

THE UNIVERSITY OF TEXAS AT DALLAS

William Anderson

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Google Scholar: \square

Education:

June, 2011: Ph.D., Mechanical Engineering [Adviser: C. Meneveau], Johns Hopkins University May, 2009: M.S., Mechanical Engineering [Adviser: C. Meneveau], Johns Hopkins University July, 2007: M.S., Civil Engineering, Texas Tech University January, 2004: B.S., Civil Engineering, James Cook University

Appointments:

Aug., 2020: **Dean's Fellow Program**, Erik Jonsson School of Engineering, UT Dallas, for the project "Holistic admissions at UT Dallas: enhancing graduate diversity through inclusive recruitment and graduate community-building initiatives"

May, 2020: Visiting Professor, École Supérieure de Physique et de Chimie Industrielles de la Ville de Paris, "Chaire Joliot" program. Declined due to Coronavirus.

2018–present: Associate Professor, University of Texas at Dallas, Mech. Engineering Department 2018–present: Eugene McDermott Professor, University of Texas at Dallas

2014–2018: Assistant Professor, University of Texas at Dallas, Mech. Engineering Department

2011–2014: Assistant Professor, Baylor University, Mechanical Engineering Department

2007–2011: Research Assistant, Johns Hopkins University, Dept. of Mechanical Engineering

2006–2007: Research Assistant, Texas Tech University, Dept. of Civil Engineering

2004–2005: Consulting Engineer, AECOM, Brisbane, Queensland, Australia

Honors, Publicity:

Sept., 2018: "Buoyancy effects on large-scale amplitude modulation of small-scale structures in atmospheric boundary layers", published in the *Journal of Fluid Mechanics*, selected for coverage as "*Focus on Fluids*" article (Katul, G, 2019: The Anatomy of large-scale motion in atmospheric boundary layers. J. Fluid Mech.-Focus on Fluids **858**.

Oct., 2017: "Turbulent flow over craters on Mars: vorticity dynamics reveal aeolian excavation mechanism", published in *Physical Review E*, selected as *Focus* article in the American Physical Society's *Physics* journal. Oct., 2016: Invited Speaker: **Perot Museum of Science and Nature, Social Science Evening, Dallas, Texas**

April, 2016: American Geophysical Union, Congressional Visit Days: Texas delegate April, 2015: Nominated for Presidential Early Career Award for Scientists and Engineers Nominating PM: Dr. R. Ponnapan, Air Force Office of Scientific Research

Feb., 2014: Young Investigator Program Award: U.S. Air Force Office of Scientific Research

August, 2010: Best Student Presentation Award: American Meteorological Society

Anderson W, Meneveau C, 2010: A dynamic roughness model for LES of boundary layer flow over multiscale, fractal-like surfaces. American Met. Soc., Proc. of 19th Symp. on Boundary Layers and Turbulence, Keystone, CO

May, 2009: Creel Family Teaching Award: The Johns Hopkins University, Department of Mechanical Engineering (nominated and voted on by students and faculty; presented to one graduate student in mechanical engineering each year at The Johns Hopkins Whiting School of Engineering Convocation Awards Ceremony)

August, 2007: Mechanical Engineering Departmental Fellowship: The Johns Hopkins University, Dept. of Mechanical Engineering

January, 2005: Academic Medal and Engineering and Information Technology Distinguished Student Prize: James Cook University

January, 2005: Engineering award for Fluid Dynamics and Oceanography: James Cook University and Townsville Port Authority

Research Interests:

Turbulent flows, environmental fluid dynamics, boundary layer meteorology

Affiliations and Service:

American Institute of Aeronautics and Astronautics, American Society of Mechanical Engineers, American Physical Society, American Geophysical Union, American Meteorological Society

Session chair, 2012: American Institute of Aeronautics and Astronautics, Fluid Dynamics Conference

Session chair, 2013: American Institute of Aeronautics and Astronautics, 51st Aerospace Sciences Meeting

Session chair, 2016: American Meteorological Society, 21st Symposium on Boundary Layers and Turbulence

Co-convener, 2012: American Geophysical Union, Fall Meeting, Special Session, "Aeolian processes and desert landscape development: feedbacks among atmospheric boundary layer turbulence, sediment transport, and morphodynamics"

Co-convener, Session Chair: Texas Fluid Dynamics Meeting (2013, 2014)

Co-convener, 2014: American Geophysical Union, Fall Meeting, Special Session, "Complex Geophysical Flows and Morphological Complexity Across Scales"

Co-convener, 2015: American Geophysical Union, Fall Meeting, Session "A33B: Atmospheric Boundary Layer Processes and Turbulence" (1 poster session; 2 oral sessions).

Co-convener, 2016: American Geophysical Union, Fall Meeting, Session "Atmospheric Boundary Layer Processes and Turbulence" (1 poster session; 2 oral sessions).

Primary convener, 2016: American Geophysical Union, Fall Meeting, Session "Aeolian Research at the Interface of Biophysical, Sedimentary, and Atmospheric Processes" (1 poster session; 1 oral session).

Convener, 2017, 2018, 2019, 2020: Bluebonnet Symposium on Thermal-Fluid Sciences, Graduate student and post-doctoral scholar symposium. Southern Methodist University, Dallas, Texas.

Primary convener, 2017: American Geophysical Union, Fall Meeting, Session "Aeolian Research at the Interface of Biophysical, Sedimentary, and Atmospheric Processes" (1 poster session; 1 oral session).

Co-convener, 2017: American Geophysical Union, Fall Meeting, Session "Atmospheric Boundary Layer

Processes and Turbulence" (1 poster session; 2 oral sessions).

Symposium co-chair, 2018: American Meteorological Society, "23rd Symposium on Boundary Layers on Turbulence", Norman, OK.

Session Chair: American Institute of Aeronautics and Astronautics (2012 Summer Conference and 51stAerospace Sciences Meeting); Texas Fluid Dynamics Meeting (2013); University of New Hampshire, Workshop on High Reynolds Number Boundary Layers (2013)

Teaching:

Spring 2020	University of Texas at Dallas (Professor)	Convective Heat Transfer	
Spring 2017	University of Texas at Dallas (Professor)	Geophysical Fluid Dynamics	
2014–present	University of Texas at Dallas (Professor)	Introduction to Engineering (Undergraduate), Ther- modynamics (Undergraduate), Fluid Mechanics (Undergraduate), Incompressible Fluid Mechanics (Graduate)	
2011–2014	Baylor University (Professor)	Introduction to Thermodynamics (Undergraduate), Advanced Thermodynamics (Undergraduate), Fluid Mechanics (Undergraduate), Intermediate Fluid Me- chanics (Graduate), Computational Fluid Dynamics (Graduate)	
2008-2009	Johns Hopkins University (TA)	Fluid Mechanics	
2007	Texas Tech University (TA)	Introduction to Meteorology	
2003 - 2004	James Cook University (TA)	Statics, Dynamics, Materials Science	

Peer-Review Journal Publications:

Summary: 41 peer-review journal articles, 0 peer-review conference papers *Student of Anderson; ⁺Post-doctoral scholar of Anderson; [†]Corresponding author

2021_

- Rana S^{*}, Anderson W[†], Day M, 2021: An entrainment paradox: how hysteretic saltation and secondary transport enable atmospheric uptake of aeolian source materials. *Journal of Geophysical Research-Atmospheres* 126, e2020JD033493-1—21
- Day M[†], Anderson W, 2021: Wind erosion on Mars exposes ideal targets for sample return. Geophysical Research Letters 48, doi.org/10.1029/2020GL090580
- Zheng Y^{*}, Anderson W[†], 2021: Flow-roughness heterogeneity: critical obliquity and salient parameters. J. Fluid Mech. 913, A12-1−25

2020_

- Bou-Zeid E[†], Anderson W, Katul GG, Mahrt L, 2020: The Persistent Challenge of Surface Heterogeneity in Boundary-Layer Meteorology: A Review. Boundary-Layer Meteorology https://doi.org/10.1007/s10546-020-00551-8
- Stoll R[†], Gibbs JE, Salesky S, Anderson W, 2020: Review: Large-Eddy Simulation of the Atmospheric Boundary Layer. Boundary-Layer Meteorology https://doi.org/10.1007/s10546-020-00556-3
- Anderson W[†], Salesky S, 2020: Uniform momentum zone scaling arguments from DNS of inertiadominated channel turbulence. J. Fluid Mech. 906, DOI: https://doi.org/10.1017/jfm.2020.800.

- 35. Salesky S[†], Anderson W, 2020: Coherent structures modulate atmospheric surface layer fluxgradient relationships. *Physical Review Letters* **125**, 124501
- Rana S^{*}, Anderson W[†], Day M, 2020: Turbulence-Based Model for Sub-Threshold Aeolian Saltation. Geophysical Research Letters 47, e2020GL088050.

2019_

- Anderson W,[†], 2019: Turbulent channel flow over heterogeneous roughness at oblique angles. J. Fluid Mech. 886, A15-1–15
- Salesky S[†], Anderson W, 2019: Revisiting inclination of large-scale motions in unstably stratified channel flow. J. Fluid Mech. 884, R5-1—11
- Shrestha K⁺, Anderson W[†], 2019: Coastal Langmuir circulations induce phase-locked modulation of bathymetric stress. *Environmental Fluid Mechanics* https://doi.org/10.1007/s10652-019-09727-4
- Wang C^{*}, Anderson W[†], 2019: Turbulence coherence within canonical and realistic dune-field roughness sublayers. *Boundary-Layer Meteorol.* 173, 409−434
- 29. Shrestha K⁺, Anderson W[†], Tejada-Martinez A., Kuehl J., 2019: Orientation of coastal-zone Langmuir cells forced by wind, wave, and mean current at variable obliquity. J. Fluid Mech. 879, 716–743
- 28. Anderson \mathbf{W}^{\dagger} , 2019: Non-periodic phase-space trajectories of roughness-driven secondary flows in high- Re_{τ} boundary layers and channels. J. Fluid Mech. 869, 27–84.
- 27. Zhu X^{*}, Anderson W[†], 2018: Turbulent flows over urban-like fractal landscapes: prognostic models for surface parameterizations. Journal of Turbulence **19**, 1–22

2018

- 26. Salesky S[†], Anderson W, 2018: Buoyancy effects on large-scale motions in convective atmospheric boundary layers: implications for modulation of near-wall processes. J. Fluid Mech. 856, 135—168 Article selected for coverage as Focus on Fluids article "The anatomy of large-scale motion in atmospheric boundary layers" (G. Katul, Duke), in upcoming edition of JFM.
- 25. Wang C^{*}, Anderson W[†], 2018: Large-eddy simulation of turbulent flow over spanwise-offset barchan dunes: Interdune vortex stretching drives asymmetric erosion. *Physical Review E* **98**, 033112.
- 24. Awasthi A^{*}, **Anderson W**[†], 2018: Numerical study of turbulent channel flow perturbed by spanwise topographic heterogeneity: Amplitude and frequency modulation within low- and high-momentum pathways. *Physical Review Fluids* **3**, 044602.
- Anderson W[†], Jianzhi Yang⁺, Shrestha K⁺, Awasthi A^{*}, 2018: Turbulent secondary flows in wall turbulence: vortex forcing, scaling arguments, and similarity solution. *Environmental Fluid Mechanics* 18, 1351–1378.
- 22. Shrestha K^{+,†}, Kuehl J, Anderson W, 2018: Numerical study of Langmuir turbulence in coastal regions. J. Phys. Oceanography, doi.org/10.1175/JPO-D-17-0067.1.
- 2017_
 - 21. Anderson W[†], Day K, 2017: Turbulent flows over crater-like obstacles: vorticity dynamics reveal deflationary mechanism. *Physical Review E* 96, 043110.
 Article selected for coverage as *Focus* article, "Winds can make a Martian mountain", in the American Physical Society's *Physics* journal.
 - 20. Ryu J, Kuehl J[†], Shrestha K⁺, Anderson W, 2017: Brief communication: A nonlinear self-similar solution to barotropic flow over varying topography. Nonlinear Processes in Geophysics 25, 1–5.

Yang J⁺, Anderson W[†], 2017: Numerical Study of Turbulent Channel Flow over Surfaces with Variable Spanwise Heterogeneities: Topographically-driven Secondary Flows Affect Outer-layer Similarity of Turbulent Length Scales. Flow, Turbulence, and Combustion 100, 1–17.

2016_

- 18. Wang C*, Tang Z, Bristow N, Blois G, Christensen KT, Kocurek G, Anderson W[†], 2016: Numerical and experimental study of flow over canonical and natural sand dune landscapes: bedform geomorphology and proximal dune interactions. Computers and Fluids, Invited Contribution to Special Edition on DNS/LES of Geophysical Flows doi.org/10.1016/j.compfluid.2016.11.005.
- Li Q, Bou-Zeid E[†], Anderson W, Grimmond S, Hultmark S, 2016: Quality and reliability of LES of convective scalar transfer at high Reynolds numbers. *International Journal of Heat and Mass Transport* 102, 959—970.
- Zhu X*, Iungo GV, Leonardi S, Anderson W[†], 2016: Large-eddy simulation study of urban-like topography statistical moments relevant to setting roughness length via a priori models. Boundary-Layer Meteorology doi:10.1007/s10546-016-0198-x.
- 15. Ravinatha C^{*}, Anderson W[†], 2016: Conditionally averaged large-scale motions in the neutral atmospheric boundary layer: insights for aeolian processes. *Boundary-Layer Meteorology* **162**, 21−−41.
- 14. Lanigan D^{*}, Stout J, Anderson W[†], 2016: Atmospheric stability and diurnal patterns of aeolian saltation on the Llano Estacado. *Aeolian Research* **21**, 131-137.
- 13. Day M, Anderson W, Kocurek G[†], Mohrig D, 2016: Carving intra-crater layered deposits with wind on Mars. *Geophysical Research Letters* **43**, doi:10.1002/2016GL068011.
- Li Q, Bou-Zeid E[†], Anderson W, 2016: The impact and treatment of the Gibbs phenomenon in immersed boundary method simulations of momentum and scalar transport. *Journal of Computational Physics* 310, 237-251.
- 11. Anderson W^{\dagger} , 2016: Amplitude modulation of streamwise velocity fluctuations in the roughness sublayer: evidence from large-eddy simulations. *Journal of Fluid Mechanics* **789**: 567-588.

2015_

- Anderson W[†], Barros JM, Christensen KT, Awasthi A^{*}, 2015: Turbulent secondary flows induced by streamwise-elongated roughness. *Journal of Fluid Mechanics* 768, 316-347.
- Anderson W[†], Li Q, Bou-Zeid E, 2015: Transient dynamics of coherent motions in an urban-like roughness sublayer. *Journal of Turbulence* 16, 809-831.

2014_

- Willingham D^{*}, Anderson W[†], Kenneth T. Christensen, Julio Barros, 2014: Turbulent boundary layer flow over transverse aerodynamic roughness transitions: induced mixing and flow characterization. *Physics of Fluids* 26, 025111-1-16.
- 7. Anderson W[†], Marcelo Chamecki, 2014: A numerical study of turbulent flow over complex aeolian dune fields: the White Sands National Monument. *Physical Review E* **89**, 013005-1-14.

2013_

 Anderson W⁺, 2013: Passive scalar roughness lengths for atmospheric boundary layer flow over complex, fractal topographies. *Env. Fluid Mech.*, DOI: 10.1007/s10652-013-9272-9.

2012

- 5. Anderson W[†], 2012: An immersed boundary method wall model for high-Reynolds number channel flow over complex topography. *Int. J. Numer. Meth. Fluids*, DOI: 10.1002/fld.3727.
- Anderson W, Passalacqua P, Porté-Agel F, Meneveau C, 2012: Large-eddy simulation of atmospheric boundary layer flow over fluvial-like landscapes using a dynamic roughness model. *Boundary-Layer Met.* 144, 263–286.

pre-2011_

- Anderson W, Meneveau C, 2011: A dynamic large-eddy simulation model for boundary layer flow over multiscale, fractal-like surfaces. J. Fluid Mech. 679, 288—314.
- Anderson W, Meneveau C, 2010: A large-eddy simulation model for boundary-layer flow over surfaces with horizontally resolved but vertically unresolved roughness elements. *Boundary-Layer Met.* 137, 397—415.
- Anderson W, Basu S, Letchford C, 2007: Comparison of two scale-dependent dynamic subgrid-scale models for simulation of neutrally buoyant shear-driven atmospheric boundary layer flows. *Env. Fluid Mech.* 7, 195—215.



Figure 1: Google Scholar graphical report of annual citations of peer-review publications, as of July 27, 2017. For current citation report, please visit \square .

Proceedings:

*Student of Anderson; +Post-doctoral scholar of Anderson; †Presenting author

2021_

Invited Talk: Elie Bou-Zeid[†], Mohammad Allouche, Joseph Fogarty, Hamidreza Omidvar, William Anderson, Gabriel G. Katul, Larry Mahrt, 2021: Proceedings of American Geophysical Union "Fall Meeting", New Orleans, LA.

Talk: Salesky S^{\dagger} , Calaf M, Anderson W, 2021: Proceedings of American Geophysical Union "Fall Meeting", New Orleans, LA.

Talk: Zheng Y^{*}, Anderson W[†], 2021: Proceedings of American Geophysical Union "Fall Meeting", New Orleans, LA.

Talk: Zheng $Y^{*,\dagger}$, Anderson W, 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ.

Talk: Liberzon D, van Hout R^{\dagger} , Joshi P^{*}, **Anderson W**, 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ. Talk: Joshi $P^{*,\dagger}$, Anderson W, 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ.

Talk: Rana S^{*,†}, **Anderson W**, 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ.

Talk: Zheng Y^{*}, Anderson W[†], 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ.

Talk: Salesky S[†], Calaf M, **Anderson W**, 2021: Proceedings of American Physical Society "Division of Fluid Dynamics", Phoenix, AZ.

2020_

 2019_{-}

Nothing to report: all events canceled due to COVID-19 pandemic.

Talk: Salesky S^{\dagger} , Anderson W, 2019: Proceedings of American Geophysical Union "Fall Meeting", San Francisco, Calif.

Talk: Anderson W^{\dagger} , 2019: Proceedings of American Geophysical Union "Fall Meeting", San Francisco, Calif.

Talk: Anderson W^{\dagger} , 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Poster: Yang $Z^{*,\dagger}$, Anderson W, 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Talk: Santosh R^{*,†}, **Anderson W**, 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Poster: Wang $C^{*,\dagger}$, Anderson W, 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Poster: Shrestha $K^{+,\dagger}$, Anderson W, 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Talk: Wang $C^{*,\dagger}$, Anderson W, 2019: Proceedings of the Bluebonnet Symposium on Thermal-Fluid Sciences, Dallas, Texas.

Talk: Salesky S[†], **Anderson W**, 2019: Proceedings of American Physical Society, Division of Fluid Dynamics, Seattle, Washington.

Talk: Rana $S^{*,\dagger}$, Anderson W, 2019: Proceedings of the Bluebonnet Symposium on Thermal-Fluid Sciences, Dallas, Texas.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, 2019: Proceedings of the Bluebonnet Symposium on Thermal-Fluid Sciences, Dallas, Texas.

Talk: Shrestha K^{+,†}, Kuehl J, **Anderson W**, 2019: Proceedings of the Gulf of Mexico Oil Spill and Ecosystem Science Conference, New Orleans, Louisiana.

Talk: Salesky S^{\dagger}, Anderson W, 2018: Proceedings of American Geophysical Union "Fall Meeting", Washington, D.C.

Talk: Salesky S^{\dagger} , Anderson W, 2018: Proceedings of American Physical Society, Division of Fluid Dynamics, Atlanta, Georgia.

Talk: Zhu $X^{*,\dagger}$, Anderson W, 2018: Proceedings of American Physical Society, Division of Fluid Dynamics, Atlanta, Georgia.

Talk: Chao W^{*,†}, **Anderson W**, 2018: Proceedings of American Physical Society, Division of Fluid Dynamics, Atlanta, Georgia.

Talk: Awasthi A^{*}, Anderson W^{\dagger} , 2018: Proceedings of American Physical Society, Division of Fluid Dynamics, Atlanta, Georgia.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, 2018: Proceedings of American Physical Society, Division of Fluid Dynamics, Atlanta, Georgia.

Talk: Anderson \mathbf{W}^{\dagger} , 2018: Proceedings of the World Congress on Computational Mechanics, New York, NY (Invited speaker in mini-symposium).

Talk: Zhu X^{*,†}, **Anderson W**, 2018: Proceedings of the American Meteorological Society, Symposium on Boundary Layers and Turbulence, Oklahoma City, OK.

Talk: Salesky S^{\dagger} , Anderson W, 2018: Proceedings of the American Meteorological Society, Symposium on Boundary Layers and Turbulence, Oklahoma City, OK.

Talk: Zhu X^{*}, Anderson W[†], 2018: Proceedings of the 8th International Symposium on Environmental Hydraulics, South Bend, IN.

Talk: Anderson W^{\dagger} , Yang J⁺, Shrestha K⁺, Awasthi A^{*}, 2018: Proceedings of the 8th International Symposium on Environmental Hydraulics, South Bend, IN.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, Kuehl J, 2018: Proceedings of the Gulf of Mexico Research Initiative, Gulf of Mexico Oilspill and Ecosystem Science Conference, New Orleans, La.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, Kuehl J, 2018: Proceedings of the Gulf of Mexico Research Initiative, Gulf of Mexico Oilspill and Ecosystem Science Conference, New Orleans, La.

Talk: Anderson W^{\dagger} , Shrestha K⁺, 2018: Proceedings of World Congress on Computational Mechanics, New York, NY.

2017_

Talk: Mcmahon[†], Kuehl, Shrestha⁺, **Anderson W**, 2017: Open-Coastal Ocean Connectivity Through Bottom Boundary Layer Observations and LES Modeling, "Gordon Conference on Multi-Scale Coastal Ocean Dynamics and Exchange Processes", University of New England, Biddeford ME.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, 2017: Proceedings of American Geophysical Union, "Fall Meeting", New Orleans, Louisiana.

Talk: Anderson \mathbf{W}^{\dagger} , 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Zhu $X^{*,\dagger}$, Anderson W, 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Chao $W^{*,\dagger}$, Anderson W, 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Awasthi A^{*,†}, **Anderson W**, 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Yang $J^{+,\dagger}$, Anderson W, 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, 2017: Proceedings of American Physical Society, Division of Fluid Dynamics, Denver, Colorado.

Talk: Anderson W^{\dagger} , Day M, Kocurek G, 2017: Proceedings of Joint Workshop of Mathematicians, Biogeochemists and Atmospheric Scientists, Helsinki, Finland.

Talk: Anderson W^{\dagger} , Day M, Kocurek G, 2017: Proceedings of Meteorology and Climate – Modeling for Air Quality, Davis, California.

Talk: Anderson \mathbf{W}^{\dagger} , Day M, Kocurek G, 2017: Proceedings of European Turbulence Conference, Stockholm, Sweden.

Talk: Anderson W^{\dagger} , Day M, Kocurek G, 2017: Proceedings of Engineering Mechanics Institute (EMI) Conference, University of California at San Diego, San Diego, Calif.

Talk: Anderson W^{\dagger} , Day M, Kocurek G, 2017: Proceedings of Japanese Geoscience Union-American Geophysical Union Joint Meeting, Makahari Messe, Japan.

Talk: Bristow N^{\dagger}, Wang C⁺, **Anderson W**, Blois G, Christensen K, 2017: Proceedings of 5th Planetary Dunes Workshop, St. George, Utah.

Talk: Wang $C^{+,\dagger}$, Bristow N, Blois G, Christensen K, **Anderson W**, 2017: Proceedings of 5th Planetary Dunes Workshop, St. George, Utah.

Talk: Shrestha K^{+,†}, **Anderson W**, Kuehl J, 2017: Proceedings of the Gulf of Mexico Research Initiative, Gulf of Mexico Oilspill and Ecosystem Science Conference, New Orleans, La. 2016.

Talk: Ravinatha $C^{*,\dagger}$, Anderson W, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Wang $C^{*,\dagger}$, Nate, Gianluca, Ken, **Anderson W**, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Zhu $X^{*,\dagger}$, **Anderson W**, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Awasthi $A^{*,\dagger}$, Gokul, Ken, **Anderson W**, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Yang $J^{+,\dagger}$, Anderson W, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Anderson \mathbf{W}^{\dagger} , 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Shrestha $K^{+,\dagger}$, Anderson W, 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Talk: Anderson W^* , 2016: Proceedings of American Physical Society, Annual Meeting of the Division of Fluid Dynamics, Portland, OR.

Poster: Shrestha $K^{+,\dagger}$, Anderson W, 2016: Proceedings of American Geophysical Union, Fall Meeting, San Francisco, CA.

Talk: Santoni C^{\dagger}, Ciri U, **Anderson W**, Leonardi S, 2016: Proceedings of International Colloquium of Wind-Power Plants: Interaction, Control, and Integration, Richardson, TX.

Poster: Chinthaka R^{*,†}, **Anderson W**, 2016: Proceedings of American Meteorological Society, Symposium on Boundary Layers and Turbulence, Salt Lake City, UT.

Talk: Zhu $X^{*,\dagger}$, Anderson W, 2016: Proceedings of American Meteorological Society, Symposium on Boundary Layers and Turbulence, Salt Lake City, UT.

Talk: Awasthi A^{*}, **Anderson W**^{\dagger}, 2016: Proceedings of American Meteorological Society, Symposium on Boundary Layers and Turbulence, Salt Lake City, UT.

Talk: Li Q^{\dagger} , Bou-Zeid E, Anderson W, 2016: Proceedings of American Meteorological Society, Symposium on Boundary Layers and Turbulence, Salt Lake City, UT.

Talk: Santoni C^{\dagger}, Umberto C, **Anderson W**, Leonardi S, 2016: Proceedings of the International Colloquium on Wind-Power Plants, Richardson, TX.

Poster: Garcia Cartagena E[†], Santoni C, Umberto C, **Anderson W**, Iungo GV, Leonardi S, 2016: Proceedings of the International Colloquium on Wind-Power Plants, Richardson, TX. 2015_____

Poster: Anderson W^{\dagger} , Chinthaka R^{*}, Lanigan D^{*}, Stout J, 2015: Proceedings of American Geophysical Union, Fall Meeting, San Francisco, CA.

Talk: Li Q^{\dagger} , Bou-Zeid E, Anderson W, Grimmond S, 2015: Proceedings of American Geophysical Union, Fall Meeting, San Francisco, CA.

Talk: Lanigan D^{*}, Anderson W[†], 2015: Proceedings American Physical Society 68th Division of Fluid Dynamics, Boston, MA.

Talk: Awasthi A*, Anderson W^{\dagger}, 2015: Proceedings American Physical Society 68th Division of Fluid Dynamics, Boston, MA.

Talk: Aliakbari Miyanmahaleh $M^{*,\dagger}$, Anderson W, 2015: Proceedings American Physical Society 68th Division of Fluid Dynamics, Boston, MA.

Poster: Awasthi A^{*,†}, **Anderson W**, 2015: Proceedings American Physical Society 68th Division of Fluid Dynamics, Boston, MA.

Talk: Zhu $X^{*,\dagger}$, Anderson W, 2015: Proceedings American Physical Society 68th Division of Fluid Dynamics, Boston, MA.

Talk: Bou-Zeid E^{\dagger} , Li Q, Anderson W, Grimmond S, 2015: Proceedings of U.S. National Congress on Computational Mechanics, San Diego, CA.

Talk: Li Q^{\dagger} , Anderson W, Bou-Zeid E, Grimmond S, 2015: Proceedings of 9th International Conference on Urban Climate, Paris, France.

Talk: Awasthi A^{*}, AliakbariMiyanmahaleh M^{*}, **Anderson W**[†], Barros, Christensen, 2015: Proceedings of "Whither Turbulence" and Big Data in the 21st Century, Corsica, France.

Poster: Anderson W^{\dagger} , Blois G, Christensen K, Best J, Kocurek G, 2015: Proceedings of 4th International Planetary Dunes Workshop, Boise, ID.

2014_

Anderson W^{\dagger}, Li Q, Bou-Zeid E, Zhu X^{*}, Saha S^{*}, 2014: Proc. of American Geophysical Union, Fall Meeting, San Francisco, CA.

Barros JM[†], Blois G, **Anderson W**, Tang Z, Barros JM, Best J, Christensen, KT, 2014: Proc. of American Geophysical Union, Fall Meeting, San Francisco, CA.

Blois G^{\dagger} , Anderson W, Barros J, Christensen KT, 2014: Proc. of American Physical Society, Division of Fluid Dynamics, San Francisco, CA.

Li Q^{\dagger} , Bou-Zeid E, Anderson W, Grimmond S, 2014: Proc. of American Physical Society, Division of Fluid Dynamics, San Francisco, CA.

Anderson W^{\dagger}, Barros JM, Christensen KT, Awasthi A^{*}, 2014: Proc. of American Physical Society, Division of Fluid Dynamics, San Francisco, CA.

Anderson \mathbf{W}^{\dagger} , Li Q, Bou-Zeid E, Zhu X^{*}, Saha S^{*}, 2014: Proc. of American Physical Society, Division of Fluid Dynamics, San Francisco, CA.

Anderson W^{\dagger}, Chamecki M, Kocurek G, Mohrig D, 2014: *Proc. of Geological Society of America, Vancouver, Canada.*

Blois G[†], Anderson W, Tang Z, Barros JM, Best J, Christensen, KT, 2014: Proc. of Geological Society of America, Vancouver, Canada.

Day MD[†], Kocurek GA, Bridges NT, Ewing RC, **Anderson W**, Newman CE, MSL Team: *Proc. of Geological Society of America, Vancouver, Canada.*

Anderson W^{\dagger}, Li Q, Bou-Zeid E, 2014: Proc. of American Meteorological Society, Symposium on Boundary Layers and Turbulence, Leeds, England.

Anderson W^{\dagger}, Barros JM, Christensen, KT, 2014: Proc. of United States National Congress on Theoretical and Applied Mechanics, East Lansing, MI.

Willingham $D^{*,\dagger}$, Anderson W, Barros JM, Christensen KT, 2014: Proc. of Texas Fluid Dynamics Meeting, Lake Buchanan, TX.

Li Q[†], Bou-Zeid E, Anderson W, 2014: Proc. of American Meteorological Society, Atlanta, GA.

Day MD^{\dagger} , Kocurek GA, Anderson W, Christensen KT, 2014: Proc. of Lunar and Planetary Sciences Meeting, The Woodlands, TX.

2013_

Willingham D^{*}, Anderson W, Christensen K, Barros J, 2013: Proc. of American Physical Soc., Division of Fluid Dynamics, Pittsburgh, PA.

Anderson W, Chamecki M, Kocurek G, Mohrig D, 2013: Proc. of American Physical Soc., Division of Fluid Dynamics, Pittsburgh, PA.

Anderson W, Chamecki M, Kocurek G, Mohrig D, 2013: Proc. of the American Geophysical Union, Fall Meeting, San Francisco, CA.

Willingham D^{*}, Anderson W, 2013: Turbulent boundary layer flow over aerodynamic roughness transitions: induced mixing and flow anisotropies. *Proc. of Texas Fluid Dynamics Meeting, Lake Buchanan, TX.*

Uhlrich S^{*}, Anderson W, Kocurek D, Mohrig D, 2013: Numerical simulation of atmospheric surface layer flow over aeolian, crescenting sand dunes: the White Sands National Monument. *Proc. of Texas Fluid Dynamics Meeting, Lake Buchanan, TX.*

2012

Uhlrich S^{*}, Anderson W, Passalacqua P, Mohrig D, Kocurek G, 2012: Large-eddy Simulation of Boundary Layer Flow over Desert Sand Dune Structures. *Proc. of American Geophysical Union, Fall Meeting, San Francisco, CA*.

W. Anderson, 2012: Evaluation of scalar and momentum roughness lengths in ABL flow over complex terrain. *Proc. of American Geophysical Union, Fall Meeting, San Francisco, CA*.

Anderson W, Christensen K, 2012: LES of turbulent boundary layer flow over complex topographies and comparison with experimental data. Proc. of American Phys. Soc., 65th meeting of Div. of Fluid Dyn., San Diego, CA.

Anderson W, Passalacqua P, 2012: Application of a dynamic drag model in LES of ABL flow over fluviallike topography (Poster). Proc. of American Meteorological Society, 20th Symp. on Boundary Layers and Turbulence, Boston, MA.

Anderson W, 2012: LES of passive scalar transport in ABL flow over fractal topography and evaluation of interfacial transfer coefficient relations. *Proc. of American Meteorological Society, 20th Symp. on Boundary Layers and Turbulence, Boston, MA*.

Invited talks:

October, 2019: Department of Aerospace Engineering, Embry-Riddle Aeronautical University.

September, 2019: Department of Aerospace Engineering, Auburn University.

August, 2019: Civil Engineering and Engineering Mechanics, Columbia University.

August, 2019: Department of Civil and Environmental Engineering, Princeton University.

August, 2019: Center for Environmental and Applied Fluid Mechanics, The Johns Hopkins University.

May, 2019: School of Meteorology, University of Oklahoma.

November, 2018: Center for Astrophysics, Space Physics, and Engineering Research, Baylor University, Waco, Texas.

October, 2018: Department of Mechanical Engineering, University of Houston, Houston, Texas.

July, 2018: Invited Speaker in session "Scale-Resolving Turbulence Simulation", World Congress on Computational Mechanics, New York, NY.

June, 2018: Kavli Institute for Theoretical Physics, University of California at Santa Barbara – invited speaker in program "Planetary Boundary Layers in Atmospheres, Oceans, and Ice on Earth and Moons".

May, 2018: Department of Mechanical Engineering, Queensland University of Technology, Brisbane, Australia.

May, 2018: Department of Mechanical Engineering, Monash University, Melbourne, Australia.

May, 2018: Department of Mechanical Engineering, The University of Melbourne, Melbourne, Australia.

May, 2018: Department of Mechanical Engineering, Monash University, Melbourne, Australia.

March, 2018: Invited Seminar, Department of Mechanical and Aerospace Engineering, Arizona State University, Tempe, Arizona.

November, 2017: Guest lecture, "Turbulence modeling with large-eddy simulation", Southern Methodist University, Dallas, Texas.

November, 2017: Invited Speaker at Joint Workshop of Mathematicians, Biogeochemists and Atmospheric Scientists, Helsinki, Finland.

November, 2017: Invited Seminar at Southwest Research Institute, University of Colorado at Boulder, Denver, Colorado.

October, 2017: Department of Ocean Engineering, Texas A&M University, College Station, Texas.

September, 2017: Invited Speaker at Symposium on Meteorology and Climate – Modeling for Air Quality, Davis, California.

May, 2017: Department of Mechanical Engineering, The University of Utah.

June, 2017: Invited Speaker at Engineering Mechanics Institute (EMI) Conference, University of California at San Diego, San Diego, Calif.

May, 2017: School of Environment and Society, Tokyo Institute of Technology, Tokyo, Japan.

April, 2017: Graduate Seminar Series, Department of Mechanical and Aerospace Engineering, University of Texas at Arlington, Arlington, TX.

April, 2017: Graduate school and fluid mechanics. Dallas County Community College District, STEM Foundation, "STEM Summit", Dallas, TX.

October, 2016: *Perot Museum, Social Sciences Evening*, "Fluid flows in engineering and the environment: math, mystery ... and a few anecdotes", Dallas, TX.

September, 2016: Departmental Seminar Series, Department of Mechanical Engineering, University of Texas at Dallas, Dallas, TX.

March, 2016: Departmental Seminar Series, Department of Mechanical Engineering, Southern Methodist University, Dallas, TX.

March, 2016: Environmental Fluid Dynamics Seminar Series, College of Engineering, University of Notre Dame, Notre Dame, IN.

January, 2016: Departmental Seminar Series, Department of Mechanical Engineering, University of Houston, Houston, TX.

October, 2015: ConocoPhillips Seminar Series, Department of Geology and Geophysics, Texas A&M University, College Station, TX.

October, 2015: Computational Science Seminar Series, University of Texas at Dallas, Dallas, TX.

October, 2015: Center for Environmental and Applied Fluid Mechanics Seminar Series, The Johns Hopkins University, Baltimore, MD.

September, 2015: St. Anthony Falls Laboratory Seminar Series, University of Minnesota, St. Paul, MN.

September, 2015: Center for Astrophysics, Space Physics, and Engineering Research, Baylor University, Waco, TX.

September, 2015: Applied Research Center, University of Texas at Dallas, Dallas, TX.

September, 2015: National Weather Center Colloquia and Seminar Series, University of Oklahoma, Norman, OK.

March, 2015: Computational Science Seminar, Department of Applied Mathematics, UT Dallas.

April, 2015: Go with the flow...opportunities in fluid mechanics. Dallas County Community College District, STEM Foundation, "STEM Summit", Dallas, TX.

August, 2014: Microscale Atmospheric Dynamics Branch, Army Research Laboratory, Adelphi, MD

June, 2014: Summer Institute on Medicine and Energy, Texas Tech University

Mar., 2014: Mechanical Science and Engineering Department, University of Illinois at Urbana-Champaign

Mar., 2014: Mechanical Engineering Department, University of Texas at Austin

Feb., 2014: Mechanical Engineering Department, University of Texas at San Antonio

January, 2014: Shell Technology Center, Houston, TX

January, 2014: Extreme Fluids Group, Los Alamos National Laboratory, Los Alamos, NM

November, 2013: Symposium on High Reynolds Number Turbulence, University of New Hampshire, Durham, NH

October, 2013: Symposium on Frontiers in Fluid Dynamics – A Legacy, San Juan, Puerto Rico

July, 2013: Microscale Atmospheric Dynamics Branch, Army Research Laboratory, Adelphi, MD

March, 2013: Mechanical Engineering Department, Texas Tech University, Lubbock, Tx

February, 2013: Aerospace Engineering and Engineering Mechanics, the University of Texas at Austin, Austin, TX

March, 2012: Numerical simulation of turbulent flows responding to fractal-like topography. Baylor University, Center for Astrophysics, Space Physics, and Engineering Research

April, 2012: Ongoing studies of atmospheric turbulence responding to environmental topography and the use of high-performance computing at Baylor University. *Baylor University, High-Performance Computing Across Texas, Spring Meeting*

September, 2012: LES of passive scalar transport in atmospheric boundary layer flow over fractal topographies. Baylor University, Mechanical Engineering Department

February, 2013: Numerical simulation of turbulent boundary layer flow over complex topographies: modeling of momentum and scalar fluxes, and complex topographies. University of Texas at Austin, Department of Aerospace Engineering and Engineering Mechanics

March, 2013: Numerical simulation of turbulent boundary layer flow over complex topographies: modeling of momentum and scalar fluxes, and complex canopies. *Texas Tech University, Department Mechanical Engineering*

July, 2013: Numerical simulation of atmospheric boundary layer flow over complex topographies: modeling of momentum and scalar fluxes. Army Research Laboratory, Atmospheric Dynamics Branch

Manuscript review:

Journal of Fluid Mechanics, Physics of Fluids, Environmental Fluid Mechanics, International Journal of Numerical Methods in Fluids, Atmospheric Chemistry and Physics, Journal of Applied Meteorology and Climatology, Boundary Layer Meteorology, PLOS ONE, Journal of Fluids Engineering, Computers and Fluids, Journal of Geophysical Research

Editorial Committee:

Editorial Board: Environmental Fluid Mechanics (2017-2019) Editorial Board: Boundary-Layer Meteorology (2018-present) Proposal review:

Office of Naval Research, National Science Foundation, National Aeronautics and Space Administration, Czeck Science Foundation, Swiss National Science Foundation, German Research Foundation, Swiss National Science Foundation

Committee: Boundary-Layers and Turbulence, American Meteorological Society

Departmental service:

Fall, 2020; Spring, 2018: Coordinator, Departmental Seminar Series, Mechanical Engineering Department, UT Dallas

Fall 2018-present: Chair of Thermal-Fluid Sciences: Mechanical Engineering Department, University of Texas at Dallas

Fall 2015-Spring 2016: Coordinator, Thermal-Fluid Science Graduate Seminar Series, University of Texas at Dallas, Mechanical Engineering Department

Fall 2013-Spring 2014: Coordinator, Graduate Seminar Series, Baylor University, Mechanical Engineering Department

Spring 2015-present: Graduate Committee member, University of Texas at Dallas, Mechanical Engineering Department

Spring 2014-present: Committee member "Thermal-Fluid Sciences", Mechanical Engineering Department

Graduate Committee member: Baylor University, Mechanical Engineering Department

Spring, 2014: Lecturer Search Committee (two positions), Mechanical Engineering Department, Baylor University

University service:

Spring, 2017 - Present: Academic Senate, University of Texas at Dallas

F20-S21: Advisory Committee to the University Budget

F20-S21: University Assessment Committee

Advising: Post-Doctoral Scholars:

Post-doctoral scholar	Times	Current Position
Kalyan Shrestha	10/15 - 11/19	Post-doctoral scholar, University of Washington
Jianzhi Yang	5/16-6/17	Lecturer, Hefei University of Technology

Advising: Doctoral Students:

Student	Degree	Current Position	Times
David Willingham	Master's (Mech. Eng.)	RMF Engineering	06/12 - 07/14
Xiaowei Zhu	PhD (Mech. Eng.)	Post-doc: Johns Hopkins	08/14-08/18
Ankit Awasthi	PhD (Mech. Eng.)	Post-doc: Queen's Univ.	08/14-08/18
Chao Wang	PhD (Mech. Eng.)	Research Engineer, Jacobs Engineering	08/15 - 12/19
Santosh Rana	PhD (Mech. Eng.)	UTD	08/17-present
Parag Joshi	PhD (Mech. Eng.)	UTD	08/18-present
Yiran Zheng	PhD (Mech. Eng.)	UTD	08/18-present
Zach Tseng	PhD (Mech. Eng.)	UTD	08/21-present

Advising: Undergraduates:

Student	Summer	Topic	Support
Scott Uhlrich	$2012,\!13$	Flow over complex aeolian dunes	Industry
Peter Fager	2013	Coagulation of dust particles	NSF REU Supp.
David Lanigan	2015	Atmospheric surface layer flow over arid landscapes	NSF REU Supp.
Matthew Sundberg	2016	Inner-outer interactions in wall turbulence	Federal grant

Funded research:

1. Years: 2012 - 2014

Description: Ongoing collaboration between Anderson and geologists at UT Austin focusing on the dynamics of turbulent flows over complex, aeolian sand dunes

Sponsor: Shell Exploration and Production Company via subcontract from the University of Texas at Austin (contact: Dr. Gary Kocurek, UT Austin) Total Funds: \approx \$100,000

2. Years: 2013 - 2014

Description: Numerical studies of turbulent flows over complex natural landscapes and subgrid-scale modeling

Sponsor: Army Research Office, Environmental Sciences Program (PM: Dr. Gorden Videen) Total Funds: \$40,000

3. Years: 2014 - 2017

Description: Turbulent flow over sharp transverse aerodynamic drag transitions Sponsor: Air Force Office of Scientific Research, Young Investigator Program (PM: Dr. R. Ponnappan) Total Funds: \$240,000

4. Years: 2014 - 2018

Description: Collaborative Study: Turbulent boundary layer flows over complex roughness (PI: K. Christensen, Notre Dame)

Sponsor: Air Force Office of Scientific Research, Turbulence and Transition Program (PM: Dr. R. Ponnoppan)

Total Funds (Funds to Anderson): \$1.2 million (\$290,000)

5. Years: 2014 - 2016

Title: Dust transport in the convectively stratified atmospheric boundary layer. *Sponsor*: U.S. National Science Foundation, Physical and Dynamic Meteorology Program (PM: Dr. N. Anderson). *Total Funds*: \$221,521.05.

6. Years: Summer 2014

Title: REU Supplement for NSF Award # 15000224 (Summer, 2015). Sponsor: U.S. National Science Foundation, Physical and Dynamic Meteorology Program (PM: Dr. N. Anderson). Total Funds: \$2,940.

7. Years: 2014-2016

Title: Numerical Simulation of Atmospheric Boundary Layer Flow over Battle Field-Scale Complex Terrain: Surface Fluxes from Resolved and Unresolved Topography. *Sponsor*: Army Research Office, Atmospheric Sciences Program (PM: Dr. J. Parker).

Total Funds: \$111,214.

8. Years: 2014-2016

Title: Open-coastal ocean connectivity through bottom boundary layer observations and LES modeling.

Sponsor: Texas General Land Office, Oil Spill Response Program (PM: Dr. S. Buschang). Total Funds: \$282,214.85.

9. Years: 2017

Title: Bottom current monitoring of the Flower Garden Banks National Marine Sanctuary (Supplemental award to "Open-coastal ocean connectivity through bottom boundary layer observations and LES modeling").

Sponsor: Texas General Land Office, Oil Spill Response Program (PM: Dr. S. Buschang). Total Funds: \$27,000.

 $10. \ Years: \ 2017\mathchar`-2019$

Title: Mixing in the Texas coastal zone through coordinated simulations and field measurements: the role of Langmuir cells in sediment suspension and oil-mineral aggregation. *Sponsor*: Texas General Land Office, Oil Spill Response Program (PM: Dr. S. Buschang). *Total Funds*: \$279,420.00.

11. Years: 2016 - 2019

Title: Turbulent sediment transport in flows over realistic barchan dunes: unravelling dune interactions through coordinated flume experiments, large-eddy simulations, and reduced-order models (PI: K. Christensen, Notre Dame).

Sponsor: U.S. National Science Foundation, Fluid Dynamics Program Program (PM: Dr. D. Papavassiliou).

Total Funds (Funds to Anderson): \$450,000.00 (\$152,000).

 $12. \ Years: \ 2018{\text -}2021$

Title: NSF BSF: The Effect of Spanwise Landscape Heterogeneities on the Hydrological Cycle in the Atmospheric Boundary Layer.

Sponsor: U.S. National Science Foundation, Physical and Dynamic Meteorology Program (PM: Dr. N. Anderson).

Total Funds: \$195,000.

13. Years: 2019-2022

Title: Wall Turbulence Response to Large-scale Surface Heterogeneity: Physics-based Wall Models Derived from Coordinated Experiments and Simulations.

Sponsor: U.S. Air Force Office of Scientific Research, Unsteady Aerodynamics and Turbulent Flows Program (PM: Dr. G. Abate).
Total Funds: \$810,000.
Investigators: William Anderson (PI), Kenneth Christensen (Co-PI), Carlos Pantano (Co-PI).

14. Years: 2018-2020

Title: Flow and hypoxic conditions proximal to the Flower Garden Banks National Marine Sanctuary, Gulf of Mexico. Sponsor: Texas General Land Office, Oil Spill Response Program (PM: Dr. S. Buschang). Investigators: William Anderson (PI), J. Kuehl (Co-PI). Total Funds: \$50,000.00.

15. Years: 2021-2024

Title: Asynchronous-coupled Large-eddy Simulation of Langmuir Turbulence and the Atmospheric Surface Layer. *Sponsor*: U.S. National Science Foundation, CBET (PM: Dr. R. Josin).

Total Funds: \$239,535.

Collaborations:

Kenneth Christensen (University of Notre Dame), Gianluca Blois (University of Notre Dame), Marcelo Chamecki (University of California at Los Angeles), Elie Bou-Zeid (Princeton University), Gary Kocurek (UT Austin), Ryan Ewing (Texas A&M University), Joe Kuehl (University of Delaware), John Stout (U.S. Department of Agriculture), Mackenzie Day (University of California at Los Angeles), Rene van Hout (Technion Institute of Technology, Israel), Daniel Liberzon (Technion Institute of Technology, Israel), Scott Salesky (University of Oklahoma)

Continuing Education:

National Effective Teaching Institute (American Society for Engineering Education), June, 2012

Personal:

Married, three children. Citizenship: United States of America, Australia.

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