Summary BIO — Mark Glauser: Professor of Mechanical and Aerospace Engineering, College of Engineering and Computer Science; Professor of Physics, College of Arts and Sciences, Syracuse University

Glauser, along with his co-workers, post-docs, graduate and undergraduate students, conducts major experimental, computational and theoretical efforts to apply low-dimensional models to turbulent and transitioning flows for understanding and control. Flows studied have ranged from high speed aerospace type applications to those around thermal breathing manikins within the micro-environment. Work includes developing closed-loop flow control methods based on the use of Proper Orthogonal Decomposition (POD) and Stochastic Estimation for various turbulent flows including; that over a NACA 4412 airfoil, high speed (high subsonic and supersonic) turbulent jets for noise reduction/enhanced mixing, 3D separated flow control over turrets for improving aero-optics and for improving efficiency and reducing noise on large wind turbines and more recently flow field measurements around UAV quad copters. Glauser has or is currently serving as: a member of the US Army Science Board (2013 – 2021) where he co-chaired a 2015 study on the Future of Army Aviation, a 2016 study entitled ‘’The future armor/anti-armor competition’’, a 2017 study focused on the Army’s role in Multi Domain Battle, a 2018 study focused on Multi Domain Operations that includes aspects of joint, all of government, allies, etc., co-chair of the 2019 study focused on next generation armor/anti-armor strategy, and co-chair of the 2020 study focused on the 2040 Battlefield; a member of the NASA Langley Fundamental Aerodynamics Peer Review Panel (2014, 2009); a member of the ARO Mechanics program oversight board (2017 - present); SUNY Buffalo Mechanical and Aerospace Engineering Advisory Board (2019-present), National Academies Study Member review of Army Propulsion Research at ARL (2020-present); Associate Editor, AIAA Journal (2007 – 2016); Program Manager for the Turbulence and Internal Flows Program at the US Air Force Office of Scientific Research (AFOSR) from 1996-1999; meeting Chair for the 56th APS Annual Meeting of the Division of Fluid Dynamics, November 2003; Technical Chair for the AIAA Summer Fluid Dynamics Meeting, June 2006; an ABET evaluator for Aerospace Engineering programs since 2004; and from 2013-2015 an ABET EAC member. Glauser has obtained more than 12.7 Million dollars in research funding as PI or Co-PI from AFOSR, NSF, NASA, EPA, DoE, Dantec, GE, United Technologies, Spectral Energies, Clear Science Corp. and others. His current funding as PI is approximately 1 Million dollars from AFOSR and Spectral Energies LLC/AFRL/Lockheed. Glauser has published more than 180 peer-reviewed publications and conference proceedings and has presented more than 100 invited presentations and keynote talks worldwide. Over the past 30 years he has mentored several post docs and more than 45 Ph.D. and MS students. Glauser served as Associate Dean for Research and Doctoral Programs within the College of Engineering and Computer Science (2008 – 2016), where he was responsible for overseeing the college’s research activities and coordinating the development of its future research portfolio. Glauser is a Fellow of; the American Institute of Aeronautics and Astronautics, the American Society of Mechanical Engineers, the American Physical Society, and the Institute of Physics (UK). In 1995 he was a Fulbright Scholar in Poitiers France. Glauser received his BS (1982) and his Ph.D. (1987) from the Department of Mechanical and Aerospace Engineering, the University at Buffalo SUNY.

FULL RESUME

Mark N. Glauser

Professor Mechanical and Aerospace Engineering
Professor, Department of Physics
Syracuse University

OFFICE
Syracuse University
263 Link Hall
Syracuse, NY 13244
Phone: (315) 443-2823
Fax: (315) 443-9099
E-mail: mglauser@syr.edu

HOME
8546 Lamp Post Circle
Manlius, NY 13104
Phone: (315) 682 -1878

CITIZENSHIP: USA

EDUCATION:

Ph.D. - Fluid Dynamics, Department of Mechanical and Aerospace Engineering, University at Buffalo, SUNY, August 1987
Dissertation Advisor: William K. George, Jr.
Major Research Area: Application of a Proper Orthogonal Decomposition to Large Eddy Structures in a Turbulent Axisymmetric Jet Mixing Layer

B.S. - Mechanical Engineering, University at Buffalo, SUNY, 1982

PROFESSIONAL EXPERIENCE

Professor, Mechanical and Aerospace Engineering, Syracuse University (July 1, 2001 – present). Professor, Department of Physics, Syracuse University (July 1, 2008 – present).

Associate Dean for Research and Doctoral Programs, College of Engineering and Computer Science, Syracuse University (January 1, 2008 – August 15, 2016)

Army Science Board Member, Special Government Employee (March 2013 – February 2021),
Vice Chair of 2015 Study, ``Future of Army Aviation''
Vice Chair of 2016 Study, ``The Future Armor Anti-Armor Competition''
Vice Chair of 2017 Study, ``Multi Domain Battle''
Vice Chair of 2018 Study, ``Multi Domain Operations''
Vice Chair of 2019 Study, ``Next Generation Combat Vehicle''
Vice Chair of 2020 Study,``The 2040 Battlefield''

National Academies Review team study member (June 2020 - present), Review of Army Propulsion R&D at ARL.

Army Research Office; Member, Mechanics Program Oversight Board (2017 – Present)

Elected Member of the Engineering Research Council of ASEE (2015 – 2016)

Sabbatical Leave as Senior Research Scientist, Jan 1 - June, 30, 2007, AFRL/RQ, 2130 8th St. Building 45, Area B, Wright Patterson Air Force Base, Dayton, Ohio, 45433 (POC, Dr. Ryan Schmit, email: ryan.schmit@wpafb.af.mil)

Associate Director for Research, "New York State Environmental Quality Systems Center'' A Syracuse University led Strategically Targeted Academic Research Center. LC Smith College of Engineering and Computer Science, 223 Link Hall, Syracuse New York 13244 (July 1, 2001 – 2008)

Program Manager, "Turbulence and Internal Flows," Air Force Office of Scientific Research (AFOSR), Washington, D.C., (Sept. 1, 1996 - August 31, 1999).

Adjunct Professor, Mechanical and Aeronautical Engineering, Clarkson University (July 1, 2001 – June 30, 2003)

Professor, Mechanical and Aeronautical Engineering, Clarkson University (July 1, 1998 – June 30, 2001).

Associate Professor, Mechanical and Aeronautical Engineering and Institute for Nonlinear Studies, Clarkson University (July 1, 1993 - June 30, 1998).

Fulbright Fellow and Visiting Senior Research Scientist, Laboratoire d Etudes Aerodynamiques, Universite de Poitiers, Poitiers, France (June 1, - July 31, 1995).

Visiting Senior Research Scientist, NASA Langley Research Center (June 1, 1994 - May 31, 1995) (Sabbatical Leave).

Assistant Professor, Mechanical and Aeronautical Engineering and Institute for Nonlinear Studies, Clarkson University (Sept. 1987 - June 30, 1993).

Recipient: NASA Graduate Student Researchers Fellowship, NASA/Ames Research Center (1984 - 1987) (NASA Advisor: Parviz Moin).

Research Assistant, Turbulence Research Laboratory, University at Buffalo, SUNY, (1983 - 1984).

Teaching Assistant, University at Buffalo, SUNY (1982 - 1983).

Undergraduate Research Assistant, Turbulence Research Laboratory, University at Buffalo, SUNY (1981 - 1982).

Junior Mechanical Engineer, Alcan Aluminum Company, Oswego, NY (Summer 1981).

HONORS and AWARDS

Twice awarded the Meritorious Civilian Service Medal (2020, 2021), for service as a Special Government Employee on the Army Science Board.
Fellow, American Institute for Aeronautics and Astronautics (AIAA), 2011
Fellow, American Physical Society (APS), 2007
Fellow, American Society of Mechanical Engineers (ASME), 2002
Fellow, The Institute of Physics (UK), 2004
Associate Fellow, American Institute of Aeronautics and Astronautics (AIAA), 2001
Invited Lecture, 69th Annual Meeting of the APS Division of Fluid Dynamics, 20-22 November, 2016, Portland Oregon
ASME Robert T. Knapp Best Paper Award, 2003
Invited Speaker and Participant, National Academy of Engineers (NAE), Frontiers in Engineering, Beckmann Center, University of California, Irvine, September 1998.
Fulbright Fellow, June 1 - August 2, 1995, CEAT/LEA University of Poitiers, Poitiers France.
Member, New York Academy of Sciences
Mentor, Posse Foundation, City of Miami First Posse at Syracuse University, 2012 - 2016
Elected (by ECS faculty) Member, Syracuse University VC and Provosts Tenure and Promotion Committee (2018, 2019)
Chair, Syracuse University Remembrance Scholar Selection Committee, 2012 – 2015
Syracuse University Chancellor's Citation for Excellence in Research and Scholarship, March 2008.
The 2006 Barry L. Wells Man of the Year Award, African American Male Congress, Syracuse University.
The 2006 James K. Duah-Agyeman Award, Collegiate Science & Technology Entry Program (CSTEP), Syracuse University.
Syracuse University Gateway Learning Community Faculty Fellow (2004- 2008).
Invited Speaker at the 2006 Syracuse University Remembrance Scholar Convocation
Filtertech Outstanding Faculty Award, MAME Department, Syracuse University, 2003.
Clarkson's Million Dollar Club, September 1998.
Clarkson Phalanx Commendable Service Award, April 1998.
Outstanding Advisor, Clarkson University, 1988-1989, 1995-1996.
Lead Editor (with J.P. Bonnet and T.B. Gatski) (1993), Special Issue of Theoretical and Computational Fluid Dynamics entitled "Turbulent Eddy Structure and Dynamics," Vol. 5, Number 4-5.
Co-editor with J.P. Bonnet of Hardbound Volume (1993) published by Kluwer entitled "Eddy Structure Identification in Free Turbulent Shear Flows."
NASA/ASEE Summer Faculty Fellow, NASA Langley 1991, 1992.
Who's Who in Science and Engineering, (Second Edition), 1993.
My Ph.D. student, Larry Ukeiley was awarded a Chateaubriand Fellowship from the French Embassy and spent 1 year in Poitiers, France.

NASA Graduate Student Researchers Fellowship, NASA/AMES Research Center, 1984-1987.

Winner of 2nd prize, Scientific Poster Competition, held at the 100th Anniversary Celebration of the Society of Sigma XI, Western New York Chapter, April 30, 1986.

PROFESSIONAL INTERESTS

Turbulence and Multi-phase flows, Active Flow Control, Intelligent Systems and Control, Cyber Physical Systems, Unsteady Aerodynamics, Aeroacoustics, Wind Energy, Fluid Mechanics of Built Environments, Fluid Mechanics of coughing and breathing of humans, Dynamical Systems, Heat Transfer, Applied Mathematics, Signal Processing and Instrumentation; K-12, Undergraduate and Graduate Education.

PROFESSIONAL ACTIVITY

Chair, Invited Session, ``On Fake Walls Along the USA/Mexico Border'', Professor Luciano Castillo, Purdue University, 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago.

National Academies Study Member, Review of Army Propulsion Research at ARL (2020 - present).

Army Science Board: (member), March 15, 2014 – January 2021; (consultant), March 15, 2013 – March 14, 2014.

Army Research Office: Member, Mechanics Program Oversight Board (2017 – present)

Member, SUNY Buffalo Mechanical and Aerospace Engineering Advisory Board (2019-present)

Outside Evaluator on behalf of the State of Florida of the Florida State University Mechanical Engineering Program, BS-PhD. (March 2019)

Outside Evaluator for the Doctoral Thesis of Mohammad Karami entitled ``Modal Analysis and Analytical Modeling of Tornado-Like Vortices'' Department of Civil Engineering, Western University, London Ontario, Fall 2019.

Member, NASA Langley Fundamental Aerodynamics Peer Review Panel, January 2009 and February 2014.

Member, ABET EAC Commission representing AIAA, 2013 – 2015.

Associate Editor, AIAA Journal (January 2008 – December 2015)

Organizing Committee, ``Whither Turbulence and Big Data for the 21st Century'', NSF Funded workshop, Corsica France, April 20-24, 2015, Co-Editor of Volume of same title.

Technical Chair, 2006 AIAA Summer Fluids Meeting in San Francisco

Chair, 56th Annual Meeting, APS Division of Fluid Dynamics, Nov 23-25, 2003, (The meeting was held in New Jersey and NYC and is the largest worldwide in the area of Fluid Dynamics ~ 1350 participants)

Member, AIAA Fluid Dynamics Technical Committee (2004 – 2010), served as Chair of subcommittee on Experimental and Theoretical Fluid Dynamics, also, was member of Fluids TC Steering Committee

Leader, AIAA Fluids TC Working Group, Fluid Information Triad (Jan 07 – Jan 09).

Member, Organizing Committee and Keynote Speaker, IUTAM Symposium on "Flow

Control and MEMS," September 2006, Imperial College, London.

ABET Evaluator for Aerospace Engineering programs (Fall 04 - present). ABET Commissioner 2012 - 2015

University Senate, Syracuse University, 2002 – 2008

Member, Syracuse University Wide Faculty Salary Committee (November 2016 – 2018)

Member, SU Remembrance Scholar Selection Committee, 2004 – 2015 (Chair 2012-2015)

Posse Mentor, Syracuse University, City of Miami Mentees, summer 2012 – 2016

Key point person along with Suresh Santanam, for the Great Lakes Sustainable Energy Consortium (GLSEC).

Syracuse University Point of Contact for the Transborder Research University Network (TRUN)

Member, SU Senate Committee for Athletic Policy, 2003- 2013

Chair, Syracuse University MAE Dept. Promotion and Tenure Committee, 2003 – 2006.

Member, MAE Undergraduate Curriculum Committee, 2004 – present

Engineering and Computer Science Deans Search Committee, SU, 2003-2004

Faculty Senate, Clarkson University 1989 - 1994, Vice-Chair 1992-93.

University wide Promotions Committee, Clarkson University, 1999-2001.

Engineering Deans Search Committee, Clarkson University 2000-2001

Co-Organizer, Symposium on the Measurement and Modeling of Large-Scale Turbulent Structures, ASME Montreal 2002 FED Conference

Invited Participant, NSF Sponsored workshop on Improving Undergraduate Fluid Mechanics Education, University of Michigan, October 3 & 4, 2000.

Editorial Board, Journal of Turbulence (JoT).

NSF Career Panelist: Fall 2016, 2017, 2018

NSF Panelist: Turbulence and Flow Control, Summer 2008

NSF Panelist: Energy for Sustainability Program, Spring 2007.

NSF Panelist: Turbulence and Flow Control, Fluid Mechanics Division, Spring 2006.

NSF Panelist: Turbulence and Flow Control, Fluid Mechanics Division, Fall 2005.

NSF Panelist: Turbulence and Flow Control, Fluid Mechanics Division, Fall 2004.

NSF Panelist: Major Research Instrumentation (MRI) grants, Fluid Mechanics Division, Spring 2003.

NSF Panelist: Scientific Equipment Grants, Fluid Mechanics Division, Washington, D.C. Spring 2000.

NSF Panelist: Scientific Equipment Grants, Fluid Mechanics Division, Washington, D.C. January 1995.

NSF Panelist: Scientific Equipment Grants, Fluid Mechanics Division, Washington, D.C. April, 1991.

Session Chair, Session M01: Flash Oral Presentations: Turbulence, 72nd Annual Meeting of the APS Division of Fluid Dynamics, November 23–26, 2019; Seattle, Washington

Session Chair: Separation Control, 50th AIAA Aerospace Sciences Meeting, 9-12 January 2012, Nashville Tennessee

Session Chair: Special Topics in Stability, Transition and Turbulence II in Honor of William Saric, 41st AIAA Fluid Dynamics Conference and Exhibit, 27-30 June 2011, Honolulu, Hawaii.

Session Chair: Aerodynamics of Massively Separated Low Reynolds Number Flows, 49th

AIAA Aerospace Sciences Meeting, 4-7 January 2011, Orlando Florida

Session Chair: Integrating Experimental, Theoretical, and/or Computational Approaches, 39th AIAA Fluid Dynamics Conference and Exhibit, June 2009, San Antonio Texas.

Session Chair: Dialog on Challenges in Flight Mechanics, 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida

Session Chair: Transition and Turbulence: RANS/LES/DES, 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida

Session Chair: Further Case Studies in the Fluids Information Triad, 38th AIAA Fluid Dynamics Conference and Exhibit, June 2008, Airport Double Tree Hotel, Seattle Washington

Session Chair: Further Case Studies in the Fluids Information Triad, 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Grand Sierra Resort, Reno, Nevada.

Session Chair: Case Studies in Fluids Information, 37th AIAA Fluid Dynamics Conference and Exhibit, 25- 28 June 2007, Hyatt Regency Miami Florida.

Session Chair: Unsteady Flows, 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11, January 2007, Reno, Nevada

Session Chair: Turbulent Shear Flows I, The American Physical Society 59th Annual Meeting of the Division of Fluid Dynamics, Tampa, Fl, November 19-21, 2006.

Session Chair: Turbulent Flows, 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno, Nevada.

Session Chair: Turbulent Jets and Wakes, The American Physical Society 58th Annual Meeting of the Division of Fluid Dynamics, Chicago, Ill, November 20-22, 2005.

Session Chair: Fluid Structure Interaction and Morphing, 35th AIAA Fluid Dynamics Conference and Exhibit, 6-9 June 2005, Toronto, Canada.

Session Organizer and Chair: Toward Feedback Flow Control for Aeroacoustic Applications, 35th AIAA Fluid Dynamics Conference and Exhibit, 6-9 June 2005, Toronto, Canada.

Session Chair: Turbulent Flows, 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 10-13 January 2005.

Session Chair: Separated Flows III, The American Physical Society 57th Annual Meeting of the Division of Fluid Dynamics, Seattle Washington, November 21-23, 2004.

Session Chair: Unsteady-Flow Applications, 34th AIAA Fluid Dynamics Conference and Exhibit, Portland, Oregon, 28 June – 1 July 2004.

Session Chair: CFD Validation/Comparisons to Experiment 1, 42nd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 5-8 January 2004.

Session Chair: 4th ASME/JSME Joint Fluids Engineering Conference, July 6th – 10th, 2003, Honolulu, Hawaii.

Session Chair, ``The Measurement and Modeling of Large-Scale Turbulent Structures-II'', 2002 ASME Joint US-European Fluids Engineering Division Summer Meeting, July 14-18, 2002, Montreal, Quebec.

Session Chair: IUTAM Symposium on Turbulent Mixing and Combustion, Queen's University at Kingston, Canada, June 3-6, 2001.

Session Chair: Separated Flows and Wakes I, 51st Meeting of the Fluid Dynamics Division of APS, November 1998.

Session Chair: Control of Separated Flows and Jets, 28th AIAA Fluid Dynamics

Conference, Snowmass Village, CO, June 29 - July 2, 1997.

Session Chair: "Turbulence II," Session FD-32, 25th AIAA Fluid Dynamics Conference, Colorado Springs, CO, June 20-23, 1994.

Session Chair: "Separated Flow CFD," Session BE, Program of the 1994 Annual Meeting of the APS Division of Fluid Dynamics, November 1994, Atlanta, Georgia.

Session Chair: "Experimentally-Based Dynamical Fluids Models," Program of the Society of Engineering Science 31st Annual Technical Meeting, October 10-12, 1994, Texas A&M University, College Station, Texas.

Session Chair: "Turbulent Mixing Layers," Session EE, Program of the 1993 Annual Meeting of the APS Division of Fluid Dynamics, November 1993, Albuquerque, N.M.

Session Chair: "Instability Phenomenon," Second World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, Croatia Hotel, Dubrovnik, Yugoslavia, June 23-28, 1991.

Session Chair: "Experimental Techniques II," 41st Annual APS Meeting of the Division of Fluid Dynamics, University at Buffalo/SUNY, Buffalo, NY, November 20-22, 1988.

Session Chair: "Turbulent Incompressible Mixing Layers I," 43rd Annual APS Meeting of the Division of Fluid Dynamics, Cornell University, Ithaca, NY November 18-20, 1990.

Session Chair: "Turbulence Theory III," 44th Annual APS Meeting of the Division of Fluid Dynamics, ASU, Scottsdale, Arizona, November 24-26, 1991.

Session Chair: "Multiphase Flows and Turbulence," Society of Engineering Science 28th Annual Technical Meeting, University of Florida, Gainesville, Florida, November 6-8, 1996.

Session Chair: "Numerical Techniques," ASME Computers in Engineering Conference, Boston, MA, Summer 1990.

Reviewer for: NSF; Physics of Fluids; Journal of Fluid Mechanics; ASME Journal of Fluids Engineering; ASME Gas Turbine Division; National Fluid Dynamics Congress; International Journal of Experimental Heat Transfer, Thermodynamics, and Fluid Mechanics; International Journal for Numerical Methods in Fluids: AIAA Journal, Experiments in Fluids, Experimental Thermal Fluid Science, Applied Scientific Research, Theoretical and Computational Fluid Dynamics.

Organized 2 sessions for 12th U.S. National Congress of Applied Mechanics, Seattle, Washington, 1994.

Meeting organizer for the 7th Iroquois Conference on Fluid Mechanics, April 1990. Syracuse University.

Member, Organizing Committee IUTAM Symposium on "Eddy Structure Identification in Free Turbulent Shear Flows," Oct. 12-14, 1992, Poitiers, France.

Committee Member for several Masters and Ph.D. Theses at Clarkson.

Reporter on Ph.D.Thesis of J. Delville, CEAT/LEA, Poitiers, France, January 1995.

Outside reader for Ph.D. Theses at other Universities in the US, Canada and Europe.

Jury Member, Ph.D. Thesis of Stephan Gamard, Chalmers University, Gothenburg, Sweden, June 2002.

Outside Reader, Ph.D. Thesis, University of Western Ontario, London Ontario, Spring 2003

Reporter, Ph.D. Thesis, University of Poitiers, Poitiers, France, Summer 2003
Reporter, Ph.D. Thesis, University of Poitiers, Poitiers, France, March 2007.
Outside Reader, Ph.D. Thesis, University of Ottawa, April 2014

TEACHING, ADVISING AND CURRICULUM CONTRIBUTIONS

ABET Aerospace Engineering Evaluator (2004 – present), ABET Commissioner (2013 – 2015)

AIAA Deputy Director for Education, Northeast Region 1994-1998

AIAA Advisor, Clarkson University 1991-1994
Clarkson hosted AIAA Student Conference, April 1994.

Director, Undergraduate Labs in MAE at Clarkson 1987-1994, 1998 - 1999

Taught the following courses:

Syracuse University:
MAE 315, Mechanical and Aerospace Laboratory (Fall 06 – Fall 20)
MAE 321, Vibrations (Spring 08, 09, 20)
MAE 415, Mechanical and Aerospace Engineering Laboratory (Fall 03, 04, 05, 06)
MAE 341, Introduction to Fluid Mechanics (Fall 01, 02)
MAE 421, Vibrations and Control (Spring 02, 03, 04, 05, 06)
MAE 545, Applications of Fluid Mechanics (Fall 05)
MAE 990 Independent Study Hypersonics (Fall 19)
MAE 741, Turbulence (Fall 02, Spring 04, 05, 06, 08, 09, 10, 11, 12, 13, 14, 16, 17, 18,19, 21)

Clarkson University:
ES 100, Introduction to Computer
ME 470, Aeronautical Engineering Lab (developed the course)
ME 370, Mechanical Engineering Lab
Fluid Mechanics (Graduate Level)
Boundary-Layer Theory (Graduate Level)
Turbulence (Graduate Level)
Advanced Turbulence (Graduate Level)
ME 365 Independent Projects
ME 465 Advanced Independent Projects

General Advisement and Mentoring Activities:
Advised or am currently advising 5 post docs, 26 Ph.D. students (3 currently), 36 MS students (2 currently), 40+ REU students (5 currently) and 550+ Mechanical and Aerospace undergraduates in addition to mentoring many students from underrepresented groups from all disciplines (pre-med, Law, physics, etc)

through SU's Posse Program, Gateway Learning Community, CSTEP and AGEP program.
Awarded "Outstanding Advisor," Clarkson University, 1988-1989, 1995-1996 and the Filtertech Outstanding Faculty Award, MAME Department, Syracuse University, 2003

Short Course Lecturer for:

The Art and Science of Dynamic Flow Measurements. University at Buffalo, SUNY, and Dantec (DISA) Electronics. Summers 1987, 86, 83, 82

CCNY and Dantec, Workshop on Laser Doppler Anemometry with an Introduction to Constant Temperature Anemometry, NYC, NY (June 13-16, 1989).

Teaching and Service to Local Community:

Invited Speaker to the Syracuse Community, ``Turbulence, can we control it?'', Café Scientific, Ambrosia Restaurant, Armory Square, Nov 7, 2006

Given several lectures/wind tunnel demos on Aerodynamics to Tiger Cubs, Boy Scouts and Potsdam's fifth grade enrichment class.

Participant in Alexandria Bay school career days.

Lecturer on Aerodynamics to 10-15 year old children, Potsdam Days, July 1990.

Lecturer for Project Challenge, Clarkson University, 5 week course on Aerodynamics For High School Sophomores - Seniors, Spring 1991, 1992 and 1993.

SHORT COURSES ATTENDED

An advanced Short Course in Aero- and Hydro-Acoustics, University of California, San Diego, April 7-11, 1986

Fundamentals and Recent Advances in Hypersonics, University at Buffalo, SUNY, August 19-22, 1986

SOCIETY AFFILIATION

Fulbright Society
Society of the Sigma Xi
American Institute of Aeronautics and Astronautics
American Society for Engineering Education
American Society of Mechanical Engineers
New York Academy of Sciences
Pi Tau Sigma
Tau Beta Pi
American Physical Society
Institute of Physics

RESEARCH GRANTS (M. Glauser PI unless otherwise noted)

At Syracuse University:

AFOSR, ``Multi-Stream, Near-Wall Turbulence Dynamics", $689,812, 2/1/19-1/31/22. SU lead, Ohio State Subcontract

AFOSR, `` Fundamental turbulence mechanisms in multi-stream flows: a comprehensive joint experimental, theoretical and computational study'', $900,000 9/28/2015 – 9/27/2018**.** SU lead, Ohio State Subcontract

Spectral Energies, LLC/AFRL Phase 2, SBIR, ``Reduced-Order Model for Prediction of Supersonic Aircraft Jet Noise'', $100,000 8/1/2016 – present.

Spectral Energies, LLC/AFRL, `` Jet Noise Assessment of Distributed Propulsion for Efficient Medium Scale Propulsion Systems'', $120,000 7/1/16 – present.

Gryphon Sensors/NYS UAS funding, `` Classification of Performance-Based Impact Standards for Small Commercial UAVs'', $36,485 11/7/2016-4/1/2017

Spectral Energies, LLC/AFRL Phase 2, SBIR, `` Identification and Active Control of Jet Noise Sources Using High Resolution Coupled Measurement Devices and Methods'', $266,000 1/1/2012 – 4/23/2014, additional Phase 3 funding of $99,200 extended to 4/23/2015, Follow on funding $100,000 through December 2015,

General Electric, ``Development of a Toolkit for the Analysis of High-Speed Flows'', $70,000, 3/7/2012 – 12/31/2013

Innovative Scientific Solutions, Inc, (J. Dannenhoffer PI, M. Glauser Co-PI) ``Development of a Toolkit for the Analysis of High-Speed Flows'', $41,000, 1/1/2012 – 6/30/2013

Leskiw Associates, LLC/AFOSR Phase 1, STTR, (P. Varshney PI, M. Glauser Co-PI), `` Mission Prioritized Lossless Data Compression'', $46,000, 11/1/2011 – 7/31/2012

DOE/University of Minnesota, ``An Industry/Academe Consortium for Achieving 20% Wind by 2030 through Cutting-Edge Research and Workforce Training'', $135,000, 1/15/2010 – 12/31/2012.

Haledyne, Grants4Growth, ``Simulation of Haledyne IAS/HAS-74'', $17,500, 2/15/2011 – 2/14/2012.

Spectral Energies, LLC/AFRL Phase 1, SBIR.`` Identification and Active Control of Jet Noise Sources Using High Resolution Coupled Measurement Devices and Methods'', $24,000 2/15/2011 – 10/15/2011

Innovative Scientific Solutions, Inc/AFRl, ``Ejector Design for Air Capabilities'', $40,000, 8/15/2010 – 8/14/2011

AFOSR, `` Closed-Loop Control for High Reynolds Number Compressible Turbulent Jets'', $75,000 8/1/2010 – 7/15/2011

AFOSR/AFRL, ``Advancement of Intelligent Aerospace Systems'', $900,000, 2/1/2009 – 2/28/12 (Joint effort with Clarkson, Glauser PI on SU effort).

AFRL/Clear Science Corp, Phase 2 SBIR, `` Feedback Flow Control for a Three-Dimensional Turret''$265,000, 4/1/2008 – 9/30/2011 (Note, CASE funding associated with this for 1 GA for Fall 07 – Sp 10, Sp 11)

AFOSR, ``Closed-Loop Control for High Reynolds Number Compressible Turbulent Jets'', $70,000, 4/1/08 – 11/30/08

AFOSR, ``Feedback Flow Control with Experiment Based Order Reduction'', $83,030, 1/1/2007 – 6/30/2007.

AFOSR, ``Separated Turbulent Shear Layer Modification via Feedback Flow Control'', $75,000, 11/1/06 – 12/31/07**.**

AFOSR, ``Noise Identification in a Hot Transonic Jet Using Low-Dimensional Methods", $320,000, 1/1/05 – 12/31/07.

AFOSR, ``Separated Turbulent Shear Layer Modification via Feedback Flow Control'', $66,000, 6/1/06 – 12/31/06.

EPA, ``Computational and Experimental Techniques for Human Health and Security in Indoor Environments", $120,000, 7/1/06 – 5/31/09. Note, this is a joint effort with Professor Ahmadi at Clarkson. Total project is $300,000.

EPA, Strategically Targeted Research in Intelligent Built Environmental Systems (E. Khalifa, PI; Mark Glauser, Co-PI; Larry Tavlarides, Co-PI; Jensen Zhang, Co-PI; P. Varshney, Co-PI), $3,000,000, 9/30/04 – 12/31/06.

EPA, Development of Alternative Approaches to Assessing the Impact of Pollutants on Environmental Systems: Part 1 of 2: Human Exposure to Indoor Pollutants in Personal Microenvironments (E. Khalifa, PI; Mark Glauser, Co-PI; Hiroshi Higuchi, Co-PI; Jensen Zhang, Co-PI; Thong Dang, Co-PI), $650,000, 8/30/2003 – 2/28/2005.

NSF Alliance for Graduate Education and the Professorship , ``The Central New York to Puerto Rico-Mayaguez Alliance for Graduate Education'', (Gina Lee-Glauser, PI; Mark Glauser, Co-PI; Stacey Tice, Co-PI), $2,500,000/5 years. SU lead, academic partners, RPI, Cornell and the University of Puerto Rico-Mayaguez.

AFOSR, ``Low Dimensional Methods for Jet Noise Control", $300,000, 12/01/01 – 11/15/04.

Clear Science Corp (CSC)/AFOSR –STTR Phase 1, ``Closed-Loop Control of Separation in Subsonic and Transonic Flows,'' $30,000, 10/15/01 – 10/14/02. Phase 2, $175,000, 01/01/03 – 5/14/05. (M. Glauser, PI, H. Higuchi, Co-PI)

At Clarkson University:

BEAM Technologies/AFOSR –STTR Phase 1, "Synthesized Controller Design for MEMS-Based Flow Separation Management" $30,000, 9/01/00-8/31/01.

NASA NY Space Grant/Cornell University, "Fluid Mechanics and Aerospace Engineering", $32,000, 02/01/01-01/31/02.

NSF, Particle Transport, Deposition and Removal: Combined Research-Curriculum Development, (G. Ahmadi, PI, M. Glauser Co-PI) $400,000, 03/15/01 – 3/14/04.

NASA Langley Research Center, GSRP Grant, "Utilizing Particle Image Velocimetry and Surface Pressure Measurements to examine and Control Unsteady Incipiently Separating Flows," $66,000, July 1, 1999 – June 30, 2002.

NASA Langley Research Center, GSRP Grant, $66,000, "Examining Flow-Induced Vibrations by Low Dimensional Modeling Utilizing Particle Image Velocimetry and Accelerometers," July 1, 1999 – June 30, 2002.

NASA Langley Research Center, “Jet Mixing Enhancement by Feedback Control,” $50,000, Jan. 1, 1999 – December 31, 1999.

NSF, Time Dependent PIV, Equipment Grant, $85,000, Sept. 1, 1998 - Aug. 31, 1999.

NSF, High Speed Image Acquisition and Motion Analysis for Research and Education, Equipment Grant (PI, J. Yamamuro, Co-PIs, M. Glauser, J. Dempsey, S.P. Lin and T. Theis), $79,867, May 1, 1998 - April 30, 2001

BEAM Technology/NASA Langley SBIR Phase II, “Active Wing-A Verified Tool for Design of Active Flow Control Systems for High Lift Application,” $110,600 Dec. 1, 1996 - Nov. 30, 1998.

AFOSR, $181,500, IPA, Program Manager, Turbulence and Internal Flows,” Sept. 1, 1996 - Aug. 31, 1999.

NSF, “Control of Separated Flows,” $26,000/2 yrs, International Exchange program with KAIST (South Korea).

NASA/Dryden, “Instrumentation Development for Multipoint Measurements,” $500,000, Aug. 1991 - July 1996 (Subcontract to W. Saric, ASU).

NASA/Dryden, “Interactive Aeronautical Lab of the Future,” $50,000, Aug. 1995 – July 1996.

NASA/Langley, “Jet Mixing Enhancement by Feedback Control,” $200,000, March 1995 - June 1998.

NASA/Dryden, “Examination of Hot Film Response,” $88,000, Sept. 1, 1995 - August 31, 1999.

NASA/Langley, “Examination of a 2 Step 3D Experiment,” $88,000, July 1, 1995 - June 31, 1999.

NASA/Langley, “Theoretical and Experimental Studies in Aerospace Sciences,” $96,000, Jan. 1993 - Jan. 1996.

NASA/Langley, “IPA for Mark Glauser,” $50,000, June 1, 1994 - May 31, 1995. (Funds For Sabbatical Leave at NASA Langley).

Cornell/NASA Langley, “Jet Mixing Enhancement by Feedback Control,” $53,000, September 14, 1993 - September 13, 1994.

NSF, IUTAM Symposium Entitled: “Eddy Structure Identification in Free Turbulent

Shear Flows, Travel Grant," $7,500, May 1992 - June 1993.

NASA/Lewis, "Employing Flying Hot-Wires to Study Experimentally and Theoretically the Flow in an Axisymmetric Sudden Expansion," $66,000, July 1991 - June 1994.

NASA/ASEE Summer Faculty Fellow, NASA Langley 1991, $10,000.

NASA/ASEE Summer Faculty Fellow, NASA Langley 1992, $10,000.

Dantec, 1990, An Upgrade of Clarkson's LDA System to a Particle Dynamics Analyzer, $22,000.

NSF, CNRS International Program (with CEAT in Poitiers, France) (1991) "An Examination of Turbulent Shear Layers," $14,000/2 yrs.

Pratt and Whitney/UTRC 1989, "The Role of Flow Unsteadiness on Lobe Mixer Performance," $50,000(PI, W. Eckerle, Co-PI, M. Glauser).

Research Initiation Grant (NSF) 1988, $70,000, Title of Proposal, "An Investigation of the Turbulent Flow in the Suddenly Expanding Pipe Via POD".

NSF Undergraduate Research Experience. Increase of $8,000 for the above grant.

ALCOA New Faculty Grant 1987, $5,000.

THESES DIRECTED

Ph.D.: X. Zheng, Thesis topic: A Low Dimensional Description of the Axisymmetric Jet Mixing Layer, August 1991.
Ph.D.: L. Ukeiley, Thesis topic: Spatial and Temporal Dynamics of Coherent Structures in a Plane Mixing Layer, Sept. 1995. (Tenured Professor at the University of Florida in Mechanical and Aerospace Engineering, Fellow ASME)
Ph.D.: D. Cole, Thesis topic: Employing Flying Hot Wires to Study Experimentally and Theoretically the Flow in an Axisymmetric Sudden Expansion, May 1996. (Contractor at NASA Langley)
Ph.D.: K. Chapman, Thesis topic: Application of Multi-point Techniques to Swept Wing Flow, December 1996. (Senior Vice President for Research and Development, Fender Musical Instruments)
Ph.D.: S. Stokes, Thesis topic: Single and Multi-Point Measurement Techniques used in the Study of Separated Flows, May 1999. (Research Engineer/Scientist, CREARE)
Ph.D.: E. Eaton, Thesis topic: An Examination of the Azimuthal Variation Using Multi-Point Measurements in the Axi-Symmetric Sudden Expansion, August 1999. (Applied Research, Lennox International)
Ph.D.: J. Taylor, Control of Unsteady Flow Separation, July 2001. (Adjunct Professor, Clarkson University)

Ph.D.: R. Schmit, Examining Flow-Induced Vibrations by Low Dimensional Modeling Utilizing Particle Image Velocimetry and Accelerometers, Dec 2002. (Research Scientist, Air Force Research Labs, Dayton, Ohio)

Ph.D.: Charles Tinney, Low Dimensional Techniques for Sound Source Identification in High Speed Jets, Feb 2005. (ARL, University of Texas at Austin)

Ph.D.: David Marr, Velocity Measurements in the Breathing Zone of a Moving Thermal Manikin Within the Indoor Environment, May 2007. (Research Engineer, Carrier Corp)

Ph.D.: Jeremy Pinier, Low-Dimensional Techniques for Active Control of High-Speed Jet Aero-acoustics, Aug 2007. (Research Scientist, Civil Servant, NASA Langley)

Ph.D.: Julie Ausseur, Application of Low-Dimensional Techniques for Closed-Loop Control of Turbulent Flows, Sept 2007. (Research Engineer, Total Energy)

Ph.D.: Andre Hall, An Experimental Investigation of Low-Dimensional Techniques for Large Scale Noise Source Characterization in a Heated Jet, May 2008. (Management at Pratt and Whitney)

Ph.D.: Marlyn Andino, Flow control for Aero-Optic Applications, December 2009 (Research Scientist, Civil Servant, NASA Langley).

Ph.D: Ryan Wallace, Control of turbulent flow over an articulating turret for reduction of adverse aero-optic effects, February 2011 (Research Engineer, NASA Armstrong).

Ph.D: Kerwin Low, Towards Closed-loop Control of a High-Speed Jet for Noise Reduction, May 2012 (post doc, Poitiers France, 6/1/2012-7/31/2012, Pratt and Whitney, August 2012 -).

Ph.D: Patrick Shea, Experimental Investigation of an Actively Controlled Three-Dimensional Turret Wake, May 2012 (Research Assistant Professor, Syracuse University, 6/1/2012 – 5/31/2014, Research Scientist, Civil Servant, NASA Langley)

Ph.D: Guannan Wang (M. Glauser, Advisor, J. Lewalle, Co-advisor), Application of Flow Control to Wind Turbine Blades, August 2013 (GE Wind Turbine Division)

Ph.D: Zachery Berger, The Effects of Active Flow Control on High-Speed Jet Flow Physics and Noise, May 2014 (ARL, Penn State U.)

Ph.D: Chris Ruscher (J. Dannenhoffer, advisor, M. Glauser, co-advisor), Application of Data Fusion to Fluid Dynamic Data, May 2014. (Spectral Energies, LLC, June 1, 2014 - present)

Ph.D: Andrew Magstadt, `` Investigating the Structures of Turbulence in a Multi-stream, Rectangular, Supersonic Jet'', May 2017. (Lockheed Martin, Skunk works)

Ph.D: Matthew Berry, ``_Investigating the Interaction of a Supersonic Single Expansion Ramp Nozzle and Sonic Wall Jet'', December 2017. (Post doc with Glauser until March 2018, April 2018 Raytheon)

Ph.D: Andrew Tenney (M. Glauser, advisor, J. Lewalle, co-advisor), ``Modern Methods in Machine Learning as Applied to the Study of a Complex Supersonic Jet Flow'', May 2019 (June 2019, Raytheon)

Ph.D: Emma Gist, ``Influence of corner vortices on flow development, loading and noise in Rectangular multi-stream supersonic jets'', May 2022 (expected).

Ph.D: Ningshan Wang,``Control of UAVs in turbulent gust environments'' (jointly advised with Amit Sanyal), May 2022 (expected).

Ph.D: Seth Kelly, ``Application of AI/ML for understanding and control of flow and

noise in complex supersonic jets'', May 2023 (expected).

MS: Seth Kelly: ``Pressure and velocity measurements in high speed complex nozzle jet flows'', Dec 2020.

MS: Emma Gist, ``Simultaneous PIV and noise measurements in Rectangular multi-stream supersonic jets'', May 2020

MS: Dom DiDominic III: ``Using AI for noise prediction from Complex Nozzles'', December 2019

MS: Tyler Vartabedian:``Noise and flow measurements in Rectangular multi-stream supersonic jets'', May 2020

MS: Ryan Masetta, ``Acoustic Measurements of high subsonic and supersonic jets'', Dec 2018 (Lockheed Martin).

MS: Jacob Connor, ``Using UAVs for wind velocity measurements'', Dec 2018 (Lockheed Martin, Skunk Works)

MS: Harry Winick, ``High Subsonic jet noise from complex nozzles'', Dec 2017 (Lockheed Martin)

MS: Joseph Weiner, `` Classification of Performance-Based Impact Standards for Small Commercial UAVs'', Dec 2017

MS: Samuel Banahene, `` Sled Test development for UAV Impact Tests'', May 2018 (Aerospace Corporation)

MS: John-Michael Velarde, ``Reduction of unsteady loading on wind turbine blades via closed-loop flow control'', May 2016

MS: Thomas J. Coleman, ``Time resolved Schlieren measurements in high-speed rectangular jets'', December 2016

MS: Zhe Bai, Application of Compressive Sensing to Air Foil PIV data, May 2013.

MS: Matthew Berry, Flow control for jet noise reduction, May 2014.

MS: Jakub Walczak, Baseline Flow over wind turbine blade model, Dec 2011.

MS: Zachery Berger, POD Analysis of Disc Wake, May 2011

MS: Chris Ruscher (Joint with J. Dannenhoffer), Design and Simulation of Ejector for AFRL Afterburner Rig, May 2011.

MS: Guannan Wang, ``BEM simulation demonstrating effectiveness of flow control to enhance wind turbine performance'', May 2010

MS: Vinay Devanathan, ``Processing measurements in 2D Backstep Flow Geometry at 15000 Reynolds number, May 2010.

MS: Bala Varma Datla, PIV measurements between two thermal manikins, Dec 2009

MS: Ian Spitzer, PDPA measurements around a breathing thermal manikin, May 2007. .

MS: Srikar Kaligotla, Breathing interaction between two thermal manikins, May 2007

MS: Ryan Wallace, Towards micro air vehicle wing morphing via feedback flow control, May 2007.

MS: Carlos Perez, Low Dimensional descriptions of wall jets, Dec 2007 (expected).

MS: Marlyn Andino, Control of Flow Separation, May 2006.

MS: Andre Hall, An Experimental Investigation of the Pressure-velocity Correlation of an Axisymmetric Jet. Dec 2004.

MS: Monica Young, Flow Separation Detection via Surface Pressure on a NACA 4412 Airfoil, May 2004.

MS: David Marr, PIV measurements in and around heated Manikin, May 2004.

MS: Charles Tinney, A Time Dependent Low Dimensional Description of

the Axisymmetric Sudden Expansion Flow, May 2001.
MS: J. Taylor, Thesis Topic: A Smart Wing for Aerodynamics and Control, Dec. 1998.
MS: R. Schmit, Aeroelastic Wind Generator, September 1999.
MS: S. Stokes, Thesis topic: Experimental Analysis of Fundamental Flow Field, May 1994.
MS: E. Eaton, Thesis topic: Response of Hot Film, Dec. 1994.
MS: P. Sullivan, Thesis topic: LDA Measurements in an Axisymmetric Sudden Expansion, June 1990.
MS: D. Wick, Thesis topic: A Pseudo-Visualization Technique Applied to a Lobed Mixer, June, 1991.
MS: L. Ukeiley, Thesis topic: An Examination of the Role of Coherent Structures in a Lobed Mixer Via Proper Orthogonal Decomposition, June 1991.
MS: D. Cole, Thesis topic: Stochastic Estimation of the Role of Large Eddies in an Axisymmetric Jet Mixing Layer, June 1991.

REFEREED PUBLICATIONS

Editorial Contributions

Hardbound volume entitled, ``Whither Turbulence and Big Data in the 21st Century?", Springer (eds. A. Pollard, L. Castillo, L. Danaila and M. Glauser) 2017.

Hardbound volume entitled, "Eddy Structure Identification in Free Turbulent Shear Flows," Kluwer Academic Publishers (eds. J.P. Bonnet and M.N. Glauser) 1993.

Special Issue of Theoretical and Computational Fluid Dynamics (TCFD) entitled "Turbulent Eddy Structure and Dynamics," (Eds. M.N. Glauser, J.P. Bonnet and T.B. Gatski) Vol. 5, 1993.

Special Issue of Applied Scientific Research, Selected Papers from a IUTAM Symposium held at Poitiers, France, 12-14 October, 1992 (Guest Eds. J.P. Bonnet and M.N. Glauser), Volume 53, Nos. 3-4.

Glauser, M., "Micro-Actuator Tests Demonstrate Control of a Swept Wing, Scale-Model Aircraft," Research Highlights of the Air Force Office of Scientific Research, December 1996, pp. 2-3.

Glauser, M. and Walker, S., ``Active Flow Control Technology to Cut Millions from Jet Engine Life Cycle Costs," Research Highlights of the Air Force Office of Scientific Research, Sept/Oct 1998, pp. 2-3.

Refereed Journal Articles and Archival Publications (~65)

Glauser, M.N., Leib, S.J. and George, W.K. (1987), "Coherent Structures in the Axisymmetric Turbulent Jet Mixing Layer," Turbulent Shear Flows 5, Springer-Verlag,

pp. 134-145.

Glauser, M.N. and George, W.K., "Orthogonal Decomposition of the Axisymmetric Jet Mixing Layer Including Azimuthal Dependence," Advances in Turbulence, Spring-Verlag 1987 (Editors: G. Comte-Bellot and J. Mathieu), pp. 357-366.

Glauser, M.N., Zheng, X., and Doering, C. (1991), "The Dynamics of Organized Structures in the Axisymmetric Jet Mixing Layer," Turbulence and Coherent Structures, Kluwer Academic Publishers, M. Lesieur and O. Metais, eds., pp. 253-265.

Glauser, M.N. and George, W.K. (1992), "Application of Multi-Point Measurements for Flow Characterization," Experimental Thermal and Fluid Science, Vol. 5, No. 5, pp. 617-632.

Cole, D., Glauser, M. and Guezennec, Y. (1992), "An Application of Stochastic Estimation to the Jet Mixing Layer," Physics of Fluids A, Vol. 4, pp. 192-194.

Ukeiley, L., Varghese, M., Glauser, M. and Valentine, D., (1992), "Multifractal Analysis of a Lobed Mixer Flowfield Utilizing the Proper Orthogonal Decomposition," AIAA Journal, Vol. 30, No. 5, pp. 1260-1267.

Gatski, T.B. and Glauser, M.N. (1992), "Proper Orthogonal Decomposition Based Turbulence Modeling," Instability, Transition, and Turbulence, Springer-Verlag, eds. M.Y. Hussaini, A. Kumar and C.L. Streett, 498-510.

Glauser, M., Zheng, X. and George, W.K. (1992), "The Streamwise Evolution of Coherent Structures in the Axisymmetric Jet Mixing Layer, Studies in Turbulence, Spring-Verlag, (Gatski, Sarkar and Speziale eds.) Pp. 207-222.

Ukeiley, L., Glauser, M. and Wick, D. (1993), "Downstream Evolution of POD Eigenfunctions in a Lobed Mixer," AIAA Journal, Vol. 31, No. 8, pp. 1392-1397.

Glauser, M.N., Bonnet, J.P. and Gatski, T.B. (1993), Preface for "Turbulent Eddy Structure and Dynamics," Special Issue of Theoretical and Computational Fluid Dynamics, Vol. 5, p. 139.

Bonnet, J.P., Delville, J. and Glauser, M.N. (1993), Workshop on Eddy Structure Identification in Free Turbulent Shear Flows, ERCOFTAC Bulletin #17, pp. 41-51.

Wick, D.P., Glauser, M.N. and Ukeiley, L.S. (1994), "Investigation of Turbulent Flows Via Pseudo Flow Visualization, Part I: Axisymmetric Jet Mixing Layer, Experimental Thermal & Fluid Science, Volume 9, Issue 4, pp. 391-404.

Corke, T., Glauser, M.N., Berkooz, G. (1994), "Utilizing Low Dimensional Dynamical Systems to Guide Control Experiments," Applied Mechanics Review, 47, 6, 133-138.

Bonnet, J.P., Cole, D.R., Delville, J., Glauser, M.N. and Ukeiley, L.S. (1994), "Stochastic Estimation and Proper Orthogonal Decomposition: Complementary Techniques for Identifying Structure," Experiments in Fluids, Volume 17, pp. 307-314.

Bonnet, J.P. and Glauser, M.N. (1994), Preface for Special Double Issue of Applied Scientific Research, Vol. 53, p. 201.

Grinstein, F.F., Glauser, M.N. and George, W.K. (1995), "Vorticity in Jets," In Fluid Vortices, Kluwer Academic Publishers (editor, Sheldon Green), pp. 65-94.

Bonnet, J.P., Lewalle, J. and Glauser, M.N. (1996), "Coherent Structures: Past, Present and Future," (Invited Paper) Advances in Turbulences VI, 83-90, Kluwer Academic Publishers, S. Gavilatis etal eds.

Glauser, M.N., Ukeiley, L.S. and Wick, D.P. (1996), "Investigation of Turbulent Flows Via Pseudo Flow Visualization, Part 2: The Lobed Mixer Flow Field, Experimental Thermal & Fluid Science, 13: 167-177.

Arndt, R.E.A., Long, D.F. and Glauser, M.N. (1997), "The Proper Orthogonal Decomposition of Pressure Fluctuations Surrounding a Turbulent Jet, Journal of Fluid Mechanics, Vol. 340, pp. 1-33.

Glauser, M.N. (1998), "Review of, Turbulence, Coherent Structures, Dynamical Systems and Symmetry," by Holmes, Lumley and Berkooz, Cambridge Monographs on Mechanics," European Journal of Mechanics B/Fluids, First Issue 1998, pp. 137-138.

Stokes, S.D., Glauser, M.N., Gatski, T.B. (1998), "An Examination of a 3D Corner Step Experiment," Experimental Thermal Fluid Science, 17, pp. 132-138.

Cole, D.R. and Glauser, M.N. (1998) "Flying Hot-Wire Measurements in an Axisymmetric Sudden Expansion," Exp. Thermal Fluid Science, 18, pp. 150-167.

Bonnet, J.P., Delville, J., Glauser, M.N., Antonia, R.A., Bisset, D.K., Cole, D.R., Fiedler., Garem, J.H., Hilber, D., Jeong, J., Kevalhan, N.K.R., Ukeiley, L.S. and Vincendaue, E. (1998), "Collaborative Testing of Eddy Structure Identification Methods in Free Turbulent Shear Flows," Experiments in Fluids, 25, pp. 197-225.

Cole, D.R. and Glauser, M.N. (1998), "Application of Stochastic Estimation in the Axisymmetric Sudden Expansion, Physics of Fluids, Volume 10, Number 11, pp. 2941-2949.

Delville, J., Ukeiley, L., Cordier, L., Bonnet, J.P. and Glauser, M (1999), "Examination of Large Scale Structures in a Turbulent Plane Mixing Layer, Part 1: Proper Orthogonal Decomposition," Journal of Fluid Mechanics, Vol. 391, pp. 91-122.

Glauser, M.N., Taylor, J.A., Ukeiley, L.S., George, W.K., and Citriniti, J.H. (2000), "A

Low Dimensional Description of the Axisymmetric Turbulent Jet: An Update", ERCOFTAC Bulletin No. 46, pp. 53 – 61.

Ukeiley, L., Cordier, L., Manceau, R., Delville, J.,Glauser, M. and Bonnet, J.P. (2001), "Examination of large Scale Structures in a Turbulent Plane Mixing Layer, Part 2: Dynamical Systems Model", Journal of Fluid Mechanics, Vol. 441, pp 67-108.

Schmit, R., Glauser, M. and Ahamdi, G. (2004), `` Flow and Turbulence Conditions in the Wake of an H-Section Wind Energy Converter,'' Journal of Fluids and Structures, Issue 19, pp. 193-207.

Taylor, J.A and Glauser, M.N., (2004), `` Towards Practical Flow Sensing and Control via POD and LSE Based Low-Dimensional Methods,'' ASME Journal of Fluids Engineering, Vol. 126, pp 337 - 345.

Schmit, R.F. and Glauser, M.N. (2005), ``Use of Low-Dimensional Methods for Wake Flowfield Estimation from Dynamic Strain'', AIAA Journal, Volume 43, Number 5, pp 1133-1136.

Marr, D.R., Khan, T.A., Glauser, M.N., Higuchi, H. and Zhang, J. (2005), ``On Particle Image Velocimetry (PIV) Measurements in the Breathing Zone of a Thermal Breathing Manikin.'' ASHRAE Transactions 111 Part 2.

Tinney, C.E., Glauser, M.N., Eaton, E.L. and Taylor, J.A. (2006),``Low Dimensional Azimuthal Characteristics of Suddenly Expanding Axisymmetric Flows'', J. Fluid Mech., Vol. 567, pp. 141 – 155.

Tinney, C.E., Coiffet, F., Delville, J., A.M. Hall, Jordan, P. and Glauser, M.N. (2006),``Spectral Linear Stochastic Estimation'', Experiments in Fluids, Volume 41, No. 5.

Pinier, J.T., Ausseur, J.M., Glauser, M.N. and Higuchi, H., (2007), ``Proportional Closed-loop Feedback Control of Flow Separation'', AIAA Journal, Volume 45, Issue 1, pp 181 - 190.

Tinney, C.E., Jordan, P., Hall, A.M., Delville, J. and Glauser, M.N. (2007),``A Time-resolved Estimate of the Turbulence and Source Mechanisms in a Subsonic Jet Flow'' Journal of Turbulence, Volume 8, 1.

Ukeiley, Lawrence, Tinney, Charles, E., Mann, Richa and Glauser, Mark (2007) ``Spatial Correlations in a Transonic Jet'', AIAA Journal, Volume 45, Number 6, pp 1357 - 1369.

Hall, J., Tinney, C., Ausseur, J., Pinier, J., Hall, A. and Glauser, M. (2007), ``Low-Dimensional Tools for Closed-Loop Flow-Control in High-Reynolds Number Turbulent Flows'', (Paper associated with Glauser's Plenary Talk), Hardbound

Volume IUTAM Symposium on “Flow Control and MEMS,” September 2006, Imperial College, London (Eds. Morrison, Birch and Lavoie), Springer, pp 293 – 310.

Marr, D.R., Glauser, M.N. and Spitzer, I.M., (2008), ``Anistropy in the breathing zone of a thermal manikin'', Experiments in Fluids, Vol 44, pp 661-673.

Tinney, C.E., Glauser, M.N. and Ukeiley, L.S. (2008), `` Low-Dimensional characteristics of Transonic Jet. Part 1: Proper Orthogonal Decomposition, J. Fluid Mechanics, Vol. 612, pp. 107 – 141.

Tinney, C.E., Ukeiley, L.S. and Glauser, M.N. (2008), ``Low-Dimensional characteristics of Transonic Jet. Part 2: Estimate and Far Field Prediction, '', J. Fluid Mechanics, Vol. 615, pp 53-92.

Hall, J., Pinier, J., Hall, A.M. and Glauser, M.N. (2009), ``Cross-Spectral Analysis of the Pressure in a Mach 0.85 Turbulent Jet,'' AIAA Journal, Vol. 47, No. 1, pp 54 – 59.

Spitzer, I. M., Marr, D.R. and Glauser, M.N. (2010), ``Impact of Manikin Motion on Particle Transport in the Breathing Zone'', Journal of Aerosol Science, 41 (2010), pp. 373-383.

Andino, M.Y., and Glauser, M.N., "Flow control effects on length scales over a turret", *International Journal of Flow Control*, Vol. 2, No. 3, 2010, pp. 143-153.

M. Andino, R. Wallace, M. Glauser, R. C. Camphouse, R. Schmit, and J. Myatt, “Boundary feedback flow control: Proportional control with potential application to aero-optics.” AIAA Journal, vol. 49, no.1, pp 32-40, 2011.

R. D. Wallace, P. R. Shea, M. N. Glauser, V. Thirunavukkarasu, and H. A. Carlson (2012), “Simulation-Guided, Model-Based Feedback Flow Control for a Pitching Turret”, AIAA Journal, Vol. 50, No 8, pp. 1685 - 1696.

V. Thirunavukkarasu, H. A. Carlson, R. D. Wallace, P. R. Shea, and M. N. Glauser (2012), “Model-Based Feedback Flow Control Development and Simulation for a Pitching Turret”, AIAA Journal, Vol. 50, No. 9, pp. 1834-1842.

M. Salmanzadeh, Gh. Zahedi, G. Ahmadi, D.R. Marr and M. Glauser (2012), ``Computational Modeling of Effects of Thermal Plume Adjacent to the Body on the Indoor Airflow and Particle Transport'', Journal of Aerosol Science, 53, pp. 29-39.

Lewalle, J., Low, K.R. and Glauser, M.N., (2012), ``Properties of the Far-Field Pressures Signatures of Individual Jet Noise Sources'' International Journal of Aeroacoustics, Vol. 11, No 5&6, pp. 651-674.

Low, K.R., Berger, Z.P., Kostka, S., El Hadidi, B., Gogineni, S. and Glauser, M.N., (2013), ``Noise Source Identification and Control in a Mach 0.6 Turbulent Jet with

Simultaneous Time Resolved PIV, Pressure and Acoustic Measurements'', Experiments in Fluids. Vol. 54, No. 4, 2013, pp. 1-17

Wang, G., Lewalle, J., Glauser, M. and Walczak, J. (2013), "Investigation of the benefits of unsteady blowing actuation on a 2D wind turbine blade". Journal of Turbulence, Vol 14, Issue 1, pp 165 - 189.

Glauser, M.N., Saric, W.R., Chapman, K. and Riebert, M., (2014), `` Swept Wing Boundary-Layer Transition and Turbulent Flow Physics from Multi-Point Measurements'', AIAA Journal, Volume 52, Issue 2 pages 338-347.

Shea, P. R., and Glauser, M. N., (2014) ``Closed-Loop Active Flow Control of a Three-Dimensional Turret Wake," AIAA Journal, doi: http://arc.aiaa.org/doi/abs/10.2514/1.J052810

Bai, Z., Wimalajeewa, T., Berger, Z.P., Wang, G., Glauser, M.N., Varshney, P., (2014) ``Low-Dimensional Approach for Reconstruction of Airfoil Data via Compressive Sensing'' AIAA Journal http://arc.aiaa.org/doi/abs/10.2514/1.J053287

Berger, Z.P., Berry, M.G., Shea, P.R., Noack, B.R., Gogineni, S., Glauser, M.N., (2014) ``Active Flow Control for High Speed Jets Using Advanced Modeling Coupled with PIV", Journal of Flow Turbulence and Combustion. DOI 10.1007/s10494-014-9580-2

C. J. Ruscher, B. V. Kiel, S. P. Gogineni, A. S. Magstadt, M. G. Berry, and M. N. Glauser. Toward the development of a noise and performance tool for supersonic jet nozzles: Experimental and computational results. The Journal of the Acoustical Society of America, 136(4):2100, 2014

Ruscher, C.J., Dannenhoffer, J.F., Glauser, M.N., "Repairing Occluded Data for a Mach 0.6 Jet via Data Fusion Techniques", AIAA Journal, 2016

A. S. Magstadt, M. G. Berry, Z. P. Berger, P. R. Shea, C. J. Ruscher, S. P. Gogineni, and M.N. Glauser. An investigation of sonic & supersonic axisymmetric jets: Correlations between flow physics and far-field noise. Journal of Flow Turbulence and Combustion, pages 1–26, 2016

A. S. Magstadt, P. Kan, Z. P. Berger, C. J. Ruscher, M. G. Berry, M. A. Green, J. Lewalle, and M. N. Glauser. Turbulent flow physics and control: The role of big data analyses tools. In A. Pollard, L. Castillo, L. Danaila, and M. Glauser, editors, Whither Turbulence and Big Data in the 21st Century?, pages 295–322. Springer, 2017

M. G. Berry, A. S. Magstadt, and Glauser M. N. Application of pod on time-resolved schlieren in supersonic multi-stream rectangular jets. Physics of Fluids **29**, 020706 (2017); doi: http://dx.doi.org/10.1063/1.4974518

– Matthew G. Berry, Cory M. Stack, Andrew S. Magstadt, Mohd Y. Ali, Datta V. Gaitonde, and Mark N. Glauser, ``Low-dimensional and data fusion techniques applied to a supersonic multistream single expansion ramp nozzle'',Phys. Rev. Fluids 2, 100504 Published 17 October 2017 https://link.aps.org/doi/10.1103/PhysRevFluids.2.100504

Ruscher, C.J., Magstadt, A.S., Berry, M.G., Glauser, M.N., Shea, P.R., Viswanath, K., Corrigan, A., Gogineni, S., Kiel, B.V. and Giese, A.J., "Investigation of a Supersonic Jet from a Three-Stream Engine Nozzle," AIAA Journal, Vol 56(4), pp. 1554-1568, 2018.

A.S. Tenney, M.N. Glauser, C.J. Ruscher and Z. Berger, ``Application of Artificial Neural Networks to Stochastic Estimation and Jet Noise Modeling'', AIAA Journal, Published Online: 12 Jan 2020 https://doi.org/10.2514/1.J058638

Andrew Tenney, Mark Glauser, Zachary Berger, ``Velocity Estimation in the Mixing Layer of a Subsonic Jet Using Deep Neural Networks'',In review, International Journal of Heat and Fluid Flow.

Reviewed and Invited Meeting Papers, Hardbound Volumes and Proceedings (~ 120), Note that the contributed AIAA conference papers are reviewed at the Abstract Stage, Note, lead author is generally the presenter.

Emma D. Gist, Seth W. Kelly, Tyler M. Vartabedian, Rishov Chatterjee, Parshwanath S. Doshi, Mark N. Glauser and Datta V. Gaitonde, `` Effects of Geometric Modifications on a Complex Multi-Stream Supersonic Rectangular Nozzle'', AIAA SciTech Meeting, January 2021, AIAA 2021-1559

Parshwanath S. Doshi, Rajesh Ranjan, Qiong Liu and Datta V. Gaitonde, Emma D. Gist and Mark N. Glauser, ``Toward a Passive Control Strategy for a Supersonic Multi-Stream Flow using Resolvent Analysis'', AIAA SciTech Meeting, January 2021, AIAA 2021-1557

Seth W. Kelly, Tyler M. Vartabedian, Emma D. Gist, and Mark N. Glauser, ``Neural Network Noise Prediction for a Complex Supersonic Rectangular Jet Nozzle'', AIAA SciTech Meeting, January 2021, AIAA 2021-1691

Gist, E., Doshi, P., Kelly, S., Glauser, M. and Gaitonde, D., ``Exploratory Passive Control of a Supersonic Multi-Stream Nozzle Flow'', 2020 AIAA Aviation Meeting, AIAA Paper 2020-

Ningshan Wang, Dominic DiDominic, Tyler M. Vartabedian, Amit K. Sanyal and Mark N. Glauser. ``Interactions Between Upstream Turbulent Flow and Quadrotor Thruster Dynamic Performance'', AIAA Scitech 2020 Forum, (AIAA 2020-1508) Published Online: 5 Jan 2020 https://doi.org/10.2514/6.2020-1508.

Dominic DiDominic, Emma Gist, Jonathan Fitzgerald and Mark N. Glauser, ``Complex

Nozzle Optimization Techniques using Machine Learning", AIAA Scitech 2020 Forum (AIAA 2020-1866), Published Online: 5 Jan 2020, https://doi.org/10.2514/6.2020-1866

Andrew Tenney, Mark Glauser, Zachary Berger, ``Velocity Estimation in the Mixing Layer of a Subsonic Jet Using Deep Neural Networks'', 11th International Symposium on Turbulence and Shear Flow Phenomena, July 2019, Southampton, United Kingdom, Europe

Andrew S. Tenney, Mark N. Glauser, and Zachary P. Berger. "Stochastic Estimation Using Modern Methods in Machine Learning", AIAA Scitech 2019 Forum, AIAA SciTech Forum, (AIAA 2019-0324), https://doi.org/10.2514/6.2019-0324

Christopher J. Ruscher, Sivaram Gogineni, Andrew S. Tenney, and Mark N. Glauser. "Jet Noise Prediction via Low-order Machine Learning", AIAA Scitech 2019 Forum, AIAA SciTech Forum, (AIAA 2019-0547), https://doi.org/10.2514/6.2019-0547

John-Michael Velarde, Jacob Connor and Mark Glauser, ``Experimental Characterization of UAS Flow Fields through Hot Wire Anemometry and PIV'', AIAA Aviation Forum, June 2018, Atlanta Georgia, AIAA 2018-4121.

Andrew S. Tenney, Mark N. Glauser and Jacques Lewalle, ``A Deep Learning Approach to Jet Noise Prediction'', AIAA-2018-1736, AIAA SciTech, January 2018, Orlando Florida.

Andrew S. Magstadt and Mark N. Glauser, ``Stereo PIV Measurements in a Multi-stream, Rectangular, Supersonic Jet'', AIAA-2018-0054, AIAA SciTech, January 2018, Orlando, Florida.

M. G. Berry, C. M. Stack, M. Y. Ali, A. S. Magstadt, D. V. Gaitonde, and M. N. Glauser. `Analysis of a Rectangular Supersonic Multi-stream Jet by LES and Experiments'', 10th International Symposium on Turbulence and Shear Flow Phenomena (TSFP10), Chicago, USA, July 2017.

G. Starke, J. Lewalle, M. Glauser and S. Gogineni, ``Near-field and Far-field Event Associations in Supersonic Jet Flow '', AIAA SciTech, January 2017, Grapevine, TX

A. Tenney, T.J. Coleman, J. Lewalle, M. Glauser, S. Gogineni, Correlations in the Near-Field of a Complex Supersonic Jet Using Time-Resolved Schlieren Imaging, AIAA SciTech, January 2017, Grapevine, TX, USA

Kan, P., Ruscher, C. J., Lewalle, J., Glauser, M. N. and Gogineni, S. P., 'Near-Field Acoustic Radiations in a Two-Stream Supersonic Jet Flow', 55th Aerospace Sciences Meeting, AIAA SciTech, Grapevine, TX, USA, Jan. 9-13, 2017

M. Berry, A. Magstadt, M. Y. Ali, C. J. Ruscher, M.N. Glauser, and S. P. Gogineni. Time-resolved schlieren pod and aft deck pressure correlations on complex

supersonic jet nozzles. 55th AIAA Aerospace Sciences Meeting, Jan 2017, AIAA paper number

A. Tenney, T.J. Coleman, J. Lewalle, C. Ruscher, M. Glauser, S. Gogineni, B. Kiel, Identifying Coherent Structures in a 3Stream Supersonic Jet Flow Using Time-Resolved Schlieren Imaging, AIAA SciTech, 4-8 January 2016, San Diego, CA, USA

A. S. Magstadt, M. G. Berry, T. J. Coleman, P. R. Shea, M. N. Glauser, C. J. Ruscher, S. P. Gogineni, and B. V. Kiel. A near-field investigation of a supersonic, multi-stream jet: locating turbulence mechanisms through velocity and density measurements. 54th AIAA Aerospace Sciences Meeting, (2016-1639), Jan 2016, AIAA paper number

M. G. Berry, A. S. Magstadt, M. N. Glauser, C. J. Ruscher, S. P. Gogineni, and B. V. Kiel. An acoustic investigation of a supersonic, multi-stream jet with aft deck: Characterization and acoustically-optimal operating conditions. In 54th AIAA ASM, volume 2321022, San Diego, CA, Jan 4 - 8 2016. AIAA paper number

C. M. Stack, D. V. Gaitonde, L. Agostini, M. G. Berry, A. S. Magstadt, and M. N. Glauser. Numerical investigation of a supersonic multistream jet with an aft-deck. AIAA SciTech, 2016, AIAA paper number 2016-2058.

Kan, P., Ruscher, C. J., Lewalle, J., Glauser, M. N., Gogineni, S. & Kiel, B. V., 'Extracting NearField Structures Related to Noise Production of High Speed Jets', 54th Aerospace Sciences Meeting, AIAA SciTech, San Diego, CA, USA, Jan. 4-8, 2016 (AIAA 2016-0004)

Magstadt, A. S.; Berry, M. G.; Glauser, M. N.; Ruscher, C. J.; Gogineni, S.; Shea, P. R. & Kiel, B. V., ``Aeroacoustic Experiments on Supersonic Multi-aperture Nozzles'', 51st AIAA/SAE/ASEE Joint Propulsion Conference, American Institute of Aeronautics and Astronautics, Orlando, FL, ITAR Session, 27-29 July 2015, AIAA paper number

Ruscher, C., Gogineni, S., Viswanath, K., Kiel, B., Berry, M., Magstadt, A., Glauser, M., "Aeroacoustic Validation of a Simulation for a Complex Nozzle", 51st AIAA/SAE/ASEE Joint Propulsion Conference, 27-29 July, 2015, Orlando, FL., ITAR Session, AIAA paper number

Magstadt, A. S.; Berry, M. G.; Berger, Z. P.; Shea, P. R.; Glauser, M. N.; Ruscher, C. J. & Gogineni, S., ``An Investigation of Sonic & Supersonic Axisymmetric Jets: Correlations Between Flow Physics and Far-Field Noise'', *proceeding* 9th International Symposium on Turbulence and Shear Flow Phenomena, Melbourne Australia, July 2015.

Kan, P., Lewalle, J., Berger, Z. and Glauser, M., The Properties and Localizations of Acoustic Sources of High Speed Jets AA-05, Jet Noise Measurements II, SciTech Meeting, January 6, 2015, AIAA-2015-

Berger, Z., Berry, M., Shea, P., Glauser, M., Kan, P., Lewalle, J., Ruscher, C. and Gogineni, S., Investigation of "Loud" Modes in a High-Speed Jet to Identify Noise-Producing Events, Jets AA-05, Jet Noise Measurements II, SciTech Meeting, January 6, 2015. AIAA-2015-

Shea, P.R., Berger, Z.P., Berry, M.G., Glauser, M.N., Kiel, B.V., Gogineni, S., "Low-Dimensional Modeling of a Mach 0.6 Axisymmetric Jet", 52nd AIAA Aerospace Sciences Meeting 13-17 January 2014, National Harbor, MD, AIAA-2014-0245.

Berger, Z.P., Berry, M.G., Shea, P.R., Glauser, M.N., Jiang, N., Gogineni, S., Kiel, B.V., Kasier, E., Noack, B.R., Spohn, A., "Analysis of High Speed Jet Flow Physics with Time-Resolved PIV", 52nd AIAA Aerospace Sciences Meeting 13-17 January 2014, National Harbor, MD, AIAA-2014-1226.

Berger, Z., Berry, M., Shea, P., Noack, B., Gogineni, S., Glauser, M. (2013). "Active Flow Control for High Speed Jets Using Advanced Modeling Coupled with PIV". Proceedings of the 8th Turbulence and Shear Flow Phenomenon Meeting, August, 2013, Poitiers, France.

Ruscher, Christopher J., Dannehoffer, John F. III, Glauser, Mark N., Belovich, Vincent M., and Sekar, Balu, "Modeling Flow Through a Perforated Plate for a New Combustion Rig", 21st AIAA Computational Fluid Dynamics Conference., June 24-27 2013 San Diego, CA (AIAA 2013-3092)

(Invited) Glauser, M., Varshney, P., Wimalajeewa, T., Bai, Z., Berger, Z., Wang, G. (2013), "Application of Compressive Sensing to NACA 4412 PIV Data". AIAA Paper 2013-0772, 2013 AIAA ASM Conference, January 7-10, Dallas, Texas

Shea, P. and Glauser, M., (2013), ``Closed-Loop Active Flow Control of a Three-Dimensional Turret Wake'', AIAA Paper 2013-0394, 2013 AIAA ASM Conference, January 7-10, Dallas, Texas.

Ruscher, Christopher J., Dannenhoffer, John F. III, and Glauser, Mark N., "Application of Snapshot POD on a Varying Grid", AIAA Paper 2013-0256, 51st AIAA ASM, January 7-10, 2013 Grapevine, TX.

Wang, G. and Glauser, M. (2013), "Aerodynamic and Aeroacoustic Study of the Interaction between a 2D Wind Turbine Airfoil and a Cylinder Wake using PIV and Far-Field Microphones". AIAA Paper 2013- 0916, 2013 AIAA ASM, Meeting, January 7 - 10, Dallas, TX.

Berger, Z., Low, K., Berry, M., Kostka, S., Cordier, L., Noack, B., Gogineni, S., Glauser, M. (2013). "Reduced Order Models for a High Speed Jet with Time-Resolved PIV". AIAA Paper 2013-0011, 2013 AIAA ASM Conference, January 7-10, Dallas, Texas

(Invited) Berger, Z., Low, K., Kostka, S., Cordier, L., Gogineni, S., Noack, B., Glauser, M. (2012). "Exploring High Subsonic Jet Noise with Time-Resolved PIV and Reduced-Order Modeling". Proceedings of the 2012 Israeli Conference on Mechanical Engineering, October 2012, Tel Aviv, Israel.

(Invited) Berger, Z**.,** Low, K., Kostka, S., Lewalle, J., Cordier, L., Noack, B., Gogineni, S.,Glauser, M. (2012) "High Subsonic Jet Flow Physics and Noise"., Proceedings of the 2012 ASME InterNoise Conference, August 2012, New York, New York.

(Invited) Berger, Z., Low, K., Kostka, S., Gogineni, S., Glauser, M. (2012). "Investigation of an Axisymmetric Transonic Jet with High Resolution Time-Resolved PIV". AIAA Paper 2012-3822, AIAA Joint Propulsion Conference, Atlanta, July 30 – August 1, 2012.

Ruscher, Christopher J., Dannehoffer, John F. III, Glauser, Mark N., Kiel, Barry V., and Sekar, Balu, "Vortex Shedding of Various Bluff Bodies in Cross Flow", AIAA Paper 2012-4285, 48th AIAA Joint Propulsion Conference, July 29 –August 1, 2012 Atlanta, GA.

Low, K., Berger, Z., Kostka, S., Gogineni, S., Glauser, M. (2012). "Application of Low-Dimensional Modeling Techniques to an Axisymmetric Jet with Time-Resolved PIV". AIAA Paper 2012-3079, 2012 AIAA Fluid Dynamics Meeting, New Orleans, 25 - 29 June 2012.

Shea, P., Glauser, M., Carlson, H., Verberg, R. and Schmit, R., (2012), ``Active Flow Control of a Pitching Turret Flow Field Using Closed-Loop Feedback Control'', AIAA Paper 2012-2804, 2012 Flow Control/Fluid Dynamics Meeting, New Orleans, 25 – 29 June 2012.

Shea, P. and Glauser, M., (2012), ``Experimental Investigation of a Three-Dimensional Turret Wake with Active Flow Control'', AIAA Paper 2012-0745, 50th AIAA Aerospace Sciences Meeting, 9-12 January 2012.

Lewalle, J., Low, K.R., Glauser, M.N. and Berger, Z.P., (2011), ``Correlations of Near- and Far- Field Acoustic Data in a High-Speed Jet,'', Proceedings of the Seventh International Symposium on Turbulence and Shear Flow Phenomena'' Ottawa Ontario Canada, July 28-31, 2011.

(Invited) Glauser, M.N., Saric, W.R., Chapman, K. and Riebert, M., (2011)``Insight into Swept Wing Boundary-Layer Transition and Turbulent Flow Physics from Multi-Point Measurements", AIAA Paper 2011-3076, 41st AIAA Fluid Dynamics Conference and Exhibit, 27-30 June 2011, Honolulu Hawaii**.**

(Invited) Wang, G., Walczak, J., Elhadidi, B. and Glauser, M.N. (2011), ``Preliminary Investigation of the Active Flow Control Benefits on Wind Turbine Blades, AIAA Paper 2011-3611, 6th AIAA Theoretical Fluid Mechanics Conference, 27-30 June 2011, Honolulu Hawaii**.**

Wallace, R., Shea, P., Glauser, M.N., Thirunavukkarasu, V., Carlson, H. and Schmit, R. (2011), ``Suction Flow Control at High Reynolds Number'', AIAA Paper 2011-3716, 41st AIAA Fluid Dynamics Conference and Exhibit, 27-30 June 2011, Honolulu Hawaii**.**

Pinier, J. and Glauser, M.N., ``An Empirical Reduced Order Model of the Mach 0.6 Turbulent Axisymmetric Jet'', AIAA Paper 2011-0282, 49th AIAA Aerospace Sciences Meeting, 4-7 January 2011, Orlando Florida.

Z. Berger, R. Bigger, M. Fardad, H. Higuchi, M. N. Glauser, M. Angeli. "Investigation of POD Bases for Flow Control on Disk Wakes", ASME Paper number FEDSM-ICNMM2010-31071, ASME 3rd Joint US-European Fluids Engineering Summer Meeting, August 1-5, 2010, Montreal, Quebec, Canada.

R. D. Wallace, P. R. Shea, M. N. Glauser, and V. Thirunavukkarasu, and H. A. Carlson, "Closed-loop Flow Control for an Articulating Turret with Two Degrees of Freedom: Pitch and Yaw" AIAA Paper 2010-4966, *5th AIAA Flow Control Conference*, Chicago, Il, USA, 2010.

K.R. Low, B.E. Hadidi, M.Y. Andino, R. Berdanier, M.N. Glauser, "Investigation of Different**,** Active Flow Control Strategies for High Speed Jets Using Synthetic Jet Actuators", *AIAA-2010- 4267, 40th Fluid Dynamics Conference and Exhibit*, Chicago, Illinois, June 28-1, 2010.

Andino, M.Y. and Glauser, M.N., ``Low-Dimensional description of the flow field over a hemisphere'', AIAA paper 2010-4592, *40th Fluid Dynamics Conference and Exhibit*, Chicago, Illinois, June 28-1, 2010.

Wallace, R.D., Shea, P. and Glauser, M.N., Vaithianathan, T. and Carlson, H., ``Feedback Flow Control for a Pitching Turret (Part 2)'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0361.

Vaithianathan, T., Carlson, H., Wallace, R.D., Shea, P. and Glauser, M.N., ``Feedback Flow Control for a Pitching Turret (Part 1)'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0360.

Andino, M.Y. and Glauser, M.N., ``Flow Control Effects on the Length Scales Over a Turret'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0087.

Glauser, M.N. and Bala Varma Datla, ``Flow Measurements in Indoor Environments'', Proceedings of the 9th International Conference and Exhibition, Healthy Buildings, September 15th, 2009, Syracuse New York USA

Low, K.R., Elhadidi, B., Andino, M.Y., Wallace, R.D., and Glauser, M.N., ``Characteristics of Closed-Loop Control in an Axisymmetric Jet at Mach 0.6'',

Proceedings of the 6th International Symposium on Turbulence and Shear Flow Phenomena, Seoul National University, Seoul, Korea, June 22-24, 2009.

Low, K.R., Andino, M.Y., Wallace, R.M., Hall, A.M. and Glauser, M.N., ``Closed-loop Control of a Turbulent Compressible Mach 0.6 Jet'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-0854.

`

Wallace, R.D., Andino, M.Y., Glauser, M.N., Camphouse, R., Schmit, R. and Myatt, J., ``Flow Characteristics of Active Control around a 3D Turret'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-0537.

Hall, A. and Glauser, M.N., ``An Experimental Analysis of the Modal Characteristics Intrinsic to Both the Heated and Cold Jet'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-1238.

Camphouse, R.C., Myatt, J, Schmit, R., Glauser, M.N., Ausseur, J., Andino, M., and Wallace, R.,``A Snapshot Decomposition Method for Reduced Order Modeling and Boundary Feedback Control'', 4th AIAA Flow Control Conference, June 23-26th, Seattle Washington, AIAA Paper AIAA-2008-4195.

Andino, M., Wallace, R., Glauser, M.N., Schmit, R., Myatt, J. and Camphouse, R.C., ``Flow and Aero-optics around a Turret. Part 1: Open Loop Flow Control'', 39th AIAA Plasmadynamics and Lasers Conference, June 23-26th, Seattle, Washington, AIAA Paper AIAA-2008-4216.

Wallace, R, Andino, M., Glauser, M.N., Camphouse, R.C., Schmit R. and Myatt, J. , `` Flow and Aero-optics around a Turret. Part 2: Surface Pressure Based Closed-Loop Control'', 39th AIAA Plasmadynamics and Lasers Conference, June 23-26th, Seattle, Washington, AIAA Paper AIAA-2008-4217.

Andino, M., Pinier, J., Schmit, R., Wallace, R., Camphouse, C., Myatt, J. and Glauser, M. (2008), ``Flow Control Over a Cylindrical Turret Using Synthetic Jets'', 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Grand Sierra Resort, Reno, Nevada, AIAA Paper 2008-0736

Pinier, J. and Glauser, M. (2007), ``Dual-Time PIV Investigation of the Sound Producing Region of the High-Speed Jet,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25-28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3857.

Hall, A., Hall, J. and Glauser, M. (2007), `` Dominant Aeroacoustic Source Contribution in a Hot Transonic Jet,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25-28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3868.

Ausseur, J., Pinier, J. and Glauser, M. (2007), ``Estimation Techniques in a Turbulent Flow Field,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25- 28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3975.

Perez, C., Hall, J. and Glauser, M. (2007), ``PIV Measurements in a Three-Dimensional Wall Jet Formed Using a Round Nozzle,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25- 28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-4493.

Hall, J., Pinier, J., Hall, A.M. and Glauser, M.N. (2007), ``A Spatio-Temporal Decomposition of the Acoustic Source in a Mach 0.85 Axisymmetric Jet,'' 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11 January 2007, Reno, Nevada, AIAA Paper 2007-0442

Hall, J., Pinier, J., Hall, A.M. and Glauser, M.N. (2006), ``Two-point Correlations of the Near and Far-Field Pressure in a Transonic Jet, '' 2006 ASME Joint US-European Fluids Engineering Summer Meeting, July 17-20, 2006, Miami, Florida, USA. ASME paper number FEDSM2006-98458.

Ausseur, J., Pinier, J. and Glauser, M.N. (2006), ``Closed-Loop Flow Separation Control Using a New POD Approach'' 3rd AIAA Flow Control Conference, 5-8 June 2006 San Francisco, AIAA Paper 2006-3017.

Hall, J., Ausseur, J., Pinier, J. and Glauser, M.N. (2006), ``Low-Order Models of the Fluctuating Wall Pressure and Acoustic Field in an Incompressible Turbulent Impinging Jet'' 3rd AIAA Flow Control Conference, 5-8 June 2006 San Francisco, AIAA Paper 2006-3699.

Andino, M., Ausseur, J., Pinier, J., Glauser, M. and Hicughi, H., (2006), ``Interaction of Zero Net-Mass Flow Acutators with the Flow over the NACA 4412 Foils, 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-0105.

Hall, A., Pinier, J., Hall, J., Glauser, M. and Tinney, C., (2006),``Identifying the Most Energetic Modes of the Pressure and Velocity Near-Field Region of a M=0.85 Axisymmetric Jet'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-0314.

Ausseur, J., Pinier, J., Glauser, M. and Higuchi, H. (2006), ``Experimental Development of a Reduced Order Model for Flow Separation Control'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-1251.

Martin, T., Hall, J., Schmit, R. and Glauser, M. (2006),`` Estimation Procedures for Micro Air Vehicles'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-1421.

Tinney, C.E., Jordan, P., Hall, A.M., Delville, J. and Glauser, M.N. (2006),``A Time-resolved Estimate of the Turbulence and Source Mechanisms in a Subsonic Jet Flow'' 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada.

AIAA Paper 2006-0621.

Marr, D.R., Glauser, M.N., Higuchi, H., (2005), ``Towards Zone Exposure Control of the Breathing Zone'', A&WMA Annual Conference Proceedings, Minneapolis, MN, June 21-24.

Andino, M., Braud, C., Glauser, M., Higuchi, H. and van Lagen, P. (2005), ``Global Effects of Flow Control over a NACA 4412 Hydrofoil'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-4883.

Ausseur, J., Pinier, J., Glauser, M., Higuchi, H. and Carlson, H. (2005), ``Controller Development for Closed-Loop Feedback Control of Flows'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5264.

(Invited) Jordan, P., Tinney, C., Delville, J., Coiffet, F., Glauser, M. and Hall, A., (2005),``Low-Dimensional Signatures of the Sound Production Mechanisms in Subsonic Jets: Towards Their Identification and Control'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-4647.

Hall, A., Glauser, M. and Tinney, C., (2005), ``Experimental Investigation of the Pressure-Velocity Correlation of a M=0.6 Axisymmetric Jet'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5294.

Martin, T., Guitton, A., Schmit, R. and Glauser, M., (2005), ``Development of a Morphing Micro Air Vehicle Wing Using Low-Dimensional Tools'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5131.

Hall, A., Tinney, C. and Glauser, M. (2005),``Investigating the `modified' Complementary Technique Using Pressure-Velocity Correlations of an Axisymmetric Jet'', 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 10-13 January 2005. AIAA Paper 2005-0039.

Tinney, C., Ukeiley, L. and Glauser, M. (2005),``The Evolution of the Large Scale Structure in High Speed Subsonic Mach Nmuber Jets'', 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 10-13 January 2005. AIAA Paper 2005-0417.

Braud, C., Andino, M., Pinier, J., Ausseur, J., Higuchi, H. and Glauser, M. (2004),`` Separation Control of Flow Over NACA 4412 Hydro foil Using Zero Net-Mass Flow Actuators'' Proceedings 1st European Forum on Flow Control, Poitiers, France, Oct. 11-14, 2004, pp 13-15.

Ausseur, J., Pinier, J., Andino, M., Braud, C., Glauser, M. and Higuchi, H. (2004), ``

Closed-Loop Feedback Control of the Flow over a NACA 4412-Airfoil'', Proceedings 1st European Forum on Flow Control, Poitiers, France, Oct. 11-14, pp 75-77.

(Invited) Glauser, M.N., Higuchi, H., Ausseur, J., Pinier, J. and Carlson, H. ``Feedback Control of Separated Flows'', 2nd AIAA Flow Conference, Portland, Oregon, 28 June – 1 July 2004. AIAA Paper 2004-2521.

Tinney, C.E., Ukeiley, L. and Glauser, M.N. (2004), ``Noise Identification in a Mach 0.85 Jet using Modified Low-Dimensional Techniques'', Advances in Turbulence X, Proceedings of the Tenth European Turbulence Conference, (H.I. Andersson & P. A. Krogstad (Eds.)), Paper no 101.

Ukeiley, L., Mann, R., Tinney, C. and Glauser, M.N., ``Spatial Correlations in a Transonic Jet'', 34th AIAA Fluid Dynamics Conference, Portland Oregon, 28 June – 1 July 2004. AIAA Paper 2004-2654

(Invited) Glauser, M.N., Young, M.J., Higuchi, H., Tinney, C. and Carlson, H., ``POD Based Experimental Flow Control on a NACA-4412 Airfoil'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0574.

Carlson, H., Glauser, M. and Roveda, R., ``Models for Controlling Airfoil Lift and Drag'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0579.

Tinney, C., Glauser, M., Coughlin, T. and Ukeiley, L.,``Designing an Anechoic Chamber for the Experimental Study of High Speed Heated Jets'', 42nd AIAA Aerospaces Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0010.

Schmit, R., Glauser, M., ``Improvements in Low Dimensional Tools for Flow-Structure Interaction Problems: Using Global POD'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0889.

Khan, T. A., H. Higuchi, D. R. Marr, M. N. Glauser (2004). ``Unsteady Flow Measurements of Human Micro Environment Using Time Resolved Particle Image Velocimetry'' Proceedings of 2004 Syracuse Symposium on Environmental and Energy Systems, Syracuse, NY, 25-26 October 2004.

Khan, T.A., H. Higuchi, D.R. Marr, M.N. Glauser (2004), ``Unsteady Flow Measurements of Human Micro Environment Using Time Resolved Particle Image Velocimetry'', Proceedings of ROOMVENT 2004, 9th International Conference on Air Distribution in Rooms, Coimbra, Portugal, September 5 – 8.

Marr, D.R., T. Khan, M. Glauser, H. Higuchi (2003), ``The Structure of a Velocity Field Around a Breathing Thermal Manikin- Proper Orthogonal Decomposition (POD)'', Proceedings of 2003 Third International Symposium on Advanced Fluid Information,

New York, NY November 21-22.

Marr, D.R., T. Khan, M. Glauser, H. Higuchi (2003), ``Velocity Measurements in the Breathing Zone of a Thermal Breathing Manikin'', Proceedings of 2003 Syracuse Symposium on Environmental and Energy Systems, Syracuse, NY, 27-28 October.

Khan, T.A., D.R. Marr, H. Higuchi, M.N. Glauser (2003), ``Measurement of Unsteady Flow Velocities of Human Coughing Using Time Resolved Particle Image Velocimetry,'' Proceedings of 2003 Third International Symposium on Advanced Fluid Information, New York, NY November 21-22.

Marr, D.R., Higuchi, H., Glauser, M.N. and Zhang, J., ``Measurements of Airflows Around a Manikin in a Ventilated Space Using Multiple Particle Image Velocimetry (PIV) Techniques'', Indoor Air Quality Problems and Engineering Solutions, an international symposium cosponsored by the Air and Waste Management Association and the U.S. EPA's Office of Research and Development, July 21-23, 2003, in Research Triangle Park, NC.

Young, M.J., Glauser, M.N. and Taylor, J.A., ``Towards Sensing and Control of Separation in Subsonic Flows'', 4th ASME/JSME Joint Fluids Engineering Conference, July 6th – 10th, 2003, Honolulu, Hawaii, ASME FEDSM2003-45586.

Schmit, R.F., Glauser, M.N. and Gorton, S.A., ``Low-Dimensional Tools for Flow-Structure Interaction Problems: Application to Micro-Air Vehicles'', 41st AIAA Aerospace Sciences Meeting and Exhibit, 4 – 9 January 2003, Reno, Nevada, AIAA – 2003-0626.

Tinney, C.E., Eaton, E. and Glauser, M.N., ``Multi-point Measurements in an Axisymmetric Sudden Expansion'', Engineering Turbulence Modelling and Experiments 5 (Eds. W. Rodi and N. Fueyo), pp. 485 - 494. Proceedings of the 5th International Symposium on Engineering Turbulence Modelling and Measurements, Mallorca, Spain, 16-18 September, 2002.

(Keynote) Taylor, J.A. and Glauser, M.N., ``Towards Practical Flow Sensing and Control via POD and LSE Based Low-Dimensional Tools,'' 2002 ASME Fluids Engineering Division Summer Meeting, Montreal, ASME Paper FEDSM2002-31416.

(Keynote) Bonnet, J.P., Delville, J. and Glauser, M.N., ``Coherent Structures in Turbulent Shear Flows: The Confluence of Experimental and Numerical Approaches " 2002 ASME Fluids Engineering Division Summer Meeting, Montreal, ASME Paper FEDSM2002-31412.

Tinney, C.E., Taylor, J.A., Eaton, E. and Glauser, M.N., ``Low-Dimensional Descriptions of Separated Flows,'' Advances in Turbulence IX, (Edited by I.P. Castro, P.E. Hancock and T.G. Thomas), CIMNE Barcelona, pp. 627 – 631. Proceedings of the 9th European Turbulence Conference July 2nd – July 5th, 2002, Southhampton, UK.

Taylor, J., Ukeiley, L. and Glauser, M., “A Low-Dimensional Description of the Compressible Axisymmetric Shear Layer,’’ 39th AIAA Aerospace Sciences Meeting and Exhibit, 8 – 11 January 2001, Reno, Nevada, AIAA –2001-0292.

Schmit, R., Glauser, M. and Ahmadi, G., `` Using POD to Examine the Unsteady Wake of an Aeroelastic Wind Energy Converter,” 39th AIAA Aerospace Sciences Meeting and Exhibit, 8 – 11 January 2001, Reno, Nevada, AIAA –2001-0856.

(Invited) Glauser, M., Eaton, E., Taylor, J., Cole, D., Ukeiley, L., Citriniti, J., George, W.K. and Stokes, S.,``Low-Dimensional Descriptions of Turbulent Flows: Experiment and Modeling,” 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3699.

Cole, D., Glauser, M., Yao, C.S. and Paschal, K., ``Including Time Dependency in Particle Image Velocimetry Measurements using Linear Stochastic Estimation”, 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3595.

Stokes, S., and Glauser, M., ``Multi-Point Measurement Techniques Used in the Study of Separated Flows,” 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3518.

(Invited) Glauser, M., “Role of Simulation in the Design of Next-Generation Engines for Military Aircraft,” National Academy of Engineers, Frontiers in Engineering, Reports on Leading Edge Engineering Form the 1998 NAE Symposium on Frontiers of Engineering, pp 65-67.

K. Chapman, M. Reibert, W. Saric and M. Glauser, “Boundary-Layer Transition Detection and Structure Identification through Surface Shear Stress Measurement,” 36th Aerospace Sciences Meeting & Exhibit, Reno, NV, AIAA 98-0782 (January 12-15, 1998).

(Invited) J.P. Bonnet, J. Delville and M.N. Glauser, “Large Scale Structures in Free Turbulent Shear Flows,” 28th AIAA Fluid Dynamics Conference 4th AIAA Shear Flow Control Conference, Snowmass Village, CO, AIAA 97-2116 (June 29 - July 2, 1997).

Ukeiley, L.S. and Glauser, M.N. (1997), Multi-point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows (Invited Paper) Proceedings IUTAM Symposium on “Simulation and Identification of Organized Structures in Flows (Eds. Sorensen et al.) Kluwer Academic Publishers.

Chapman, K.L., Glauser, M., Reibert, M.S., Saric, W.S. (1996), “Proper Orthogonal Decomposition Applied to Boundary-Layer Transition on a Swept Wing,” in Transitional Boundary Layers, in Aeronautics (Eds. Rawm Henkes and J.L. Van Ingen) pp. 165-173, North Holland Press.

Berkooz, G., Corke, T., Glauser, M.N., Psiaki, M. & Fischer, M., “Design for control of

flow instabilities: first principles and an application," Proc. Sensing, Actuation, and Control in Aeropropulsion, SPIE v. 2494, pp. 70-86 (1995).

Ukeiley, L.S., Cole, D.R. and Glauser, M. (1993), "An Examination of the Axisymmetric Jet Mixing Layer Using Coherent Structure Detection Techniques," In Eddy Structure Identification in Free Turbulent Shear Flows, Kluwer Academic Publishers (editors, J.P. Bonnet and M.N. Glauser), pp. 325-336.

Glauser, M. and Gatski, T.B. (1993), "Near-Wall Reconstruction of Higher-Order Moments and Length Scales Using the POD," In Eddy Structure Identification in Free Turbulent Shear Flows, Kluwer Academic Publishers (editors, J.P. Bonnet and M.N. Glauser), pp. 239-249.

Sullivan, P. and Glauser, M.N. (1990), "LDA Measurements in a Sudden Expansion," Engineering Turbulence Modeling and Experiments, Editors: Rodi and Ganic, Elsevier Science Publishing Co., Inc., 727-737.

George, W.K. and Glauser, M.N. (1991), "Flow Structure Identification From Multi-Point Measurements. Experimental Heat Transfer, Fluid Mechanics and Thermodynamic, Elsevier (Eds. Ketter, Shah and Ganic), pp. 92-106.

Bonnet, J.P., Delville, J. And Glauser, M.N. (1997) (Invited), "Large Scale Structures in Free Shear Flow" AIAA Paper No. 97-2116.

Stokes, S.D., Morrison, J., Glauser, M.N., Gatski, T.B. (1996), An Examination of a 3D Corner Step Experiment, Proceedings 3rd International Symposium on Engineering Turbulence Modelling and Measurements, Crete. Greece, May 1996.

Chapman, K.L., Glauser, M., Reibert, M., Saric, W., "A Multi-Point Correlation Analysis of a Crossflow - Dominated Boundary Layer," AIAA Paper No. 96-0186.

Stokes, S.D., Morrison, J., Glauser, M.N., Gatski, T.B., "An Examination of a 2 Step 3D Experiment," Tenth Symposium on Turbulent Shear Flows, Penn State, August 1995, Volume 1, pp. 25-30.

Chapman, K.L., Glauser, M.N., Dagenhart, J.R. and Saric, W.S., "Application of Multi-Point Correlation Techniques to Aerodynamic Flows," 25th AIAA Fluid Dynamics Conference, Colorado Springs, CO, June 20-23, 1994, paper # AIAA-94-2279 (Invited).

Glauser, M.N., Cole, D.R., Ukeiley, L.S., Bonnet, J.P. And Delville, J., "Stochastic Estimation and Proper Orthogonal Decomposition: Complementary Techniques for Identifying Structure, Proceedings Ninth Symposium on Turbulent Shear Flows, Kyoto, Japan, 1993, pp. 16-2-1 - 16-2-6.

Ukeiley, L., Varghese, M., Glauser, M. and Valentine, D.T., "An Examination of Coherent Structures in a Lobed Mixing Using Multifractal Measures in Conjunction with

the Proper Orthogonal Decomposition," AIAA Paper No. 91-0521.

Ukeiley, L., Wick, D. and Glauser, M. (1991), "Coherent Structure Identification ina Lobed Mixer," ASME Paper Number 91-GT-307.

Ukeiley, L., Glauser, M. and Wick, D., "A One-dimensional Proper Orthogonal Decomposition of the Downstream Flowfield of a Lobed Mixer," Proceedings Eighth Symposium on Turbulent Shear Flows,, Technical University of Munich, Sept. 9-11, 1991, pp. 25-2-1 - 25-2-6.

Ukeiley, L., Wick, D. and Glauser, M.N. (1990), "A Novel Hot-wire Rake Design," ASME FED-Vol. 97, pp.87-92.

Zheng, X. and Glauser, M.N. (1990), "A Low Dimensional Description of the Axisymmetric Jet Mixing Layer," ASME Computer in Engineering, 2, 121-127.

Zheng, X., Glauser, M.N. and Doering, C., "A Dynamical Systems Model for the Axisymmetric Jet Mixing Layer," Proceedings 10th Australian Fluid Mechanics Conference, Dec. 11-15, 1989, pp. 3.9-3.12.

Glauser, M.N. and George, W.K., "An Orthogonal Decomposition of the Axisymmetric Jet Mixing Layer Utilizing Cross-Wire Velocity Measurements," Proceedings Sixth Symposium on Turbulent Shear Flows, Toulouse, France, September 7-9, 1987, pp. 10.1.1-10.1.6.

Glauser, M.N., Leib, S.J. and George, W.K. (1985), "Coherent Structures in the Axisymmetric Turbulent Jet Mixing Layer," Proceedings Fifth Symposium on Turbulent Shear Flows, Cornell University, Ithaca, N.Y.

Leib, S.J., Glauser, M.N. and George, W.K., "An Application of Lumley's Orthogonal Decomposition to the Axisymmetric Turbulent Jet Mixing Layer," Proceedings 9th Rolla Symposium, 1984.

INVITED SEMINARS AND PRESENTATIONS BY GLAUSER (~ 100):

`` Extracting flow physics for understanding and control of complex 3D turbulent flows via fusion of experimental measurements and large eddy simulations'', Distinguished Scholars Seminar Series, Florida Center for Advanced Aero-Propulsion, Mechanical Engineering, FAMU-FSU College of Engineering, Nov 13, 2020, Virtual via Zoom.

``Application of Artificial Neural Networks to Stochastic Estimation and Jet Noise Modeling'', Department of Aerospace Engineering, Embry-Riddle Aeronautical University, Daytona Beach Florida, February 20, 2020

``Low-dimensional and Data Fusion Techniques Applied to a Supersonic Multi-stream Single Expansion Ramp Nozzle'', Clarkson Center for Complex Systems Science, October 26, 2018.

`` Low-Dimensional and Data Fusion Techniques Applied to Turbulent Flows'', AIAA session 27-FD-3/FC-2, AIAA Aviation Forum, June 2018, Atlanta Georgia.

``Low-dimensional and Data Fusion Techniques Applied to a Supersonic Multi-stream Single Expansion Ramp Nozzle'', Department of Mechanical and Aerospace Engineering, Military College of Canada, Kingston Ontario, March 12, 2018.

``Fundamental turbulence mechanisms in multi-stream flows: a comprehensive joint experimental, theoretical and computational study'', Invited Seminar, Department of Mechanical and Aeronautical Engineering, Clarkson University, Potsdam, New York, November 2017.

``Turbulent Flow Physics and Noise in High Reynolds Number Compressible Jets'', Invited Lecture at the 69th Annual Meeting of the APS Division of Fluid Dynamics 22 November 2016, Portland Oregon.

``Turbulent Flow Physics and Noise in High Reynolds Number Compressible Jets'', Invited Seminar, Department of Mechanical and Aeronautical Engineering, Clarkson University, Potsdam, New York, November 2016.

``Turbulent Flow Physics and Noise in High Reynolds Number Compressible Jets'', Symposium on Experiments and Simulations in Fluid Dynamics Research, Queen's University, Kingston Ontario Canada, August 19-20, 2016

``Turbulent Flow Physics and Noise: Impact on Environmental, Energy and Aerospace Systems'', Invited Seminar, Department of Civil Engineering, Western University, London Ontario, Summer 2016.

``Turbulent Flow Physics and Noise in High Reynolds Number Compressible Jets'', Invited Seminar, Department of Mechanical Engineering, Florida State University, Tallassee, Florida, Fall 2015.

(Invited) Shea, P.R., Glauser, M.N., Berger, Z.P., Berry, M.G., Kiel, B.V., Gogineni, S., Noack, B.R., "Validation of Estimation Methods via Time-Resolved PIV in High Speed Compressible Jet", 52nd AIAA Aerospace Sciences Meeting, 13-17 January 2014, National Harbor, MD.

"Application of Compressive Sensing to NACA 4412 PIV Data". AIAA Paper 2013-0772, 2013 AIAA ASM Conference, January 7-10, Dallas, Texas

``Closed-Loop Flow Control as an Enabler for Next Generation Aerospace and Energy Systems'', Sibley School of Mechanical and Aerospace Engineering, Cornell University, November 13th, 2012.

``Closed-Loop Flow Control as an Enabler for Next Generation Aerospace and Energy Systems'' Invited Oral Presentation, Session 9-FC-2, Closed-Loop Flow Control 1,

AIAA Flow Control/Fluids Conference, 25 – 28 June 2012, New Orleans Louisiana.

``Insight into Swept Wing Boundary-Layer Transition and Turbulent Flow Physics from Multi-Point Measurements", AIAA Paper 2011-3076, 41st AIAA Fluid Dynamics Conference Exhibit, 27-30 June 2011, Honolulu Hawaii**.**

``Preliminary Investigation of the Active Flow Control Benefits on Wind Turbine Blades, AIAA Paper 2011-3611, 6th AIAA Theoretical Fluid Mechanics Conference, 27-30 June 2011, Honolulu Hawaii**.**

`` Acoustic Wind Tunnel Facility at Syracuse University'', NSF Workshop on Wind Energy and Turbulence, Universidad del Turabo, Caguas, Puerto Rico, February 24-26, 2011.

``Closed-Loop Control of Separated Turbulent Flows with Dynamically Articulating Geometries'', GDR-IFFC2 Conference, Dec 6, 2010, University of Poitiers, Poitiers France.

``Closed-Loop Control of Turbulent Flows'', Department of Mechanical Engineering, Johns Hopkins University, October 2010.

``Closed-Loop Control of Turbulent Flows'', Department of Aerospace Engineering, University of Toronto, March 24th, 2010.

``Closed-Loop Control of Turbulent Flows'', Presented at the Special Symposium in Celebration of the Distinguished Career of Professor Roger E.A. Arndt, Nov 20th, 2009, Saint Anthony Falls Lab, Department of Civil Engineering, University of Minnesota

``Great Lakes Sustainable Energy Consortium (GLSEC)'', BALANCE Seminar, York University, Toronto Ontario, September 24-25, 2009.

``Closed-Loop Control of Turbulent Flows'', Department of Aerospace Engineering, Texas A &M University, College Station Texas, January 29, 2009.

``Closed-Loop Control of Turbulent Flows'', Graduate Aeronautical Laboratories Cal Tech (GALCIT), Pasadena, CA, November 21st, 2008.

``Closed-Loop Control of Turbulent Flows'', Department of Mechanical and Aerospace Engineering, Seoul National University, Seoul, South Korea, November 13th, 2008.

``Closed-Loop Control of Turbulent Flows'', Department of Mechanical Engineering, Korean Advanced Institute for Science and Technology (KAIST), Taejeon, South Korea, November 12th, 2008.

``Closed-Loop Control of Turbulent Flows'', Department of Mechanical, Aerospace and Nuclear Engineering, RPI, Troy, NY, November 5th, 2008.

``Controlling Turbulent Flows'', Department of Physics, Syracuse University, Syracuse, NY, October 2nd, 2008.

``Feedback flow control: towards practical applications''4th AIAA Flow Control Conference, June 23-26th 2008, Seattle, Washington, Invited Oral Presentation.

``Feedback flow control: towards practical applications'', Department of Physics, City College of New York, NYC, March 19th, 2008.

``Feedback flow control: towards practical applications'', Aerospace and Mechanical Engineering Departmental Seminar, University of Arizona, Tucson, Arizona, October 25th, 2007.

``Controlling Turbulent Flows'', Mechanical and Aeronautical Engineering Seminar, Clarkson University, Potsdam, NY, March 2, 2007.

``Controlling Turbulent Flows'', AFOSR Workshop on Turbulence Control and Implications, February 22, 2007, Dayton, Ohio

``Feedback flow control: towards practical applications'', Mechanical Engineering Departmental Seminar, University of Minnesota, Twin Cities, Dec 13, 2006.

``Turbulence, can we control it?'', Café-Scientific Seminar, Ambrosia Restaurant, Syracuse New York, Nov 7, 2006.

(Keynote)``Progress in Feedback Flow Control for Practical Applications'' IUTAM Symposium, Flow Control and MEMS, 19 – 22 September, 2006, Imperial College London.

``Low-Dimensional Techniques for Feedback Flow Control Measurements'' Invited presentation in Session 1-AMT/GT-1/FC-1 at the 25th AIAA AMT/GT and AIAA 3rd Flow Control Conference, AIAA, 5-8 June 2006, Hyatt Regency, San Francisco

``Experiment based Reduced-Order Modeling for Feedback Flow Control: Application to Flow Separation and Jet Aeroacoustics'', Invited talk for Minisymposium: Reduced-Order Modeling for Feedback Flow Control, 58th Annual meeting of the Division of Fluid Dynamics of the APS, Nov 20 – 22, 2005, Chicago, Illinois. Abstract in Bulletin of the APS, Vol. 50, No. 9, pp 102.

``Closed-Loop Control of Separated Flows'', 1st International Closed-Loop Flow Control Workshop'', July 18 – 19, 2005, Jackson Hole, Wyoming (Sponsored by AFOSR).

``Application of Low-Dimensional Methods to Turbulent Flows: From High Speed Jets to Coughing and Breathing and Beyond'', Seminar at CEAT/LEA, ENSMA, University of Poitiers, Poitiers, France, February 23, 2005.

``Feedback Flow Control on a NACA 4412 Airfoil'', Seminar at NASA Langley Research Center, Hampton, VA, January 21, 2005.

``Closed-Loop Feedback Control of the Turbulent Flow over a Wing'', Seminar, Department of Physics, Clarkson University, September 24, 2004.

``Closed-Loop Feedback Control of the Turbulent Flow over a Wing'', Seminar, Department of Mechanical, Aerospace and Materials Engineering, Illinois Institute of Technology, September 22, 2004.

``Feedback Control of Separated Flows'', 2nd AIAA Flow Conference, Portland, Oregon, 28 June – 1 July 2004.

``POD Based Experimental Flow Control on a NACA-4412 Airfoil'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada.

``Low-Dimensional Tools for Understanding and Controlling Turbulent Flows,'' Department of Physics Seminar, Syracuse University, February 28, 2003.

(Keynote)``Towards Practical Flow Sensing and Control via POD and LSE Based Low-Dimensional Tools,'' 2002 ASME Fluids Engineering Division Summer Meeting, Montreal, Quebec, Canada.

``Towards Practical Flow Sensing and Control via POD and LSE Based Low-Dimensional Tools,'' Workshop on the POD, Turbulence Research Laboratory, Chalmers University of Technology, Gothenburg, Sweden, June 2002.

``Low-Dimensional Methods for Characterization and Control of Turbulent Flows,'' Department of Chemical Engineering, Syracuse University, March 8, 2002.

"Turbulence Research", AE 200, Clarkson University Sophomore Research Seminar, Nov 3, 2000.

"Research Center Development – IMPRINT as an Example", Syracuse University, Nov 1, 2000.

"Research Center Development – IMPRINT as an Example", Presented to Academic Sub-Committee of Clarkson's Board of Trustees, October 13, 2000.

"Low-Dimensional Descriptions of Turbulent Flows: Experiment and Modeling,'' Department of Mechanical Engineering, Aeronautical Engineering and Mechanics Seminar, Rensselaer Polytechnic Institute, Troy, New York, January 21, 2000.

``Low-Dimensional Descriptions of Turbulent Flows: Experiment and Modeling," Presented to the Department of Mechanical Engineering, KAIST, Taejon, Korea, July,

1999, .

``Low-Dimensional Descriptions of Turbulent Flows: Experiment and Modeling," 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3699.

"IMPRINT: Proposal for a UB/Cornell/Clarkson/Princeton Center for Industrial Turbulence," Presented to the Engineering Dean's Council, University at Buffalo, SUNY, Buffalo, NY, Spring, 1999.

"Turbulence and Internal Flows Program at the AFOSR," Department of Mechanical Engineering, The City College of CUNY, December 28, 1998.

"Low Dimensional Approaches for the Characterization and Control of Turbulent Flows,"Department of Mechanical Engineering, The City College of CUNY, December 28, 1998.

"IMPRINT: Proposal for a UB/Cornell/Clarkson/Princeton Center for Industrial Turbulence," Katharine Cornell Theatre, Ellicott Complex, University of Buffalo, North Campus, November 20, 1998.

"Role of Simulation in the Design of Next-Generation Engines for Military Aircraft," National Academy of Engineers, Frontiers in Engineering, University of California, Irvine Sept. 1998.

Program Overview for AFOSR of "Turbulence and Internal Flows," National Research Council, June 1998.

"Low Dimensional Approaches for Flow Characterization and Control; Experiments and Modelling." UTRC Flow Control Workshop, Hartford, Connecticut, Nov. 11, 1998.

Briefing on the AFOSR "Turbulence and Internal Flows" Program to the Scientific Advisory Board (SAB) of the Air Force, Wright Paterson AFB, Dec. 1, 1998.

"Time Dependent Velocity Measurements Via Linear Stochastic Estimation (LSE)," Arizona State University, Tempe AZ, March 8, 1998.

"Turbulence and Internal Flows at AFOSR," TAM Dept., University of Illinois at Urbana-Champaign, February 19, 1998.

"Multi-Point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows," TAM Dept., University of Illinois at Urbana-Champaign, February 19, 1998.

"Turbulence and Internal Flows at AFOSR," Polytechnic University, NY, NY, November 4, 1997.

"Turbulence and Internal Flows at AFOSR," New Jersey Institute of Technology, Newark, NJ, November 5, 1997.

"Multi-Point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows," Gas Turbine Laboratory Seminar, Dept. of Aeronautics and Astronautics, MIT, Cambridge, Mass. October 7, 1997.

"Multi-Point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows," United Technologies Research Center, East Hartford, CT, October 8, 1997.

"Large Scale Structures in Free Shear Flow," with J.P. Bonnet and J. Delville, 28th AIAA Fluid Dynamics Conference, Silvertree Hotel Snowmass Village, CO, June 29 - July 2, 1997.

Invited Panel Member: Future Directions in Fluid Dynamics - The Research Managers Perspective, 28th AIAA Fluid Dynamics Conference, Silvertree Hotel, Snowmass Village, CO, June 29 - July 2, 1997.

Program Overview for AFOSR of "Turbulence and Internal Flows" National Academy of Sciences National Research Council Panel Review, June 1997.

Multi-Point Measurements and Low-Dimensional Models: Tools for the Characterization and Control of Turbulent Flows. IUTAM Symposium on Simulation and Identification of Organized Structures in Flows, Tech. University of Denmark, Lyngby, Denmark, May 24-29, 1997.

Air Force Office of Scientific Research, a Program Managers Perspective, Clarkson University, May 2, 1997.

Utilizing POD based Low-dimensional Models for Flow Characterization and Control. Dept. Of Aerospace and Mechanical Engineering, Notre Dame University, 18 March 1997.

"Low Dimensional Turbulence Models and Their Use in Flow Control and Characterization," Dept. Of Mechanical Engineering, University of Maryland, College Park, March 11, 1997.

"Fluid Mechanics Research at the Air Force Office of Scientific Research," Dept. Of Mechanical and Aero. Engr., Clarkson University, February 28, 1997.

Briefing on AFOSR Turbulence and Internal Flows: Program Vehicles and Power Panel Review, to the 1996 Air Force Scientific Advisory Board, Wright Patterson Air Force Base, 15 January 1997.

Briefing on AFOSR Turbulence and Internal Flows: Ordinance and Propulsion Panel

Review, to the 1996 Air Force Scientific Advisory Board, Wright Paterson Air Force Base, 14 January 1997.

"Low-Dimensional Models and Their Use in Flow Control," ASME International Mechanical Engineering Congress and Exposition, Atlanta, GA, November 20, 1996.

"Utilizing Multipoint Techniques for Flow Characterization and Control," VPI and State University, Blacksburg, VA, November 13, 1996.

Program Overview for AFOSR of "Turbulence and Internal Flows" National Academy of Sciences National Research Council Panel Review, October 1996.

"Coherent Structures: Past, Present and Future," with J.P. Bonnet and J. Lewalle, 6th European Turbulence Conference, Lausane, Switzerland, 2-5 July 1996.

"Multipoint Techniques Applied to Swept Wing Flow," with Keith Chapman, KAIST, Taejeon, South Korea, July 1996.

"An Examination of a 3D Corner Step Flow," with Sheldon Stokes, KAIST, Taejeon, South Korea, July 1996.

"Utilizing Multipoine Techniques for a Flow Characterization and Control," KAIST, Taejeon, South Korea, July 1996.

"Application of the POD and LSE to the Axisymmetric Sudden Expansion," with Dr. Dan Cole, Taejeon, South Korea, July 1996.

"Utilizing Multipoint Techniques for Flow Characterization and Control," Air Force Office of Scientific Research, May 2, 1996.

"Utilizing Low Dimensional Models for Guiding Control Experiments," Invited presentation at Institut De Mecanique Des Fluides De Toulouse, Toulouse, France, July 13, 1995.

"Examination of a 2 step 3D experiment," Invited presentation at CEAT/LEA, Universite de Poitiers, Poitiers, France, June 30, 1995.

"Utilizing Low Dimensional Models for Guiding Control Experiments," Invited presentation at Institut fur Aerodynamik und Gasdynamik, Universitat Stuttgart, Stuttgart, Germany, June 19, 1995.

"Utilizing Low Dimensional Models for Guiding Control Experiments," Invited presentation at CEAT/LEA, Universite de Poitiers, Poitiers, France, June 15, 1995.

"Application of Multipoint Correlation Techniques to Aerodynamic Flow," Invited Talk at AIAA Fluid Dynamics Meeting, June 1994. Colorado Springs, CO.

"On Using Low Dimensional Dynamical Systems to Guide Control Experiments," Invited Talk at 12th U.S. National Congress of Applied Mechanics, June 1994, Seattle, Washington.

"A Dynamical System for the Jet Mixing Layer," Invited presentation at KAIST, Taejeon South Korea, August 1993.

"A Dynamical System for the Jet Mixing Layer," Invited presentation at Yeung Nam University DaeGoo South Korea, August 1993.

"Structural Based Turbulence Modeling," Invited talk at the NASA-ASEE Summer Faculty Presentations, NASA/Langley, August 1992.

"An Examination of Turbulent Shear Layers," Invited presentation at CEAT and Universite De Poitiers, Poitiers, France, June 1991.

"Proper Orthogonal Decomposition Based Turbulence Modeling," Invited talk at the NASA-ASEE Summer Faculty Fellowship Presentations, NASA/Langley Research Center, August 8, 1991.

"Proper Orthogonal Decomposition Based Turbulence Modeling," Invited talk at the ICASE/LARC Transition and Turbulence Workshop, August 1991, NASA/Langley Research Center.

"Investigation of the Separated Flow in an Axisymmetric Sudden Expansion Using Flying Hot Wires," Invited talk at the ICASE/LARC Workshop on Separated Flows, July 1991.

(Keynote paper) "Flow Structure Identification from Multi-point Measurements," Second World Conference on Experimental Heat Transfer, Fluid Mechanics and Thermodynamics, Croatia Hotel, Dubrovnik, Yugoslavia, June 23-28, 1991.

"An Examination of the Turbulent Axisymmetric Jet Mixing Layer Using Low Dimensional Models," Invited talk at The Benjamin Levich Institute, CCNY, December 4, 1990.

"The Streamwise Evolution of Coherent Structures in the Axisymmetric Jet Mixing Layer," Proceedings, Professor John Lumley's 60th Birthday Symposium. Springer-Verlag, NASA Langley Research Center, November 12-13, 1990.

"Application of a Pseudo Flow Visualization Technique to a Lobed Mixer Flow," United Technologies Research Center, East Hartford, CT, June 1990.

"A Dynamical Systems Model for the Axisymmetric Jet Mixing Layer," Invited presentation at CEAT & Universite De Poitiers, Poitiers, France, September 1989.

"Investigating the Role of Flow Unsteadiness on a Lobed Mixer," United Technologies Research Center, East Hartford, CT, April 1989.

"The Dynamics of Organized Structures in the Axisymmetric Jet Mixing Layer," Invited presentation at the University of Cincinnati, June 16, 1989.

"Applying the Proper Orthogonal Decomposition t Turbulent Flows with Emphasis on the Axisymmetric Jet," Invited presentation at Yale University, Department Mechanical Engineering, October 12, 1988.

"Applying the Proper Orthogonal Decomposition to Turbulent Flows: Experimental Considerations," Invited talk at DARPA-URI Conference, Brown University, Yale University, June 13-15, 1988.

"An Application of the Proper Orthogonal Decomposition to the Near Field Jet Shear Layer," Invited presentation at the City College of New York, July 1987.

"An Orthogonal Decomposition of an Axisymmetric Jet Mixing Layer," Invited presentation at Cornell University, April 28, 1987 (Stability, Transition and Turbulence Seminars).

"Application of Lumley's Orthogonal Decomposition to the Axisymmetric Turbulent Jet Mixing Layer," Invited presentation at Rutgers University, Spring 1987.

"Using Orthogonal Decomposition to Find Coherent Structures in an Axisymmetric Turbulent Jet Mixing Layer," Invited presentation at Washington State University, Summer 1985.

CONTRIBUTED ABSTRACTS (APS) AND PRESENTATIONS (Glauser, Students & Colleagues, first author is generally the presenter, otherwise, boldface). Note: Contributed meeting presentations at conferences where reviewed abstracts (e.g., AIAA) or papers (e.g. ASME, European Turbulence Conference, etc.) are listed under Meeting Papers, Hardbound Volumes and Proceedings.

Seth Kelly, Emma Gist and Mark Glauser,``Geometric Modifications to Complex Supersonic Nozzle Configurations Guided by Machine Learning'', 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago, Abs G08:1.

Emma Gist, Seth Kelly, Parshwanath Doshi, Mark Glauser and Datta Gaitonde, ``Experimental Evaluation of Splitter Plate Trailing Edge Modifications for Passive Control in a Supersonic Multi-Stream Nozzle'', 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago, Abstract G08:2.

Rishov Chatterjee, Seth Kelly, Emma Gist and Mark Glauser, ``Cavities in Deck Plate for a Rectangular Supersonic Multi-Stream Jet Nozzle'', 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago, Abstract J11:7.

Aleksandar Dzodic, Emma Gist, Seth Kelly and Mark Glauser, ``Shock Train Analysis of Varying Deck Plate Configurations for a Multi Stream Rectangular Nozzle'', 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago, Abstract T08:9.

Ningshan Wang, Jean-Eric van der Elst, Amit Sanyal and Mark Glauser, ``Multirotor Unmanned Aerial Vehicle (UAV) Flight Performances under Shear Flow Turbulence with Different Control Schemes'', 73rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22- 24, 2020, Virtual Chicago, Abstract W04:3.

Ningshan Wang, Aleksandar Dzodic, Dom DiDominic III, Amit Sanyal, Mark Glauser (Syracuse University), ``Multi-rotor Unmanned Aerial Vehicle (UAV) performance under shear flow'', 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle, Washington, Abstract: B17.00007

Dom DiDominic, Jonathan Fitzgerald, Emma Gist, Mark Glauser (Syracuse University), ``Complex Nozzle Optimization Techniques using Machine Learning", 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle, Washington, Abstract: M01.00002

Emma Gist, Cory Stack, Dominic DiDominic, Tyler Vartabedian, Seth Kelly, Datta Gaitonde (The Ohio State University), Mark Glauser (Syracuse University), ``Influence of Splitter Plate Geometry on a Multi-Stream Jet Nozzle", 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle, Washington, Abstract: M01.00025

Tyler Vartabedian, Seth Kelly, Emma Gist, Dominic DiDominic, Mark Glauser (Syracuse University), ``Comparison of Complex Multi-Stream Supersonic Nozzle Geometry", 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle,Washington, Abstract: NP05.00060

Christopher Hauck, Jacques Lewalle, Mark Glauser (Syracuse University), ``Analysis of Shear Layer Structures from Time Resolved Schlieren Images of Supersonic Multi-Stream Rectangular Nozzle Flow", 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle,Washington, Abstract: NP05.00088

Seth Kelly, Tyler Vartabedian, Emma Gist, Dominic DiDominic, Mark Glauser (Syracuse University), ``Investigation of Corner Flows in Complex Supersonic Rectangular Jet Nozzles", 72nd Annual Meeting of the APS Division of Fluid Dynamics, Volume 64, Number 13, November 23–26, 2019; Seattle, Washington, Abstract: NP05.00133

Jacob Connor, John-Michael Velarde and Mark Glauser,``A Stereo-PIV Investigation of a Quadrotor Flow Field'' Bulletin of the 71st Annual Meeting of the APS Division of Fluid Dynamics November 18–20, 2018; Atlanta, Georgia, Abstract: D14.00002

Ningshan Wang, John-Michael Velarde and Mark Glauser,``Interactions between upstream turbulent flow and quadrotor thruster controller performance'' Bulletin of the 71st Annual Meeting of the APS Division of Fluid Dynamics November 18–20, 2018; Atlanta, Georgia, Abstract: KP1.00042

Ryan Masetta, Andrew Tenney, Zach Berger and Mark Glauser, ``Application of Dependent Proper Orthogonal Decomposition to Time-Resolved Schlieren Data Extracted From a Supersonic Multi-Stream Rectangular Jet'', Bulletin of the 71st Annual Meeting of the APS Division of Fluid Dynamics November 18–20, 2018 Atlanta, Georgia, Abstract: KP1.00156

Andrew Tenney, Mark Glauser and Zach Berger, ``Velocity Estimation in the Shear Layer of a M_j=0.6 Jet Using Deep Neural Networks'', Bulletin of the 71st Annual Meeting of the APS Division of Fluid Dynamics November 18–20, 2018 Atlanta, Georgia, Abstract: M30.00009

Andrew Tenney, Matthew Berry, Halley Aycock-Rizzo, Mark Glauser, Jacques Lewalle.`` Low Dimensional Study of a Supersonic Multi-Stream Jet Flow'', Bulletin of the American Physical Society, 62, 2017, Abstract: A31.00006

Jacob Connors, Joseph Weiner, John-Michael Velarde, Mark Glauser. `` Experimental Measurement of Small Scale Multirotor Flows'', Bulletin of the American Physical Society, 62, 2017, Abstract: KP1.00018

Samuel Banahene, Harry Winick, Matthew Berry, Andrew Tenney, Mark Glauser, Cory Stack, Datta Gaitonde, Christopher Ruscher, Andrew Magstadt.``Comparison of LES and PIV Velocity Fields in a Complex Multi-Stream Supersonic Nozzle'', Bulletin of the American Physical Society, 62, 2017, Abstract: KP1.00093

Halley Aycock-Rizzo, Mohd Ali, Andrew Tenney, Matthew Berry, Zachary Berger, Mark Glauser. ``Understanding Core Collapse Through Dynamic Mode Decomposition'', Bulletin of the American Physical Society, 62, 2017, Abstract: KP1.00113

John-Michael Velarde, Jacob Connors, Mark Glauser, ``Toward the Experimental Characterization of an Unmanned Air System Flow Field'', Bulletin of the American Physical Society, 62, 2017, Abstract: M18.00004

Matthew Berry, Cory Stack, Andrew Magstadt, Mohd Ali, Datta Gaitonde, Mark Glauser. ``A Low-dimensional and Data Fusion Techniques Applied to a Rectangular Supersonic Multi-stream Jet'', Bulletin of the American Physical Society, 62, 2017, Abstract: M27.00008

Andrew Magstadt, Matthew Berry, and Mark Glauser. Coherent structures in a supersonic complex nozzle. Bulletin of the American Physical Society, 61, 2016

Matthew Berry, Andrew Magstadt, Cory Stack, Datta Gaitonde, and Mark Glauser.

Time-resolved schlieren pod and aft deck pressure correlations on a rectangular supersonic nozzle and sonic wall jet. Bulletin of the American Physical Soc, 61, 2016

J.-M. Velarde, T. J. Coleman, A. S. Magstadt, S. Aggarwal, and M. N. Glauser. Reduction of aerodynamic load fluctuation on wind turbine blades through active flow control. Bulletin of the American Physical Society, 60, 2015

T. J. Coleman, M. G. Berry, A. S. Magstadt, S. P. Gogineni, and M. N. Glauser. Development of schlieren imaging for analysis of supersonic complex multi-stream rectangular nozzle. Bulletin of the American Physical Society, 60, 2015

M. G. Berry, A. S. Magstadt, C. N. Stack, D. V. Gaitonde, and M. N. Glauser. Advanced supersonic nozzle concepts: Experimental flow visualization results paired with les. Bulletin of the American Physical Society, 60, 2015

A. S. Magstadt, M. G. Berry, M. N. Glauser, C. J. Ruscher, S. P Gogineni, and B. V. Kiel. Experimental observations of a complex, supersonic nozzle concept. Bulletin of the American Physical Society, 60, 2015

A. S. Magstadt and M. N. Glauser. The physics of pod modes in axisymmetric jets. In 1000 Islands Fluid Mechanics Meeting, Gananoque, Ontario, May 1 - May 3 2015

Magstadt, A. S.; Berry, M. G.; Glauser, M. N.; Ruscher, C. J.; Gogineni, S.; Shea, P. R. & Kiel, B. V. (2015), ``Aeroacoustic Experiments on Supersonic Multi-aperture Nozzles'', 51st AIAA/SAE/ASEE Joint Propulsion Conference, American Institute of Aeronautics and Astronautics, Orlando, FL.

Magstadt, A. S.; Berry, M. G.; Berger, Z. P.; Shea, P. R.; Glauser, M. N.; Ruscher, C. J. & Gogineni, S. (2015), ``An Investigation of Sonic & Supersonic Axisymmetric Jets: Correlations Between Flow Physics and Far-Field Noise'', *proceeding* 9th International Symposium on Turbulence and Shear Flow Phenomena, Melbourne Australia, July 2015.

Glauser, M., Lewalle, J., Green, M., Sureshkumar, R., Dannenhoffer, J., Varshney, P., Wimalajeewa, T., Kim, K., ``Turbulence Flow Physics and Control: The Role of Big Data Analysis Tools'', at NSF Funded Symposium on Whither Turbulence and Big Data in the 21st Century, Corsica, France, April 20-24, 2015

Berry, M. G.; Magstadt, A. S.; Berger, Z. P.; Shea, P. R.; Ruscher, C. J. & Glauser, M. N., 'Examining PIV windowing effects on high-speed jet flow physics with POD", 67th Annual Meeting of the APS Division of Fluid Dynamics', San Francisco CA, Nov 2014

Magstadt, A. S.; Berry, M. G.; Berger, Z. P.; Shea, P. R. & Glauser, M. N. (2014), 'Correlations Between Large-scale Flow Structures and Acoustic Signatures in an Axisymmetric Jet" 67th Annual Meeting of the APS Division of Fluid Dynamics',

San Francisco CA, Nov 2014.

Kan, P., Lewalle J., and Glauser M., ``Properties and Localizations of Acoustic Sources in High Speed Jet'', 67th Annual Meeting of the APS Division of Fluid Dynamics', San Francisco CA, Nov 2014.

Shea, P.R., Berger, Z.P., Berry, M.G., Glauser, M.N., Kiel, B.V., Gogineni, S., "Low-Dimensional Modeling of a Mach 0.6 Axisymmetric Jet", 52nd AIAA Aerospace Sciences Meeting 13-17 January 2014, National Harbor, MD, AIAA-2014-0245.

Berger, Z.P., Berry, M.G., Shea, P.R., Glauser, M.N., Jiang, N., Gogineni, S., Kiel, B.V., Kasier, E., Noack, B.R., Spohn, A., "Analysis of High Speed Jet Flow Physics with Time-Resolved PIV", 52nd AIAA Aerospace Sciences Meeting 13-17 January 2014, National Harbor, MD, AIAA-2014-1226.

Rossetti, J., Berger, Z.P., Berry, M.G., Glauser, M.N., "Heater Applications for High Speed Jets", 66th APS Division of Fluid Dynamics Meeting, 24-26 November 2013, Pittsburgh, PA.

Zelenyak, A.R., Berger, Z.P., Berry, M.G., Shea, P.R., Glauser, M.N., "Characterization of synthetic jet actuators used for jet noise reduction by flow control", 66th APS Division of Fluid Dynamics Meeting, 24-26 November 2013, Pittsburgh, PA.

Berry, M.G., Kiel, B.V., Berger, Z.P., Jiang, N., Gogineni, S., Glauser, M.N., "Analysis and comparison of non-axisymmetric and circular nozzle configurations of a high speed jet", 66th APS Division of Fluid Dynamics Meeting, 24-26 November 2013, Pittsburgh, PA.

Berger, Z.P., Berry, M.G., Shea, P.R., Kiel, B.V., Jiang, N., Noack, B.R., Gogineni, S., Glauser, M.N., "Towards High Speed Jet Noise Reduction Using Time-Resolved PIV", 66th APS Division of Fluid Dynamics Meeting, 24-26 November 2013, Pittsburg, PA.

Ruscher, Christopher J., Dannehoffer, John F. III, and Glauser, Mark N., "Data Fusion for Fluid Dynamic Data", 66th APS Division of Fluid Dynamics Mtg., November 24-26, 2013 Pittsburgh, PA

Ruscher, Christopher J., Dannehoffer, John F. III, Glauser, Mark N., Belovich, Vincent M., and Sekar, Balu, "Modeling Flow Through a Perforated Plate for a New Combustion Rig", 21st AIAA Computational Fluid Dynamics Conference., June 24-27 2013 San Diego, CA (AIAA 2013-3092)

Shea, P. and Glauser, M., (2013), ``Closed-Loop Active Flow Control of a Three-Dimensional Turret Wake'', AIAA Paper 2013-0394, 2013 AIAA ASM Conference, January 7-10, Dallas, Texas.

Wang, G. and Glauser, M. (2013), "Aerodynamic and Aeroacoustic Study of the Interaction between a 2D Wind Turbine Airfoil and a Cylinder Wake using PIV and Far-Field Microphones". AIAA Paper 2013- 0916, 2013 AIAA ASM, Meeting, January 7 - 10, Dallas, TX.

Berger, Z., Low, K., Berry, M., Kostka, S., Cordier, L., Noack, B., Gogineni, S., Glauser, M. (2013). "Reduced Order Models for a High Speed Jet with Time-Resolved PIV". AIAA Paper 2013-0011, 2013 AIAA ASM Conference, January 7-10, Dallas,TX

Ruscher, Christopher J., Dannenhoffer, John F. III, and Glauser, Mark N., "Application of Snapshot POD on a Varying Grid", AIAA Paper 2013-0256, 51st AIAA ASM, January 7-10, 2013 Grapevine, TX.

Ruscher, Christopher J., Dannehoffer, John F. III, Glauser, Mark N., Belovich, Vincent M., and Sekar, Balu, "Characterization of the Boundary Conditions at the Test Section Inlet for a Combustion Rig", 65th APS Division of Fluid Dynamics Mtg., November 18-20, 2012 San Diego, CA

Shea, P. and Glauser, M. (2012), ``Characterization of an Actively Controlled Three-Dimensional Turret Wake'', 65th Annual Meeting of the APS Division of Fluid Dynamics, November 18-20, 2012, San Diego, CA.

Wang, G., Glauser, M. and Lewalle, J. (2012), "PIV and Acoustic Investigation for a 2D Wind Turbine Airfoil", 65th Annual Meeting of the APS Division of Fluid Dynamics, November 18-20, 2012, San Diego, CA.

Berger, Z., Berry, M., Low, K., Cordier, L., Noack, B., Gogineni, S., Glauser, M. (2012). "Active Control of Jet Noise Using Observable Inferred Decomposition and Large Window PIV". 65th Annual Meeting of the APS Division of Fluid Dynamics, November 18-20, 2012, San Diego, CA.

Bai, Z., Wimalajeewa, T., Berger, Z., Glauser, M., Varshney, P. (2012). "Physics Based Compressive Sensing Approach Applied to Airfoil Data Collection and Analysis". (Poster), 65th Annual Meeting of the APS Division of Fluid Dynamics, November 18-20, 2012, San Diego, CA.

Berry, M., Berger, Z., Low, K., Zelenyak, A., Gogineni, S., Glauser, M. (2012). "Flow Control Characterization of PIV Flow Field Using POD". (Poster), 65th Annual Meeting of the APS Division of Fluid Dynamics, November 18-20, 2012, San Diego, CA.

(Invited) Berger, Z., Low, K., Kostka, S., Cordier, L., Gogineni, S., Noack, B., Glauser, M. (2012). "Exploring High Subsonic Jet Noise with Time-Resolved PIV and Reduced-Order Modeling". Proceedings of the 2012 Israeli Conference on Mechanical Engineering, October 2012, Tel Aviv, Israel.

(Invited) Berger, Z**.,** Low, K., Kostka, S., Lewalle, J., Cordier, L., Noack, B., Gogineni,

S.,Glauser, M. (2012) “High Subsonic Jet Flow Physics and Noise”., Proceedings of the 2012 ASME InterNoise Conference, August 2012, New York, New York.

(Invited) Berger, Z., Low, K., Kostka, S., Gogineni, S., Glauser, M. (2012). “Investigation of an Axisymmetric Transonic Jet with High Resolution Time-Resolved PIV”. AIAA Paper 2012-3822, AIAA Joint Propulsion Conference, Atlanta, July 30 – August 1, 2012.

Ruscher, Christopher J., Dannehoffer, John F. III, Glauser, Mark N., Kiel, Barry V., and Sekar, Balu, “Vortex Shedding of Various Bluff Bodies in Cross Flow”, AIAA Paper 2012-4285, 48th AIAA Joint Propulsion Conference, July 29 –August 1, 2012 Atlanta, GA.

Low, K., **Berger, Z.**, Kostka, S., Gogineni, S., Glauser, M. (2012). “Application of Low-Dimensional Modeling Techniques to an Axisymmetric Jet with Time-Resolved PIV”. AIAA Paper 2012-3079, 2012 AIAA Fluid Dynamics Meeting, New Orleans, 25 - 29 June 2012.

Shea, P., Glauser, M., Carlson, H., Verberg, R. and Schmit, R., (2012), ``Active Flow Control of a Pitching Turret Flow Field Using Closed-Loop Feedback Control'', AIAA Paper 2012-2804, 2012 Flow Control/Fluid Dynamics Meeting, New Orleans, 25 – 29 June 2012.

Shea, P. and Glauser, M., (2012), ``Experimental Investigation of a Three-Dimensional Turret Wake with Active Flow Control'', AIAA Paper 2012-0745, 50th AIAA Aerospace Sciences Meeting, 9-12 January 2012.

Low, K., Kostka, S., Berger, Z., Berry, M., Gogineni, S. and Glauser, M. (2011), `` Active Control of Jet Noise Using High Resolution TRPIV Part 2: Velocity-Pressure-Acoustic Correlations'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Berger, Z., Kostka, S., Low, K., Berry, M., Gogineni, S. and Glauser, M. (2011), ``Active Control of Jet Noise Using High Resolution TRPIV Part 1: POD Analysis'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Lewalle, J., Low, K. and Glauser, M. (2011), ``Noise source characterization from far-field data in high-speed jets'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Ruscher, C., Dannenhoffer, J., Glauser, M., Kiel, B., Sekar, B. and Kapaku, R. (2011), `` Vortex Shedding of Various Bluff Bodies in a Cross Flow and Flame Luminosity'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Shea, P. and Glauser, M. (2011), ``Experimental Study of the Temporal Nature of an Actively Controlled Three Dimensional Turret Wake'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Kaligotla, S., Tavakoli, BB., Glauser, M. and Ahmadi, G.(2011), ``Computational and experimental study of airflow around a fan powered UVGI Lamp'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Wang, G., Walczak, J., Glauser, M. and Elhadidi, B., (2011), ``Preliminary Investigation of the Active Flow Control Benefits on Wind Turbine Blades'', American Physical Society, 64th Annual Meeting: Division of Fluid Dynamics, 20-22 November 2011, Baltimore Maryland.

Lewalle, J., Low, K.R., Glauser, M.N. and Berger, Z.P., (2011), ``Correlations of Near- and Far- Field Acoustic Data in a High-Speed Jet,'', Proceedings of the Seventh International Symposium on Turbulence and Shear Flow Phenomena'' Ottawa Ontario Canada, July 28-31, 2011.

Wallace, R., Shea, P., Glauser, M.N., Thirunavukkarasu, V., Carlson, H. and Schmit, R. (2011), ``Suction Flow Control at High Reynolds Number'', AIAA Paper 2011-3716, 41st AIAA Fluid Dynamics Conference and Exhibit, 27-30 June 2011, Honolulu Hawaii**.**

Pinier, J. and Glauser, M.N., ``An Empirical Reduced Order Model of the Mach 0.6 Turbulent Axisymmetric Jet'', AIAA Paper 2011-0282, 49th AIAA Aerospace Sciences Meeting, 4-7 January 2011, Orlando Florida.

K. R. Low, B. El Hadidi, Z. Berger, M. N. Glauser, "Shear Layer Excitation of a High Speed Turbulent Jet", American Physical Society 63RD Annual Meeting: Division of Fluid Dynamics 21 – 23 November 2010, Long Beach, California

Kaligotla S., Chen W., Glauser M.N., ``Local flow control for active building facades'' Proceedings of 63rd Annual Meeting of the American Physical Society Division of Fluid Dynamics, Nov 21-23, 2010.

Ruscher, C. J., Shea, P. R., Wallace, R. D., Glauser, M. N., Dannenhoffer III, J.F., "Characterization of a Three-Dimensional Turret Wake for Active Flow Control Part I: Simulation," 63rd APS Division of Fluid Dynamics Mtg., 21-23 November 2010, Long Beach, CA.

Shea,P.R., Ruscher, C., Wallace, R.D., Glauser, M.N. and Dannenhoffer, J.D., "Characterization of a Three-Dimensional Turret Wake for Active Flow Control Part II: Experimental Study," 63rd APS Division of Fluid Dynamics Mtg., 21-23 November 2010, Long Beach, CA.

Lewalle, J., Berger, Z., Low K. and Glauser, M.N. "High-Speed Jet Noise Source Identification by Wavelet Filtering" 63rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 21-23, 2010, Long Beach, California.

R. D. Wallace, P. R. Shea, V. Thirunavukkarasu, H. A. Carlson, Ryan Schmit, and M. N. Glauser, "A Closed-loop Suction Flow Control Study over a Pitching Turret" 63rd Annual Meeting of the APS Division of Fluid Dynamics, Nov 21-23, 2010, Long Beach, California.

G. Wang, J. Walczak, B. El Hadidi , M. Glauser and H. Higuchi, ``Benefit of Active Flow Control for Wind Turbine Blades" 63rd APS Division of Fluid Dynamics Mtg., 21-23 November 2010, Long Beach, CA.

Z. Berger, R. Bigger, M. Fardad, H. Higuchi, M. N. Glauser, M. Angeli. "Investigation of POD Bases for Flow Control on Disk Wakes", ASME Paper number FEDSM-ICNMM2010-31071, ASME 3rd Joint US-European Fluids Engineering Summer Meeting, August 1-5, 2010, Montreal, Quebec, Canada.

R. D. Wallace, P. R. Shea, M. N. Glauser, and V. Thirunavukkarasu, and H. A. Carlson, "Closed-loop Flow Control for an Articulating Turret with Two Degrees of Freedom: Pitch and Yaw" AIAA Paper 2010-4966, *5th AIAA Flow Control Conference*, Chicago, Il, USA, 2010.

K.R. Low, B.E. Hadidi, M.Y. Andino, R. Berdanier, M.N. Glauser, "Investigation of Different**,** Active Flow Control Strategies for High Speed Jets Using Synthetic Jet Actuators", *AIAA-2010- 4267, 40th Fluid Dynamics Conference and Exhibit*, Chicago, Illinois, June 28-1, 2010.

Andino, M.Y. and **Glauser, M.N.**, ``Low-Dimensional description of the flow field over a hemisphere'', AIAA paper 2010-4592, *40th Fluid Dynamics Conference and Exhibit*, Chicago, Illinois, June 28-1, 2010.

Wallace, R.D., Shea, P. and Glauser, M.N., Vaithianathan, T. and Carlson, H., ``Feedback Flow Control for a Pitching Turret (Part 2)'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0361.

Vaithianathan, T., Carlson, H., Wallace, R.D., Shea, P. and Glauser, M.N., ``Feedback Flow Control for a Pitching Turret (Part 1)'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0360.

Andino, M.Y. and Glauser, M.N., ``Flow Control Effects on the Length Scales Over a Turret'', 48th AIAA Aerospace Sciences Meeting, January 4-7, 2010, Orlando, Florida, AIAA-2010-0087.

Berger, Z., Orbaker, A.J., Glauser, M.N., Higuchi, H., Fardad, M. and Bigger, R., ``Application of Proper Orthogonal Decomposition to Disk Wakes'', 62nd Annual

Meeting of the APS Division of Fluid Dynamics, Nov 22 – 24, 2009; Minneapolis Minnesota, Bulletin of the American Physical Society, Volume 54, Number 19.

Andino, M. and Glauser, M.N., ``Low dimensional analysis of the flow over a three dimensional turret'', 62nd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22 – 24, 2009; Minneapolis, Minnesota, Bulletin of the American Physical Society, Volume 54, Number 19.

Wallace, R.D., Shea, P.R., Thirunavukkasrasu, V., Carlson, H. and Glauser, M.N., `` Active Flow Control over a 3D Articulating Turret'', 62nd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22 – 24, 2009; Minneapolis, Minnesota, Bulletin of the American Physical Society, Volume 54, Number 19.

Shea, P.R., Wallace, R.D. and Glauser, M.N., ``Active Control Techniques for use on Three Dimensional Hemispherical Turrets'', 62nd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22 – 24, 2009; Minneapolis, Minnesota, Bulletin of the American Physical Society, Volume 54, Number 19.

Low, K., Elhadidi, B. and Glauser, M.N., ``Assessment of Closed-Loop Control Using Multi-Mode Sensor Fusion for a High Reynolds Number Transonic Jet'', 62nd Annual Meeting of the APS Division of Fluid Dynamics, Nov 22 – 24, 2009; Minneapolis Minnesota, Bulletin of the American Physical Society, Volume 54, Number 19.6

Glauser, M.N. and Bala Varma Datla, ``Flow Measurements in Indoor Environments'', Proceedings of the 9th International Conference and Exhibition, Healthy Buildings, September 15th, 2009, Syracuse New York USA

Low, K.R., Elhadidi, B., Andino, M.Y., Wallace, R.D., and Glauser, M.N., ``Characteristics of Closed-Loop Control in an Axisymmetric Jet at Mach 0.6'', Proceedings of the 6th International Symposium on Turbulence and Shear Flow Phenomena, Seoul National University, Seoul, Korea, June 22-24, 2009.

Low, K.R., Andino, M.Y., Wallace, R.M., Hall, A.M. and Glauser, M.N., ``Closed-loop Control of a Turbulent Compressible Mach 0.6 Jet'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-0854.

`

Wallace, R.D., Andino, M.Y., Glauser, M.N., Camphouse, R., Schmit, R. and Myatt, J., ``Flow Characteristics of Active Control around a 3D Turret'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-0537.

Hall, A. and **Glauser, M.N**., ``An Experimental Analysis of the Modal Characteristics Intrinsic to Both the Heated and Cold Jet'', 47th AIAA Aerospace Sciences Meeting, January 5-9, 2009, Orlando, Florida, AIAA-2009-1238.

Datla, B.V., Kaligotla, S. and Glauser, M.N., ``Flow Measurements in Indoor Office Environment'', 61st Annual Meeting of the APS Division of Fluid Dynamics, Nov 23 – 25, 2008; San Antonio, Texas; Bulletin of the American Physical Society, Volume 53, Number 15.

Andino, M., Wallace, R.D., Glauser, M.N., Schmit, R., Myatt, J. and Camphouse, R.C., ``Characterization of flow control effects over a 3D Turret'', 61st Annual Meeting of the APS Division of Fluid Dynamics, Nov 23 – 25, 2008; San Antonio, Texas; Bulletin of the American Physical Society, Volume 53, Number 15.

Wallace, R.D., Andino, M., Camphouse, R.C., Schmit, R., Myatt, J. and Glauser, M.N., ``The Effect of Closed Loop Flow Control on the Integral Scales over a 3D Turret'', 61st Annual Meeting of the APS Division of Fluid Dynamics, Nov 23 – 25, 2008; San Antonio, Texas; Bulletin of the American Physical Society, Volume 53, Number 15.

Low, K., Hall, A., Wallace, R.D., Andino, M. and Glauser, M.N., ``Application of Closed-Loop control Techniques in an Axisymmetric Jet at Mach 0.6'', 61st Annual Meeting of the APS Division of Fluid Dynamics, Nov 23 – 25, 2008; San Antonio, Texas; Bulletin of the American Physical Society, Volume 53, Number 15.

Camphouse, R.C., Myatt, J, Schmit, R., Glauser, M.N., Ausseur, J., Andino, M., and Wallace, R.,``A Snapshot Decomposition Method for Reduced Order Modeling and Boundary Feedback Control'', 4th AIAA Flow Control Conference, June 23-26th, Seattle Washington, AIAA Paper AIAA-2008-4195.

Andino, M., Wallace, R., Glauser, M.N., Schmit, R., Myatt, J. and Camphouse, R.C., ``Flow and Aero-optics around a Turret. Part 1: Open Loop Flow Control'', 39th AIAA Plasmadynamics and Lasers Conference, June 23-26th, Seattle, Washington, AIAA Paper AIAA-2008-4216.

Wallace, R, Andino, M., Glauser, M.N., Camphouse, R.C., Schmit R. and Myatt, J. , `` Flow and Aero-optics around a Turret. Part 2: Surface Pressure Based Closed-Loop Control'', 39th AIAA Plasmadynamics and Lasers Conference, June 23-26th, Seattle, Washington, AIAA Paper AIAA-2008-4217.

Andino, M., Pinier, J., Schmit, R., Wallace, R., Camphouse, C., Myatt, J. and **Glauser, M.** (2008), ``Flow Control Over a Cylindrical Turret Using Synthetic Jets'', 46th AIAA Aerospace Sciences Meeting and Exhibit, 7-10 January 2008, Grand Sierra Resort, Reno, Nevada, AIAA Paper 2008-0736.

Marr, D, Spitzer, I. and Glauser, M., (2007), ``Exposure assessment involving entrainment during human motion in the indoor environment'', 60th Annual Meeting of the Divison of Fluid Dynamics, Sunday–Tuesday, November 18–20, 2007; Salt Lake City, Utah, Bulletin of the American Physical Society, Volume 52, Number 12.

Andino, M., Wallace, R., Schmit, R., Camphouse, R., Myatt, J. and Glauser, M. (2007), ``Effects of flow control over a 3D turret – Part 1'', 60th Annual Meeting of the Division of Fluid Dynamics, Sunday–Tuesday, November 18–20, 2007; Salt Lake City, Utah, Bulletin of the American Physical Society, Volume 52, Number 12.

Wallace, R, Andino, M.., Schmit, R., Camphouse, R., Myatt, J. and Glauser, M. (2007), ``Effects of flow control over a 3D turret – Part 2'', 60th Annual Meeting of the Division of Fluid Dynamics, Sunday–Tuesday, November 18–20, 2007; Salt Lake City, Utah, Bulletin of the American Physical Society, Volume 52, Number 12.

Schmit, R., Andino, M., Schmit, R., Camphouse, R., Myatt, J. and Glauser, M. (2007), ``Effects of flow control over a 3D turret – Part 3'', 60th Annual Meeting of the Division of Fluid Dynamics, Sunday–Tuesday, November 18–20, 2007; Salt Lake City, Utah, Bulletin of the American Physical Society, Volume 52, Number 12.

Glauser, M., Hall, A. and Pinier, J. (2007), ``A low-dimensional analysis of the axisymmetric jet: identification and control'' 60th Annual Meeting of the Division of Fluid Dynamics, Sunday–Tuesday, November 18–20, 2007; Salt Lake City, Utah, Bulletin of the American Physical Society, Volume 52, Number 12.

Pinier, J. and **Glauser, M**. (2007), ``Dual-Time PIV Investigation of the Sound Producing Region of the High-Speed Jet,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25-28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3857.

Hall, A., Hall, J. and Glauser, M. (2007), `` Dominant Aeroacoustic Source Contribution in a Hot Transonic Jet,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25-28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3868.

Ausseur, J., Pinier, J. and **Glauser, M.** (2007), ``Estimation Techniques in a Turbulent Flow Field,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25- 28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-3975.

Perez, C., Hall, J. and Glauser, M. (2007), ``PIV Measurements in a Three-Dimensional Wall Jet Formed Using a Round Nozzle,'' 37th AIAA Fluid Dynamics Conference and Exhibit, 25- 28 June 2007, Hyatt Regency Miami Florida, AIAA Paper 2007-4493.

Hall, J., Pinier, J., Hall, A.M. and Glauser, M.N. (2007), ``A Spatio-Temporal Decomposition of the Acoustic Source in a Mach 0.85 Axisymmetric Jet,'' 45th AIAA Aerospace Sciences Meeting and Exhibit, 8-11 January 2007, Reno, Nevada, AIAA Paper 2007-0442

Pinier, J. and Glauser, M.N. (2006), `` Flow Control and Dynamical System Development on the Axisymmetric Jet.'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Joseph Hall, Jeremy Pinier , Andre Hall , Mark Glauser (2006), `` Downstream Evolution of the Near Field Pressure Sources in a High Speed Jet.'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Carlos Perez , Thomas Boineau , Jeremy Pinier , Mark Glauser (2006), ``Effect of Zero Net-mass Flux Actuators on an Axisymmetric Jet'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Ryan Wallace , Mark Anderson , Mark Glauser (2006), ``Active Control of a Flapping Wing in a Gust Setup'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Marlyn Andino , Moira DeNatale , Jonathan Mihaly , Mark Glauser and Ryan Schmit (2006), ``Application of separated flow control over a cylindrical turret'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Kaligotla Srikar , Mark Glauser (2006), ``Towards PIV measurements around the breathing zones of two Thermal Breathing Manikins'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Charles Tinney , Mark Glauser , Lawrence Ukeiley , Peter Jordan (2006), ``The real fully low-dimensional characteristics of a subsonic jet flow'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Ian Spitzer, David Marr , Mark Glauser (2006), ``Progress in PDPA Measurements of Buoyancy Driven Flow in the Indoor Environment'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Andre Hall , Jeremy Pinier , Mark Glauser (2006), ``Identification and Control of Noise Source Mechanisms in a Transonic Axisymmetric Jet'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Yoshi Kubota , Joseph Hall , Hiroshi Higuchi , Ritesh Sheth , Mark Glauser , Ezzat Khalifa (2006), ``Near-wall aerodynamics of idealized model foot motion'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

David Marr, Mark Glauser (2006), ``Turbulent Anisotropy and Dissipation/Production in the Indoor Environment'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Jonathan Mihaly , Moira DeNatale , Marlyn Andino , Mark Glauser (2006), ``Optimization of Zero Net-mass Flow Actuators for Aero-optics Applications'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Julie Ausseur, Jeremy Pinier , Mark Glauser , Henry Carlson (2006), ``Flow Prediction Using Low-Dimensional Methods'', Bulletin of the American Physical Society, Program of the 59th Annual Meeting of the Division of Fluid Dynamics, Nov 2006, Volume 51, No 9.

Hall, J., Pinier, J., Hall, A.M. and Glauser, M.N. (2006), ``Two-point Correlations of the Near and Far-Field Pressure in a Transonic Jet, '' 2006 ASME Joint US-European Fluids Engineering Summer Meeting, July 17-20, 2006, Miami, Florida, USA. ASME paper number FEDSM2006-98458.

Ausseur, J., Pinier, J. and Glauser, M.N. (2006), ``Closed-Loop Flow Separation Control Using a New POD Approach'' 3rd AIAA Flow Control Conference, 5-8 June 2006 San Francisco, AIAA Paper 2006-3017.

Hall, J., Ausseur, J., Pinier, J. and Glauser, M.N. (2006), ``Low-Order Models of the Fluctuating Wall Pressure and Acoustic Field in an Incompressible Turbulent Impinging Jet'' 3rd AIAA Flow Control Conference, 5-8 June 2006 San Francisco, AIAA Paper 2006-3699.

Andino, M., Ausseur, J., Pinier, J., Glauser, M. and Hicughi, H., (2006), ``Interaction of Zero Net-Mass Flow Acutators with the Flow over the NACA 4412 Foils, 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-0105.

Hall, A., Pinier, J., Hall, J., Glauser, M. and Tinney, C., (2006),``Identifying the Most Energetic Modes of the Pressure and Velocity Near-Field Region of a M=0.85 Axisymmetric Jet'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-0314.

Ausseur, J., Pinier, J., Glauser, M. and Higuchi, H. (2006), ``Experimental Development of a Reduced Order Model for Flow Separation Control'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-1251.

Martin, T., Hall, J., Schmit, R. and Glauser, M. (2006),`` Estimation Procedures for Micro Air Vehicles'', 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-1421.

Tinney, C.E., Jordan, P., Hall, A.M., Delville, J. and Glauser, M.N. (2006),``A Time-resolved Estimate of the Turbulence and Source Mechanisms in a Subsonic Jet Flow'' 44th AIAA Aerospace Sciences Meeting and Exhibit, 9-12 January 2006, Reno Nevada. AIAA Paper 2006-0621.

Hall, A., Glauser, M. (2005), ``Examination of the dominant azimuthal structures in the near-field pressure region of a high-speed turbulent jet'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Martin, T, Guitton, A. and Glauser, M. (2005), ``Toward an Autonomous Micro-Air Vehicle Wing'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Andino,M., Ausseur, J., Pinier, J., Glauser, M. and Higuchi, H. (2005), ``Effect of Flow Control on Mean Pressure Field over a NACA 4412 Airfoil'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Marr, D.R., Sheth, R., Glauser, M. and Higuchi, H. (2005), ``Multiwindow PIV measurements around a breathing manikin'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Sheth, R., Braud, C., Higuchi, H., Glauser, M. and Khalifa, H.E. (2005), ``Dust Resuspension due to Idealized Foot Motion'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Ausseur, J, Pinier, J, Glauser, M. and Higuchi, H. (2005), ``Prediction capabilities in a turbulent flow field'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Pinier, J., Glauser, M. and George, W.K. (2005), `` Developing Experiment-based Dynamical Systems of the Axisymmetric Jet'', Bulletin of the American Physical Society, Program of the 58th Annual Meeting of the Division of Fluid Dynamics, Nov 2005, Volume 50, No 9.

Andino, M., Braud, C., Glauser, M., Higuchi, H. and van Lagen, P. (2005), ``Global Effects of Flow Control over a NACA 4412 Hydrofoil'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-4883.

Ausseur, J., Pinier, J., Glauser, M., Higuchi, H. and Carlson, H. (2005), ``Controller Development for Closed-Loop Feedback Control of Flows'', 35th AIAA Fluid Dynamics

Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5264.

Jordan, P., Tinney, C., Delville, J., Coiffet, F., Glauser, M. and Hall, A., (2005),``Low-Dimensional Signatures of the Sound Production Mechanisms in Subsonic Jets: Towards Their Identification and Control'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-4647.

Hall, A., Glauser, M. and Tinney, C., (2005), ``Experimental Investigation of the Pressure-Velocity Correlation of a M=0.6 Axisymmetric Jet'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5294.

Martin, T., Guitton, A., Schmit, R. and Glauser, M., (2005), ``Development of a Morphing Micro Air Vehicle Wing Using Low-Dimensional Tools'', 35th AIAA Fluid Dynamics Conference and Exhibit, June 6 – 9, 2005, Toronto, Ontario, Canada. AIAA Paper 2005-5131.

Hall, A., Tinney, C. and Glauser, M. (2005),``Investigating the `modified' Complementary Technique Using Pressure-Velocity Correlations of an Axisymmetric Jet'', 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 10-13 January 2005. AIAA Paper 2005-0039.

Tinney, C., Ukeiley, L. and Glauser, M. (2005),``The Evolution of the Large Scale Structure in High Speed Subsonic Mach Nmuber Jets'', 43rd AIAA Aerospace Sciences Meeting and Exhibit, Reno, NV, 10-13 January 2005. AIAA Paper 2005-0417.

Martin, T., Schmit, R. and Glauser, M. (2004), `` Toward a Morphing Micro-Air Vehicle Wing'', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Pinier, J. Ausseur, J., Glauser, M. and Higuchi, H. (2004), `` Closed-Loop Feedback Control of the Turbulent Flow over a Wing'', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Andino, M., Braud, C., Glauser, M. and Higuchi, H. (2004), `` Effect of zero-net mass flow actuators on the flow over a NACA 4412 foil '', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Ausseur, J., Pinier, J., Glauser, M. and Higuchi, H. (2004), `` Predicting the Dynamics of the Flow over a NACA 4412 using POD'', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Hall, A., Tinney, C. and Glauser, M. (2004), `` An experimental investigation of the lip pressure-velocity correlation of a Ma 0.85 axisymmetric turbulent jet'', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Marr, D., Glauser, M. and Higuchi, H. (2004), `` Definition of the breathing zone using a sitting thermal manikin based on PIV results'', Bulletin of the American Physical Society, Program of the 57th Annual Meeting of the Division of Fluid Dynamics, Nov 2004, Volume 49, No 9.

Braud, C., Andino, M., Pinier, J., Ausseur, J., Higuchi, H. and Glauser, M. (2004),`` Separation Control of Flow Over NACA 4412 Hydro foil Using Zero Net-Mass Flow Actuators'' 1st European Forum on Flow Control, Poitiers, France, Oct. 11-14.

Ausseur, J., Pinier, J., Andino, M., Braud, C., Glauser, M. and Higuchi, H. (2004), `` Closed-Loop Feedback Control of the Flow over a NACA 4412-Airfoil'', 1st European Forum on Flow Control, Poitiers, France, Oct. 11-14.

Tinney, C.E., Ukeiley, L. and Glauser, M.N. (2004), ``Noise Identification in a Mach 0.85 Jet using Modified Low-Dimensional Techniques'', Advances in Turbulence X, Proceedings of the Tenth European Turbulence Conference, (H.I. Andersson & P. A. Krogstad (Eds.)), Paper no 101.

Ukeiley, L., Mann, R., Tinney, C. and Glauser, M.N., ``Spatial Correlations in a Transonic Jet'', 34th AIAA Fluid Dynamics Conference, Portland Oregon, 28 June – 1 July 2004. AIAA Paper 2004-2654.

Carlson, H., Glauser, M. and Roveda, R., ``Models for Controlling Airfoil Lift and Drag'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0579.

Tinney, C., Glauser, M., Coughlin, T. and Ukeiley, L.,``Designing an Anechoic Chamber for the Experimental Study of High Speed Heated Jets'', 42nd AIAA Aerospaces Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0010.

Schmit, R., Glauser, M., ``Improvements in Low Dimensional Tools for Flow-Structure Interaction Problems: Using Global POD'', 42nd AIAA Aerospace Sciences Meeting and Exhibit, 5-8 January, Reno, Nevada, AIAA-2004-0889.

Hall, A., Tinney, C.E. and Glauser, M.N., ``Lip pressure/velocity cross correlations in an axisymmetric compressible jet '', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Khan, T., Marr, D.R., Higuchi, H. and Glauser, M.N., ``Velocity Field Measurements of

Human Coughing Using Time Resolved Particle Image Velocimetry'', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Marr, D.R., Khan, T., Glauser, M.N. and Higuchi, H., ``Identifying the structure of exhaled air using proper orthogonal decomposition (POD) around a breathing thermal manikin'', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Schmit, R. and Glauser, M.N., ``Improvements in Low Dimensional Tools for Flow Structure Interaction Problems; Using Global POD '', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Tinney, C.E., Hall, A. and Glauser, M.N., ``A Low Dimensional Approach to Jet Noise Identification '', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Hunter, D., Lambert, P. Turluer, E. Higuchi, H. and Glauser, M.N., ``Control of Flow Separation in Water Using Zero Net-Mass Actuators Separated Flow '', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Young, M.J., Caille, F. Glauser, M.N., Higuchi, H., ``Control of the Separated Flow Around a NACA 4412 Airfoil'', Bulletin of the American Physical Society, Program of the 56th Annual Meeting of the Division of Fluid Dynamics, Nov 2003, Volume 48, No 10.

Marr, D.R., Higuchi, H., Glauser, M.N. and Zhang, J., ``Measurements of Airflows Around a Manikin in a Ventilated Space Using Multiple Particle Image Velocimetry (PIV) Techniques'', Indoor Air Quality Problems and Engineering Solutions, an international symposium cosponsored by the Air and Waste Management Association and the U.S. EPA's Office of Research and Development, July 21-23, 2003, in Research Triangle Park, NC.

Young, M.J., Glauser, M.N. and Taylor, J.A., ``Towards Sensing and Control of Separation in Subsonic Flows'', 4th ASME/JSME Joint Fluids Engineering Conference, July 6th – 10th, 2003, Honolulu, Hawaii, ASME FEDSM2003-45586.

Schmit, R.F., Glauser, M.N. and Gorton, S.A., ``Low-Dimensional Tools for Flow-Structure Interaction Problems: Application to Micro-Air Vehicles'', 41st AIAA Aerospace Sciences Meeting and Exhibit, 4 – 9 January 2003, Reno, Nevada, AIAA – 2003-0626.

Schmit, R. and Glauser, M.N., ``Low Dimensional Tools for Flow-Structure Interaction Problems: Application to Micro Air Vehicles'', Bulletin of the American Physical

Society, Program of the 55th Annual Meeting of the Division of Fluid Dynamics, Nov 2002, Vol 47, No 10.

Young, M.J., Caille, F., Higuchi, H. and Glauser, M.N., ``Closed Loop Control of Separation in Subsonic Flow'', Bulletin of the American Physical Society, Program of the 55th Annual Meeting of the Division of Fluid Dynamics, Nov 2002, Vol 47, No 10.

Tinney, C.E., Taylor, J.A., Eaton, E. and Glauser, M.N., ``Low-Dimensional Descriptions of Separated Flows,'' European Turbulence Conference, July 2nd – July 5th, 2002, Southhampton, UK.

Taylor, J.A., Kenney, E. and Glauser, M.N., ``Dynamics of Large Scale Structures in a Separating Flow,'' Bulletin of the American Physical Society, Program of the 54thAnnual Meeting of the Division of Fluid Dynamics, Nov 2001, Vol 46, No 10.

Tinney, C.E., Eaton, E.L., and Glauser, M.N., `` An Instantaneous Low-Dimensional Velocity Reconstruction of the Axisymmetric Sudden Expansion,'' Bulletin of the American Physical Society, Program of the 54th Annual Meeting of the Division of Fluid Dynamics, Nov 2001, Vol 46, No 10.

Tinney, C., Glauser, M. and Eaton, E., "Multi-point Measurements in an Axi-symmetric Sudden Expansion,'' Bulletin of the American Physical Society, Program of the 53rd Annual Meeting of the Division of Fluid Dynamics, Nov 2000, Vol. 45, No. 9.

Taylor, J and Glauser, M., ``Study of Unsteady Separating Flows Using PIV and Surface Pressure Measurements,'' Bulletin of the American Physical Society, Program of the 53rd Annual Meeting of the Division of Fluid Dynamics, Nov 2000, Vol. 45, No. 9.

Eaton, E., Glauser, M., "An Examination of the azimuthal variation using multi-point measurements in the axisymmetric sudden expansion'', Bulletin of the American Physical society, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, Nov. 1999, Vol. 44, No. 8.

Cole, D., Ahmadi, G., Glauser, M., Kvasnak, W., "An Experimental and Numerical Study of Turbulent Flow in an Axisymmetric Sudden Expansion'', Bulletin of the American Physical society, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, Nov. 1999, Vol. 44, No. 8.

Taylor, J., Glauser, M., "Utilizing Particle Image Velocimetry to Examine Unsteady Incipiently Separating Flows'', Bulletin of the American Physical society, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, Nov. 1999, Vol. 44, No. 8.

Schmit, R., Glauser, M., Ahmadi, G., " Turbulent Wake Profiles of an Aeroelastic Wind Energy Converter'', Bulletin of the American Physical society, Program of the 52nd Annual Meeting of the Division of Fluid Dynamics, Nov. 1999, Vol. 44, No. 8.

Cole, D., Glauser, M., Yao, C.S. and Paschal, K., ``Including Time Dependency in Particle Image Velocimetry Measurements using Linear Stochastic Estimation", 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3595.

Stokes, S., and Glauser, M., ``Multi-Point Measurement Techniques Used in the Study of Separated Flows," 30th AIAA Fluid Dynamics Conference, 28 June – 1 July, 1999, Norfolk, VA, AIAA 99-3518.

J. Taylor and M. Glauser, "Development of an Active Wing for the Validation of Active Flow Control Schemes to be Applied for the Control of Incipient Separation," Bulletin of the American Physical Society, Program of the 51st Annual Meeting of the Division of Fluid Dynamics, Nov. 1998, Vol. 43, No. 9.

S. Stokes and M. Glauser, "Multi-Point Hotwire measurements in a Backward Facing Step Flow," Bulletin of the American Physical Society, Program of the 51st Annual Meeting of the Division of Fluid Dynamics, Nov. 1998, Vol. 43, No. 9.

E. Eaton, D.R. Cole and M. Glauser, "Multi-point Measurements in an Axi-symmetric Sudden Expansion," Bulletin of the American Physical Society, Program of the 51st Annual Meeting of the Division of Fluid Dynamics, Nov. 1998, Vol. 43, No. 9.

E. Eaton, D. Cole and M. Glauser, "Multipoint Measurements in an Axisymmetric Sudden Expansion," Bulletin of the American Physical Society Program of the 50th Annual Meeting of the Division of Fluid Dynamics, Volume 42, No. 11 (1997).

J. Taylor, M. Glauser, S. Stokes, "Development of a 'Smart Wing' for Validation of Active Flow Control Schemes to be applied for the Control of Incipient Separation," Program of the 50th Annual Meeting of the Division of Fluid Dynamics, Volume 42, No. 11 (1997).

D. Cole, M. Glauser, S. Stokes, E. Eaton, C.S. Yao, K. Paschal, "Time Dependent PIV Measurements Via Linear Stochastic Estimation (LSE)," Program of the 50th Annual Meeting of the Division of Fluid Dynamics, Vol. 42, No. 11 (1997).

L. Ukeiley, J.P. Bonnet, L. Cordier, J. Delville and M. Glauser, Dynamics of Large Scale Structures in a Plane Turbulent Mixing Layer, Cornell Workshop on POD-Galerkin Models for the Dynamics and Control of Complex Flows, October 13 & 14, 1997.

L. Ukeiley, Gal Berkooz, J. Sherry, M. Glauser and J. Seiner, "Experimental Investigation of Large Scale Structures in a Transonic Jet," Bulletin of the American Physical Society, Program of the 1996 Division of Fluid Dynamics, Volume 41, No. 9. (1996).

K. Chapman, M. Glauser, M. Reibert and W. Saric, "Identifying Crossflow Vortices in a Swept-Wing Boundary Layer Using Multi-Point Correlation Techniques," Bulletin of the

American Physical Society, Program of the 1996 Division of Fluid Dynamics, Volume 41, No. 9. (1996).

D. Cole and M. Glauser," The 2-D Linear Stochastic Estimation Applied in an Axisymmetric Sudden Expansion," Bulletin of the American Physical Society, Program of the 1996 Division of Fluid Dynamics, Volume 41, No. 9. (1996).

K. Chapman, M. Glauser, M. Reibert and W. Saric, "Correlation Measurements in a Swept-Wing Boundary Layer," Bulletin of the American Physical Society, Program of the 1995 Division of Fluid Dynamics, Vol. 40, No. 12 (1995).

L. Ukeiley, M. Glauser, L. Cordier, R. Manceau, J. Delville, J.P. Bonnet, "A Dynamical Model for a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Program of the 1995 Division of Fluid Dynamics, Vol. 40, No. 12 (1995).

D. Cole, M. Glauser, "Multi-Point Velocity Measurements in an Axisymmetric Sudden Expansion," Bulletin of the American Physical Society, Program of the 1995 Division of Fluid Dynamics, Vol. 40, No. 12 (1995).

S. Stokes, T. Gatski, M. Glauser, "Experimental Investigation of a 3D Corner-Step Flow," Bulletin of the American Physical Society, Program of the 1995 Division of Fluid Dynamics, Vol. 40, No. 12 (1995).

L. Ukeiley, M. Glauser, J. Delville, L. Cordier and J.P. Bonnet, "Dynamics of Large Scale Structures in a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Program of the 1994 Annual Meeting of the Division of Fluid Dynamics, Vol. 39, No. 9 (1994).

K. Chapman, M. Glauser, W. Saric and J. Ray Dagenhart, "Correlation Techniques Applied to Flow Over a Swept Wing," Bulletin of the American Physical Society, Program of the 1994 Annual Meeting of the Division of Fluid Dynamics, Vol. 39, No. 9 (1994).

J. Delville, L. Ukeiley, L. Cordier, J.P. Bonnet and M.N. Glauser, "A Dynamical Systems Approach for Dominant Scales in a Plane Turbulent Mixing Layer," Euromech Colloquium 328 TU Berlin, October 1994.

L. Ukeiley, J. Delville, J.P. Bonnet and M. Glauser, "Large Scale Dynamics in a Plane Turbulent Mixing Layer," Program of the Society of Engineering Science 31st Annual Technical Meeting, October 10-12, 1994, Texas A&M University, College Station, Texas.

K.L. Chapman, M.S. Reibert, M. Glauser and W. Saric, "Application of Multi-Point Correlation Techniques to Transitional Flow in a Three-Dimensional Boundary Layer," Program of the Society of Engineering Science 31st Annual Technical Meeting, October 10-12, 1994, Texas A&M University, College Station, Texas.

L. Ukeiley, J. Delville, J.P. Bonnet and M.N. Glauser, "A Dynamical Systems Model for Large Scales in a Plane Turbulent Mixing Layer," 12th U.S. National Congress of Applied Mechanics, Seattle, Washington, June 1994.

S. Stokes, S. Kjelgaard, T. Humphreys, T. Gatski and M. Glauser, "3D Flow Measurement in a Low Reynolds Number Back-Step Tunnel Using Non-Intrusive Techniques," Bulletin of the American Physical Society, Program of the 1993 Annual Meeting of the Division of Fluid Dynamics, Vol. 38, No. 12 (1993).

K. Chapman, M. Glauser and J. Ray Dagenhart, "Application of Linear Stochastic Estimation of Crossflow Over a Swept Wing," Bulletin of the American Physical Society, Program of the 1993 Annual Meeting of the Division of Fluid Dynamics, Vol. 38, No. 12 (1993).

L. Ukeiley, J. Delville, J.P. Bonnet and M. Glauser, "An Examination of Large Scale Dynamics in a Plane Turbulent Mixing Layer," Bulletin of the American Physical Society, Program of the 1993 Annual Meeting of the Division of Fluid Dynamics, Vol. 38, No. 12 (1993).

P. Crane, T.B. Gatski and M. Glauser, "Characteristics of Length Scales Computed from DNS of Channel Flow," Bulletin of the American Physical Society, Program of the 1993 Annual Meeting of the Division of Fluid Dynamics, Vol. 38, No. 12 (1993).

Chapman, K., Glauser, M., Greenen, R. and Hamlin, E., "Laminar Flow Detection over the Wing of a F-16XL Research Aircraft," Bulletin of the American Physical Society, Program of the 1992 Annual Meeting of the Division of Fluid Dynamics, Vol. 37, No. 8 (1992).

Cole, D. and Glauser, M., "Utilizing Flying Hot-Wires to Study the Flow in an Axisymmetric Sudden Expansion," Bulletin of the American Physical Society, Program of the 1992 Annual Meeting of the Division of Fluid Dynamics, Vol. 37, No. 8 (1992).

Glauser, M., Ukeiley, L., Cole, D., Delville, J and Bonnet, J., "An Application of Complimentary Coherent Structure Detection Techniques," Bulletin of the American Physical Society, Program of the 1992 Annual Meeting of the Division of Fluid Dynamics, Vol. 37, No. 8 (1992).

Ukeiley, L.S., Cole, D.R. and Glauser, M., "An Examination of the Axisymmetric Jet Mixing Layer Using Coherent Structure Detection Techniques," Eddy Structure Identification in Free Turbulent Shear Flows, IUTAM Symposium, Poitiers, France (October 12-14, 1992).

Glauser, M. and Gatski, T.B., "Near-Wall Reconstruction of Higher-Order Moments and Length Scales Using the POD," Eddy Structure Identification in Free Turbulent Shear Flows, IUTAM Symposium Poitiers, France (October 12-14, 1992).

Glauser, M., Zheng, X. and Doering, C.R.(1991), "Temporal Dynamics of the Axisymmetric Jet Mixing Layer," Bulletin of the American Physical Society, Vol. 36, No. 10, pp. 2621.

Cole, D., Ukeiley, L. and Glauser, M. (1991), "A Comparison of Coherent Structure Defection Techniques in the Axisymmetric Jet Mixing Layer," Bulletin of the American Physical Society, Vol. 36, No. 10, pp. 2699.

Gatski, T.B. and Glauser, M.N. (1991), "Proper Orthogonal Decomposition Based Turbulence Modeling," Bulletin of the American Physical Society, Vol. 36, No. 10, pp. 2687.

Kvasnak, W., Ahmadi, G. and Glauser, M. (1991), "Turbulence Intensities and Spectral Measurements in a Channel Flow with One Rough Wall," 28th Annual Technical Meeting, Society of Engineering Science, Nov. 6-8, 1991, University of Florida, Gainesville, Florida, pp. 179.

Glauser, M.N. and George, W.K. (1991), "Identification of Flow Structure from Multipoint Measurements," 28th Annual Technical Meeting, Society of Engineering Science, Nov. 6-8, 1991, University of Florida, Gainesville, Florida, pp. 183.

Glauser, M.N. and Zheng, X. (1991), "A Low Dimensional Dynamical Systems Model for Coherent Structures in the Jet Shear Layer," 28th Annual Technical Meeting, Society of Engineering Science, Nov. 6-8, 1991, University of Florida, Gainesville, Florida, pp. 184.

Inman, D., Sullivan, P. and Glauser, M., "Flying Hot Wire Measurements in a Sudden Pipe Expansion," Bulletin of the American Physical Society, 35, 10 (1990), 2257.

Wick, D., Ukeiley, L., Glauser, M. and Valentine, D., "Examination of the Turbulent Flow Field Downstream of a Lobed Mixer Using a Pseudo Flow Visualization Method," Bulletin of the American Physical Society, 35, 10 (1990), 2295.

Glauser, M., Zheng, X. and Doering, C.R., "An Examination of the Axisymmetric Jet Mixing Layer Using Low Dimensional Models," Bulletin of the American Physical Society, 35, 10 (1990), 2301.

Cole, D. and Glauser, M., "Stochastic Estimation Applied to the Axisymmetric Jet Mixing Layer," Bulletin of the American Physical Society, 35, 10 (1990), 2312.

Ukeiley, L., Wick, D. and Glauser, M., "A Study of a Lobed Mixer Flow Utilizing Proper Orthogonal Decomposition (POD)," Bulletin of the American Physical Society, 35, 10 (1990), 2327.

Zheng, X., Glauser, M. and George, W.K. (1990), "The Streamwise Evolution of

Coherent Structures in the Axisymmetric Jet Mixing Layer," Published Abstract, AIChE Meeting, Chicago.

Sullivan, P. and Glauser, M., "Single Point LDA Measurements in a Sudden Pipe Expansion," Bulletin of the American Physical Society, 34, 10 (1989), 2341.

Wick, D., Ukeiley, L., Glauser, M. and Eckerle, W., "An Application of a Pseudo Flow Visualization Method to a Lobed Mixer," Bulletin of the American Physical Society, 34, 10 (1989), 2337.

Glauser, M., Zheng, X. and Doering, C., "A Low Dimensional Description of the Axisymmetric Jet Mixing Layer," Bulletin of the American Physical Society, 34, 10 (1989), 2250-2251.

Glauser, M., Zheng, X., Doering, C., "The Dynamics of Organized Structures in the Axisymmetric Jet Mixing Layers," Turbulence 89 International Conference on Organized Structures and Turbulence in Fluid Mechanics, Grenoble, France, September 1989.

Glauser, M.N. and Zheng, X., "Evaluation of the Application of the Proper Orthogonal Decomposition to Reduced Data Sets," Bulletin of the American Physical Society, 33, 10 (1988), 2288.

Glauser, M.N., "Reconstruction of Reynolds Stress in the Near Field Jet Shear Layer Utilizing Proper Orthogonal Modes," 7th ASCE/EMD Specialty Conference, May 22-25, 1988, VPI, Blacksburg, VA, p. 30.

Glauser, M.N. and George, W.K., "The Dynamics of Coherent Structures and the Generation of Turbulence in the Axisymmetric Jet Mixing Layer," 40th Annual American Physical Society, Division of Fluid Dynamics Meeting, University of Oregon, Eugene, Oregon, November 22-24, 1987.

Glauser, M.N. and George, W.K., "Orthogonal Decomposition of the Axisymmetric Jet Mixing Layer Including Azimuthal Dependence," 39th Annual American Physical Society, Division of Fluid Dynamics Meeting, Ohio State University, Columbus, Ohio, November 23-25, 1986.

Glauser, M.N. and George, W.K., "Orthogonal Decomposition of the Axisymmetric Jet Mixing Layer Including Aximuthal Dependence," European Turbulence Symposium, Ecole Centrale de Lyon - France, July 1-4, 1986.

Glauser, M.N., George, W.K. and Taulbee, D.B., "Evaluation of an Alternative to the Orthongonal Decomposition," 38th Annual American Physical Society, Division of Fluid Dynamics Meeting, Tucson, Arizona, November 24-26, 1985.

Leib, S.J., Glauser, M.N. and George, W.K., "An Application of Lumley's Orthogonal Decomposition to the Mixing Layer of an Axisymmetric Jet," 36th Annual American

Physical Society, Division of Fluid Dynamics Meeting, Houston, Texas, November 20-22, 1983.

"An Orthogonal Decomposition of the Axisymmetric Jet Mixing Layer Utilizing Cross-wire Velocity Measurements," 6th Symposium Turbulent Shear Flows, Toulouse, France, September 7-9, 1987 (co-author, George, W.K.).

"Evaluation of the Alternative to the Orthogonal Decomposition," 38th Annual American Physical Society, Division of Fluid Dynamics Meeting, November 24-26, 1985, Tucson, Arizona (co-authors W.K. George and D.B. Taulbee).

"Coherent Structures in the Axisymmetric Turbulent Jet Mixing Layer," Fifth Symposium on Turbulent Shear Flows, Cornell University, 1985 (co-authors S.J. Leib and W.K. George).

"Reconstruction of Instantaneous Random Velocity Fields from Orthogonally Decomposed Turbulence," Mixed Fluids Conference, Owasco Conference Center, Moravia, New York, March 22-24, 1985.

"Measurement of Velocity Profiles in a Simple Bifurcation," 37th Annual American Physical Society, Division of Fluid Dynamics Meeting, Providence, RI, November 18-20, 1984 (given for D.D. Sheu and W.K. George).

"Application of Lumley's Orthogonal Decomposition to the Axisymmetric Jet Mixing Layer: The Experiments," Mixed Fluids Conference, Owasco Conference Center, Moravia, New York, March 30 - April 1, 1984.