Sound Generation and Scattering in Turbofan Engines
  - Advisor: Professor Hafiz M. AtassiM.S., Aerospace Engineering, August 2008
  - Advisor: Professor Hafiz M. Atassi**The University of North Carolina at Asheville**, Asheville, North Carolina, USA  
B.S., Physics, Mathematics, May 2004
  - *Summa cum Laude*, With Distinction in Mathematics, Physics
  - Designation: University Research Scholar, University Scholar
- AWARDS **Department of Defense**
  - National Defense Science and Engineering Graduate Fellowship, 2005-2008**The University of Notre Dame**
  - Arthur J. Schmitt Presidential Fellowship, 2004-2005, 2008-2010**The National Collegiate Athletic Association (NCAA)**
  - Postgraduate Fellowship, 2004-2005
  - 3<sup>rd</sup> Team Academic All American, 2004**The University of North Carolina at Asheville**
  - Undergraduate Research Fellowship, 2000-2004
  - Joe Parsons Mathematics Scholarship, 2003-2004
  - Outstanding Service to Undergraduate Research, 2004
  - Mathematics Department Top Student Award, 2004
  - Scholar Athlete of the Year, 2004
  - Sigma Pi Sigma national physics honor society, 2002
  - Omicron Delta Kappa national leadership society, 2002
  - Phi Eta Sigma national honor society, 2001

JOURNAL  
PUBLICATIONS

Atassi, H. M., and M. M. Logue. "Aerodynamics and Interaction Noise of Streamlined Bodies in Nonuniform Flows," In press, *J. Sound and Vibration*, doi:10.1016/j.jsv.2011.03.009.

Logue, M. M., H. M. Atassi, D. A. Topol, and J. J. Gilson. "Aerodynamics and Acoustics of an Annular Cascade: Comparison with a Linear Cascade," Accepted for publication in *AIAA Journal*. (Presented as paper AIAA-2010-3870).

CONFERENCE  
PUBLICATIONS

Logue, M. M., and H. M. Atassi. "Sound Generation and Scattering From a Rotor in a Nonuniform Flow," 16<sup>th</sup> AIAA/CEAS Aeroacoustics Conference, Stockholm, Sweden, June 7-9, 2010, AIAA-2010-3743.

Atassi, H. M., and M. M. Logue. "Modeling Tonal and Broadband Interaction Noise," IUTAM Symposium on Computational Aero-Acoustics for Aircraft Noise Prediction, South Hampton, United Kingdom, March 29-31, 2010.

Logue, M. M., H. M. Atassi, and M. S. Kamel. "Propagation of Acoustic Waves Through A Rotor," Twelfth International Symposium on Unsteady Aerodynamics, Aeroacoustics, and Aeroelasticity of Turbomachines, London, United Kingdom, September 1-4, 2009.

Atassi, H. M., and M. M. Logue. "Fan Aerodynamic and Acoustic Response to Anisotropic Turbulence," Twelfth International Symposium on Unsteady Aerodynamics, Aeroacoustics, and Aeroelasticity of Turbomachines, London, United Kingdom, September 1-4, 2009.

Logue, M. M., and H. M. Atassi, "Passive Control of Fan Broadband Noise," 15<sup>th</sup> AIAA/CEAS Aeroacoustics Conference, Miami, Florida, May 11-13, 2009, AIAA-2009-3149.

Atassi, H. M., and M. M. Logue, "Fan Broadband Noise in Anisotropic Turbulence," 15<sup>th</sup> AIAA/CEAS Aeroacoustics Conference, Miami, Florida, May 11-13, 2009, AIAA-2009-3148.

Logue, M. M., and H. M. Atassi, "Scattering of Acoustic Waves by a Rotor," 14<sup>th</sup> AIAA/CEAS Aeroacoustics Conference, Vancouver, British Columbia, May 5-7, 2008, AIAA-2008-2989.

Atassi, H. M., and M. M. Logue, "Effect of Turbulence Structure on Broadband Fan Noise," 14<sup>th</sup> AIAA/CEAS Aeroacoustics Conference, Vancouver, British Columbia, May 5-7, 2008, AIAA-2008-2842.

SERVICE

**The University of Notre Dame**, Notre Dame, Indiana, USA

*Schmitt Strategic Planning Committee*      **September 2007 to May 2010**

- Co-founded the Schmitt Strategic Planning Committee, a subgroup of the University of Notre Dame Arthur J. Schmitt Fellows.
- Organized a team of Notre Dame Schmitt Fellows to work in collaboration to develop social programs focusing on service, science and entrepreneurship.

**The University of North Carolina at Asheville**, Asheville, North Carolina, USA

*Undergraduate Research Program Advisory Council*      **August 2002 to May 2003**

- Served as one of two student members on the Undergraduate Research Program Advisory Council.
- Reviewed student grant applications for monetary support to pursue summer undergraduate research.