Refereed Conference Papers

Degani, A. T., Li, Q. and Walker, J. D. A. “Unsteady Separation from the Leading Edge of an Airfoil,” *Paper AIAA-94-2337*, AIAA 25th Fluid Dynamics, Colorado Springs, CO, June 20-23, 1994.

Puhak, R., Degani, A. T. and Walker, J. D. A., “Separation and Heat Transfer Upstream of Obstacles,” *International Workshop on Advances in Analytical Methods in Aerodynamics*, Miedzyzdroje, Poland, July, 12-14, 1993.

Degani, A. T., “Structure of the Three-Dimensional Turbulent Boundary Layer,” *International Workshop on Advances in Analytical Methods in Aerodynamics,* Miedzyzdroje, Poland, July, 12-14, 1993.

Degani, A. T. and Walker, J. D. A., “Calculation of Unsteady Separation from Stationary and Moving Walls,” *Bluff-Body Wakes, Dynamics and Instabilities*, IUTAM Symposium, Goettingen, Germany, September 7-11, 1992, Eckelmann, H et al. (eds.), pp. 23-26, Springer-Verlag, Berlin.

Degani, A. T. and Walker, J. D. A., “Computation of Three-Dimensional Turbulent Boundary Layers using the Embedded-Function Method,” *Paper AIAA-92-0440*, AIAA 30th Aerospace Sciences Meeting, Reno, NV, January 6-9,1992.

Degani, A. T., Walker, J. D. A., Ersoy, S. and Power, G., “On the Application of Algebraic Turbulence Models to High Mach Number Flows,” *Paper AIAA-91-0616*, AIAA 29th Aerospace Sciences Meeting, Reno, NV, January 7-10, 1991.

Degani, A. T. and Walker, J. D. A., “Computation of Three-Dimensional Turbulent Boundary Layers with Heat Transfer in a Plane of Symmetry using Embedded Wall-layer Functions,” *Paper AIAA-90-0307*, AIAA 28th Aerospace Sciences Meeting, Reno, NV, January 8-11, 1990.

Degani, A. T. and Walker, J. D. A., “Asymptotic Structure and Similarity Solutions for Three-Dimensional Turbulent Boundary Layers,” *Paper AIAA-89-1863,* AIAA 20th Fluid Dynamics, Plasma Dynamics and Lasers Conference, Buffalo, NY, June 12-14, 1989.

Published Abstracts

Degani, A. T. and Walker, J. D. A., “The Boundary-Layer Flow on a Translating and Rotating Cylinder,” 45th Annual Meeting of the Division of Fluid Dynamics, Tallahassee, FL, November 22-24, 1992.

Walker, J. D. A., Puhak, R. and Degani, A. T., “Unsteady Separation Upstream of Obstacles,” 45th Annual Meeting of the Division of Fluid Dynamics, Tallahassee, FL, November 22-24, 1992.

Degani, A. T. and Walker, J. D. A., “The Asymptotic Structure of a Three-Dimensional Turbulent Boundary Layer,” 43rd Annual Meeting of the Division of Fluid Dynamics, Ithaca, NY, November 18-20,1990.

Walker, J. D. A. and Degani, A. T., “Similarity Solutions for Three-Dimensional Turbulent Boundary Layers,” 42nd Annual Meeting of the Division of Fluid Dynamics, Palo Alto, CA, November 19-22,1989.

Degani, A. T., Hussain, A. K. M. F. and Tezduyar, T. E., “Dynamics of Four Point Vortices,” 38th Annual Meeting of the Division of Fluid Dynamics, Tucson, AZ, November 24-27, 1985.

Professional Associations

American Physical Society, Member
American Institute of Aeronautics and Astronautics, Member
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Education

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M.S. in Mechanical Engineering, University of Houston, Houston, TX, 1986.
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Employment

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  Alex G. Nason Research Fellow, September 1993 — present
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  Research Associate and Adjunct Lecturer, September 1991 — August 1993
Lehigh University, Bethlehem, PA
  Research Assistant, January 1987 — August 1991
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  Teaching Assistant, September 1984 — December 1986.

Awards

Alex G. Nason, Computational Science Fellowship, Northeast Parallel Architectures Center.
S. W. Kung, Department of Mechanical Engineering and Mechanics, Lehigh University.

Reviewer

European Journal of Mechanics, International Journal of Modern Physics C, Journal of Parallel and Distributed Computing, AIAA Fluid Dynamics Conference, International Parallel Processing Symposium

Invited Speaker

Mechanical, Aerospace and Manufacturing Engineering Department, Syracuse University, NY, February 1, 1994.
Institute of Computational Mechanics and Propulsion, NASA LeRC, Cleveland, OH, August 11, 1989.

Refereed Journal Publications

Degani, A. T. and Walker, J. D. A., "Computation of Attached Three-Dimensional Turbulent Boundary Layers," *J. Comp. Phys.*, Vol. 109, No. 2, pp 202-214, 1993.

Degani, A. T., Smith, F. T. and Walker, J. D. A., "The Structure of a Three-Dimensional Turbulent Boundary Layer," *J. Fluid Mech.*, Vol. 250, pp. 43-68, 1993.

Degani, A. T., Smith, F. T. and Walker, J. D. A., "The Three-Dimensional Turbulent Boundary Layer near a Plane of Symmetry," *J. Fluid Mech.*, Vol. 234, pp. 329-360, 1992.