DANIEL J. BODONY

University of Illinois at Urbana-Champaign Department of Aerospace Engineering 306C Talbot Labs, MC-236 Urbana, IL 61801



EDUCATION

Ph.D., Aeronautics & Astronautics, 2004, Stanford University, Stanford, California. Thesis: *Aeroacoustic Prediction of Turbulent Free-Shear Flows*

RECENT PROFESSIONAL EXPERIENCE

Associate Dean for Graduate, Professional, and Online Programs Grainger College of Engineering University of Illinois at Urbana-Champaign, Urbana, Illinois Professor, Department of Aerospace Engineering University of Illinois at Urbana-Champaign, Urbana, Illinois

 $August\ 2021-Present$

August 2020 – Present

AWARDS AND FELLOWSHIPS

Rose Award for Teaching Excellence, College of Engineering, UIUC, 2022. Campus Distinguished Promotion Award, UIUC, 2020.

William L. Everitt Teaching Award, College of Engineering, UIUC, 2018.

Dean's Award for Excellence in Research, UIUC College of Engineering, 2016.

Donald Biggar Willett Faculty Scholar, UIUC College of Engineering, 2015.

AIAA Associate Fellow, 2014.

Blue Waters Professorship, University of Illinois, 2014.

Tau Beta Pi Eminent Engineer Award, 2012.

NSF CAREER Award, 2012.

ARCS Research Fellowship, 2001 – 2002.

National Defense Science and Engineering Graduate Fellowship, 1998 – 2001.

SELECTED RECENT JOURNAL PUBLICATIONS (Advisees: Students in **bold**, Post-docs <u>underlined</u>)

- 1. **Dettenrieder, F.** and Bodony, D. J. (2022) "Stability analysis of compressible flat plate boundary layer flow over a mechanically compliant wall," invited paper for hypersonics-focused special issue of *Theoretical and Computational Fluid Dynamics*. https://doi.org/10.1007/s00162-021-00600-z
- 2. **Sashittal, P.** and Bodony, D. J. (2021) "Data-Driven Sensor Placement for Fluid Flow," *Theoretical and Computational Fluid Dynamics*, Vol. 35(10), pp. 709-729.
- 3. **Bay, Y. Y.**, Bodony, D. J., and Freund, J. B. (2020) "Boundary-consistent B-spline filtering schemes and application to high-fidelity simulations of turbulence", *Journal of Computational Physics*, Vol. 419(109680).
- 4. **Murthy, S. R.**, Sayadi, T., Le Chenadec, V., Schmid, P. J., and Bodony, D. J. (2019) "Analysis of Degenerate Mechanisms Triggering Finite Amplitude Thermo-Acoustic Oscillations in Annular Combustors", *Journal of Fluid Mechanics*, Vol. 881, pp. 384-419.
- 5. **Sashittal, P.** and Bodony, D. J. (2019) "Reduced-order control using low-rank Dynamic Mode Decomposition", *Theoretical and Computational Fluid Dynamics*, Vol. 33(6), pp. 603-623.
- 6. **Mikida, C.**, Klöckner, A., and Bodony, D. J. (2019) "Multi-Rate Time Integration on Overset Meshes", *Journal of Computational Physics*, Vol 396, pp. 325-346.
- 7. **Natarajan, M.**, Freund, J. B., and Bodony, D. J. (2018) "Global Mode-Based Control of Laminar and Turbulent High-Speed Jets", *Comptes Rendus Méchanique*, Vol. 346(10), pp. 978-996 (special issue on jet noise).
- 8. **Natarajan, M.**, Freund, J. B., and Bodony, D. J. (2016) "Actuator Selection and Placement for Localized Feedback Flow Control", *Journal of Fluid Mechanics*, Vol. 809, pp. 775-792.