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Education

Massachusetts Institute of Technology	Aerospace Engineering	Ph.D. 2007
Massachusetts Institute of Technology	Aerospace Engineering	S.M. 2004
Massachusetts Institute of Technology	Aerospace Engineering	S.B. 2003
Massachusetts Institute of Technology	Physics	S.B. 2003

Appointments and Research Experience

Sep. 2021-present:	Professor, Department of Aerospace Engineering, University of Michigan, Ann Arbor, MI
Sep. 2014-Aug. 2021:	Associate Professor, Department of Aerospace Engineering, University of Michigan, Ann Arbor, MI
2008-2014:	Assistant Professor, Department of Aerospace Engineering, University of Michigan, Ann Arbor, MI
Aug. 2008:	Visiting Professor, Department of Aerospace Engineering, University of Michigan, Ann Arbor, MI
2007-2008:	Postdoctoral Associate, Department of Aerospace Engineering, Massachusetts Institute of Technology, Cambridge, MA
2003-2007:	Research Assistant, Department of Aerospace Engineering, Massachusetts Institute of Technology, Cambridge, MA
Summer 2004:	DOE Computational Science Graduate Fellowship Practicum, Argonne National Laboratory, Argonne, IL
2002-2003:	Undergraduate Researcher, Aerospace Computational Design Laboratory, Massachusetts Institute of Technology, Cambridge, MA
2001-2002:	Undergraduate Researcher, Gas Turbine Laboratory, Massachusetts Institute of Technology, Cambridge, MA
Summer 2001:	Research Experience for Undergraduates, Department of Mathematics, University of Washington, Seattle, WA
2000-2001:	Undergraduate Researcher, Laboratory for Nuclear Science Massachusetts Institute of Technology, Cambridge, MA
Summer 2000:	Research Experience for Undergraduates, Department of Physics, University of California, San Diego, CA

Professional Activities

- Associate Fellow, AIAA; Member SIAM, ASEE
- Associate Member: AIAA Fluid Dynamics Technical Committee
- Associate Editor: International Journal for Numerical Methods in Fluids
- University of Michigan Center for Research on Learning and Teaching Advisory Board

- Organizing Committees: 2012 AIAA ASM Fluid Dynamics Track, 2012 International Conference on High-Order CFD Methods, 2012 AIAA Fluid Dynamics Conference, 2013 AIAA CFD Conference and Student Paper Competition, 2015 AIAA CFD Conference, 2017 AIAA Aviation Conference, 2019 AIAA Aviation Conference.
- Reviewer for: SIAM Journal of Scientific Computing, AIAA Journal, Journal of Computational Physics, Computer Methods in Applied Mechanics and Engineering, International Journal of Numerical Methods in Fluids, International Journal of Numerical Methods in Engineering, Applied Mathematical Modeling, Communications in Applied Mathematics and Computational Science, Mathematical Methods in Applied Sciences, NSF, AFOSR, NASA

Honors and Awards

- Aerospace Engineering Department Award, 2019, 2026
- Vulcan's Education Excellence Award, 2017
- Department of Energy Office of Science Early Career Research Program Award, 2013
- Air Force Office of Scientific Research Young Investigator Award, 2011
- Sigma Gamma Tau Silver Shaft Teaching Award, 2011, 2015
- Department of Energy Computational Science Graduate Fellowship, 2003-2007
- Salisbury Award for Superior Achievement in Aeronautics and Astronautics, 2003
- Boston Area Physics Contest Winner, 2001
- National Merit Finalist, 1999

Teaching Experience

- W16, W17, W18, W20, W24: Introduction to Aerospace Engineering, AE 201, University of Michigan
- W13, W14, W15, W16, W17, W18, W19, W20, W21, W23, W25: Undergraduate Computational Methods for Aerospace Engineering, AE 423, University of Michigan
- W12, W13, W17, W19, W20, W23, W26: Graduate Advanced Computational Fluid Dynamics, AE 623, University of Michigan
- W09, F09, W10, F10, W11, F11, F12, F13, F14, F15, F17, F18, F19, W21, F22, F23, W24, F24, W26: Undergraduate Aerodynamics, AE 325, University of Michigan
- F08, F16, F18, F19, F20, F21, F22, F25: Graduate Computational Fluid Dynamics, AE 523, University of Michigan
- W24: Turbulent Flows, AE 525, University of Michigan
- F25: Hypersonic Aerothermodynamics, AE 526, University of Michigan
- S08: Undergraduate Computational Methods for Aerospace Engineering , 16.90, MIT (co-instructor)
- S07: Undergraduate Aerodynamics, 16.100, MIT (co-instructor)
- 2004-2007: Graduate Resident Tutor at MIT

Research Interests

Development of robust, scalable, and adaptive solution techniques for computational fluid dynamics. Topics include high-order methods, numerical error estimation, unsteady adaptive simulations, large-scale model reduction, parallel algorithms, and uncertainty quantification.

Current and recent research projects include:

- Hybridized discontinuous Galerkin methods
- Iterative multilevel solution methods

- Machine learning for computational fluid dynamics
- Reduced-order modeling using projection and interpolation-based methods
- Unsteady output-based error estimation and mesh adaptation
- Adaptive RANS calculations with the discontinuous Galerkin method
- Uncertainty quantification in nuclear reactor thermal-hydraulics codes
- Stochastic-space adaptive methods for uncertainty quantification
- Entropy-adjoint approach to mesh refinement
- Probabilistic approach to contaminant source inversion
- Cut-cell mesh generation
- Nonlinear model reduction for inverse problems

Publications

Journal Publications

[1] Alex Kleb, Krzysztof J. Fidkowski, and Joaquim R.R.A. Martins. Solving high Reynolds number flows on Cartesian cut-cell meshes using an ODE wall function with momentum balance. *Computers and Fluids*, 304:106882, 2026. doi:10.1016/j.compfluid.2025.106882.

[2] Alexander W. C. Coppeans, Krzysztof J. Fidkowski, and Joaquim R. R. A. Martins. Anisotropic mesh adaptation for high-order meshes in two dimensions. *Journal of Computational Physics*, 545(3):114506, January 2026. doi:10.106/j.jcp.2025.114506.

[3] Alex Kleb, Krzysztof J. Fidkowski, and Joaquim R. R. A. Martins. Automatic difference operators for the eikonal equation. *SIAM Journal on Scientific Computing*, 47(2):A991–A1016, 2025. doi:10.1137/23M161598X.

[4] Alexander W. C. Coppeans, Krzysztof J. Fidkowski, and Joaquim R. R. A. Martins. Monolithic p-adaptive high-order aerodynamic shape optimization. *AIAA Journal*, 63(3):1025–1035, 2025. doi:10.2514/1.J063892.

[5] Krzysztof J. Fidkowski. A prismatic-layer advancing-front approach to anisotropic metric-based curved mesh generation. *AIAA Journal*, 63(1):184–197, 2024. doi:https://doi.org/10.2514/1.J064644.

[6] Rakesh Halder, Mohammadmehdi Ataei, Hesam Salehipour, Krzysztof Fidkowski, and Kevin Maki. Reduced-order modeling of unsteady fluid flow using neural network ensembles. *Physics of Fluids*, 36:077140, 2024. doi:https://doi.org/10.1063/5.0207978.

[7] Rakesh Halder, Krzysztof J. Fidkowski, and Kevin J. Maki. An adaptive sampling algorithm for reduced-order models using isomap. *International Journal for Numerical Methods in Engineering*, 125(8):e7427, 2024. doi:https://doi.org/10.1002/nme.7427.

[8] Rakesh Halder, Krzysztof J. Fidkowski, and Kevin J. Maki. Non-intrusive reduced-order modeling using convolutional autoencoders. *International Journal for Numerical Methods in Engineering*, 123(21):5369–5390, 2022. doi:https://doi.org/10.1002/nme.7072.

[9] Krzysztof J. Fidkowski. Gradient-based shape optimization for unsteady turbulent simulations using field inversion and machine learning. *Aerospace Science and Technology*, 129:107843, October 2022. doi:https://doi.org/10.1016/j.ast.2022.107843.

[10] Krzysztof J. Fidkowski. Output-based error estimation and mesh adaptation for unsteady turbulent flow simulations. *Computer Methods in Applied Mechanics and Engineering*, 399:115322, 2022. doi:https://doi.org/10.1016/j.cma.2022.115322.

[11] Yifan Bai and Krzysztof J. Fidkowski. Continuous artificial-viscosity shock capturing for hybrid discontinuous Galerkin on adapted meshes. *AIAA Journal*, 60(10), 2022. Accepted. doi:10.2514/1.J061783.

[12] Sijian Tan, Zhihang Zhang, Kevin Makin, Krzysztof J. Fidkowski, and Jesse Capecelatro. Beyond well-mixed: A simple probabilistic model of airborne disease transmission in indoor spaces. *Indoor Air*, 32, 2022. doi:10.1111/ina.13015.

[13] Gustavo L.O. Halila, Anil Yildirim, Charles A. Mader, Krzysztof J. Fidkowski, and Joaquim R. R. A. Martins. Linear stability-based smooth Reynolds–averaged Navier–Stokes transition model for aerodynamic flows. *AIAA Journal*, 60(2):1077–1090, 2022. doi:10.2514/1.J060481.

[14] Krzysztof J. Fidkowski. A coupled inviscid-viscous airfoil analysis solver, revisited. *AIAA Journal*, 60(5):2961–2971, 2022. doi:10.2514/1.J061341.

[15] Vivek Ojha, Krzysztof J. Fidkowski, and Carlos E. S. Cesnik. Adaptive high-order fluid-structure interaction simulations with reduced mesh-motion errors. *AIAA Journal*, 59(6), 2021. doi:10.2514/1.J059730.

[16] Guodong Chen and Krzysztof J. Fidkowski. Output-based adaptive aerodynamic simulations using convolutional neural networks. *Computers and Fluids*, 223:104947, 2021. doi:10.1016/j.compfluid.2021.104947.

[17] Krzysztof J. Fidkowski and Guodong Chen. Metric-based, goal-oriented mesh adaptation using machine learning. *Journal of Computational Physics*, 426:109957, 2021. doi:10.1016/j.jcp.2020.109957.

[18] Gustavo L. O. Halila, Krzysztof J. Fidkowski, and Joaquim R. R. A. Martins. Towards automatic PSE-based transition to turbulence prediction for aerodynamic flows. *AIAA Journal*, 59(2), 2021. doi:10.2514/1.J059516.

[19] Gustavo L.O. Halila, Joaquim R. R. A. Martins, and Krzysztof J. Fidkowski. Adjoint-based aerodynamic shape optimization including transition to turbulence effects. *Aerospace Science and Technology*, 107:106243, 2020. doi:10.1016/j.ast.2020.106243.

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[21] Matteo Franciolini, Krzysztof J. Fidkowski, and Andrea Crivellini. Efficient discontinuous Galerkin implementations and preconditioners for implicit unsteady compressible flow simulations. *Computers and Fluids*, 203:104452, 2020. doi:10.1016/j.compfluid.2020.104542.

[22] Guodong Chen and Krzysztof J. Fidkowski. Variable-fidelity multipoint aerodynamic shape optimization with output-based adapted meshes. *Aerospace Science and Technology*, 105:106004, 2020. doi:10.1016/j.ast.2020.106004.

[23] Francesco Bassi, Alessandro Colombo, Andrea Crivellini, Krzysztof J. Fidkowski, Matteo Franciolini, Antonio Ghidoni, and Gianmaria Noventa. An entropy-adjoint p-adaptive discontinuous Galerkin method for the under-resolved simulation of turbulent flows. *AIAA Journal*, 2020. doi:10.2514/1.J058847.

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[25] Gustavo L.O. Halila, Guodong Chen, Yayun Shi, Krzysztof J. Fidkowski, Joaquim R.R.A. Martins, and Márcio Teixeira de Mendonça. High-Reynolds number transitional flow simulation via parabolized stability equations with an adaptive RANS solver. *Aerospace Science and Technology*, 91:321 – 336, 2019. URL: http://www.sciencedirect.com/science/article/pii/S1270963819304444, doi:10.1016/j.ast.2019.05.018.

[26] Kevin Doetsch and Krzysztof J. Fidkowski. Combined entropy and output-based adjoint approach for mesh refinement and error estimation. *AIAA Journal*, 57(8), 2019. doi:10.2514/1.J057836.

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[28] Krzysztof J. Fidkowski. Comparison of hybrid and standard discontinuous Galerkin methods in a mesh-optimisation setting. *International Journal of Computational Fluid Dynamics*, 33(1-2):34–42, 2019. doi:10.1080/10618562.2019.1588962.

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[53] A. Quirrenbach, J.E. Roberts, Krzysztof J. Fidkowski, W. de Vries, and W. van Breugel. Keck adaptive optics observations of the radio galaxy 3C294: A merging system at z = 1.786? *The Astrophysical Journal*, 556:108–112, July 2001. doi:10.1086/321564.

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Conference Proceedings

[1] Alexander Coppeans, Krzysztof Fidkowski, and Joaquim R. Martins. Aerodynamic shape optimization with curved mesh adaptation. AIAA Paper 2025–0782, 2025. doi:10.2514/6.2025-0782.

[2] Jacob C. Vander Schaaf, Krzysztof Fidkowski, and Dennis Bernstein. Active internal flow control using adaptive model predictive control with online, closed-loop system identification. AIAA Paper 2025–0030, 2025. doi:10.2514/6.2025-0030.

[3] Jacob C. Vander Schaaf, Qizhi Lu, Harsh Kumar, Baris Ozmadenci, Krzysztof Fidkowski, and Dennis Bernstein. Predictive cost adaptive control of in-ground-effect flight using active flow control with unmodeled, unsteady aerodynamics. AIAA Paper 2025–0033, 2025. doi:10.2514/6.2025-0033.

[4] Harsh Kumar, Jacob C. Vander Schaaf, Syed Aseem Ul Islam, Krzysztof J. Fidkowski, and Dennis S. Bernstein. Aerodynamic flow control using active bleed actuation with variable-channel width. AIAA Paper 2025–0261, 2025. doi:10.2514/6.2025-0261.

[5] Krzysztof J. Fidkowski. Basis augmentation for high-order approximation of singular perturbation problems. AIAA Paper 2025–0781, 2025. doi:10.2514/6.2025-0781.

[6] Dennis Serbin, Krzysztof J. Fidkowski, and Dennis S. Bernstein. Predictive cost adaptive control of 3DOF CFD-simulated flight. AIAA Paper 2025–2466, 2025. doi:10.2514/6.2025-2466.

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pages 87–102. Springer Nature Switzerland, 2025. doi:https://doi.org/10.1007/978-3-031-69035-8_5.

[8] Jacob C. Vander Schaaf, Qizhi Lu, Krzysztof Fidkowski, and Dennis S. Bernstein. Data-driven model predictive control of airfoil flow separation. In *2024 American Control Conference (ACC)*, pages 1568–1573, 2024. doi:10.23919/ACC60939.2024.10644206.

[9] Nathan A. Wukie, Krzysztof Fidkowski, Per-Olof Persson, Takeshi R. Fujimoto, Zhi J. Wang, James Gabbard, and Wim van Rees. High-fidelity cfd verification workshop 2024: Post-workshop mesh motion summary. AIAA Paper 2024–3696, 2024. doi:10.2514/6.2024-3696.

[10] Jacob C. Vander Schaaf, Qizhi Lu, Krzysztof Fidkowski, and Dennis S. Bernstein. Data-driven retrospective cost adaptive flow control. AIAA Paper 2024–1935, 2024. doi:10.2514/6.2024-1935.

[11] Braden E. Frigoletto, Krzysztof J. Fidkowski, and Carlos E. S. Cesnik. Towards output-based mesh adaptation for high-order fluid-structure interaction of flexible wings. AIAA Paper 2024–2445, 2024. doi:10.2514/6.2024-2445.

[12] Alexander W. Coppeans andand Krzysztof J. Fidkowski and Joaquim R.R.A. Martins. Anisotropic mesh adaptation for high-order meshes in two dimensions. AIAA Paper 2024–1020, 2024. doi:10.2514/6.2024-1020.

[13] Miles McGruder and Krzysztof Fidkowski. Incremental super-resolution reconstruction for turbulent flow on high-order discontinuous finite elements. AIAA Paper 2024–1983, 2024. doi:10.2514/6.2024-1983.

[14] Krzysztof Fidkowski. Anisotropic metric-based curved meshing using prismatic layers. AIAA Paper 2024–1019, 2024. doi:10.2514/6.2024-1019.

[15] Krzysztof Fidkowski. Correcting an algebraic transition model using field inversion and machine learning. AIAA Paper 2024–2739, 2024. doi:10.2514/6.2024-2739.

[16] Alexander Coppeans, Krzysztof Fidkowski, and Joaquim R. R. A. Martins. Comparison of finite volume and high order discontinuous Galerkin based aerodynamic shape optimization. AIAA Paper 2023–1845, 2023. doi:10.2514/6.2023-1845.

[17] Nathan A. Wukie, Krzysztof Fidkowski, Per-Olof, and Z.J. Wang. High-fidelity CFD verification workshop 2023: Mesh motion. AIAA Paper 2023–1243, 2023. doi:10.2514/6.2023-1243.

[18] Alexander O. Kleb, Krzysztof Fidkowski, and Joaquim R. R. A. Martins. Development of a Cartesian cut-cell solver for viscous flows. AIAA Paper 2023–1795, 2023. doi:10.2514/6.2023-1795.

[19] Devina P. Sanjaya and Krzysztof Fidkowski. High-order node movement discretization error control in shape optimization. AIAA Paper 2023–2367, 2023. doi:10.2514/6.2023-2367.

[20] Braden E. Frigoletto, Vivek Ojha, Krzysztof Fidkowski, and Carlos E. S. Cesnik. Development of a high-order fluid-structure interaction solver for flexible wings. AIAA Paper 2023–0185, 2023. doi:10.2514/6.2023-0185.

[21] Miles J. McGruder, Aniruddhe Pradhan, and Krzysztof Fidkowski. A neural-network based adaptive discontinuous Galerkin method for turbulent flow simulations. AIAA Paper 2023–1802, 2023. doi:10.2514/6.2023-1802.

[22] Krzysztof J. Fidkowski. Residual-based time-step control for high-order discretizations. AIAA Paper 2023–2294, 2023. doi:10.2514/6.2023-2294.

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[30] Alexander W. Coppeans, Krzysztof J. Fidkowski, and Joaquim R.R.A. Martins. Output based mesh adaptation using overset methods for structured meshes. AIAA Paper 2022–1867, 2022. doi:10.2514/6.2022-1867.

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Presentations (other than the above conference proceedings)

1. Adaptation and Optimization Using Scale-Resolving Unsteady Simulations, Jameson, Wang, Kim Symposium, Stanford University, 5 December, 2024 (Invited).

2. Output-Based Discretization Error Control in Turbulent Flow Simulations, 26th Fluid Mechanics Conference, Warsaw University of Technology, 11 September, 2024 (Invited).

3. Adjoint-based Adaptation and Optimization of Unsteady Turbulent Flows using Dynamic Closures, Aerospace Computational Design Laboratory Seminar, Massachusetts Institute of Technology, 24 February, 2023.

4. Scale-Resolving Turbulence Simulations Through Adaptive High-Order Discretizations and Data-Enabled Model Refinements, Second High-Fidelity Industrial LES/DNS Symposium, 22 September, 2021. (Invited).

5. Adjoint-Based Mesh Optimization for Hybridized Discontinuous Galerkin Methods. Finite Elements in Fluids. Chicago, IL, 2019.

6. Improving Robustness of CFD Applications through Output-Based Adaptive Methods. Centre for Computational Science and Engineering. University of Toronto Institute for Aerospace Studies. April 5, 2018.

7. Improving CFD Robustness and Fidelity Through Output-Based Adaptive Methods. Fluid Dynamics Research Consortium Fall Seminar Series. Penn State University. November 16, 2017

8. Theory and Applications of Unstructured h-p Mesh Optimization for Computational Fluid Dynamics. Applied Mathematics Seminar UC Berkeley / Lawrence Berkeley Laboratory. December 13, 2017

9. Output-Based Adaptation for Chaotic Flow Simulations. 2017 SIAM Conference on Computational Science and Engineering, Atlanta, Georgia, 2017.

10. Advances in High-Order Adaptive Methods for Unsteady Problems. Recent progress on numerical analysis of higher order methods & industrial mathematics related on computational fluid dynamics. National Institute for Mathematical Sciences, Daejeon, Korea, 2016.

11. Introduction to Output-Based Error Estimation and Mesh Adaptation. Workshop on Mesh Movement and Adaptation in Adjoint-based Design Mazurski Raj, Masuria, Poland, 2015.

12. A Comparison of Hybrid and Standard Discontinuous Galerkin Methods for Output-Based Adaptive Simulations on Deformable Domains. 13th US National Congress on Computational Mechanics San Diego, California, 2015.

13. Error Estimation and Mesh Adaptation using Output Adjoints. 38th Advanced CFD Lecture Series. Von Karman Institute, Belgium, 2015 (Invited).

14. Output-Based Adaptive Methods for Unsteady Flow Problems. 38th Advanced CFD Lecture Series. Von Karman Institute, Belgium, 2015 (Invited).

15. Output-Based Adaptive Methods for Computational Fluid Dynamics. Computational and Applied Mathematics Seminar. Purdue University, 2015 (Invited).

16. Goal-Oriented Curved Mesh Optimization for High-Order Finite-Element Methods. 2015 SIAM Conference on Computational Science and Engineering, Salt Lake City, Utah, 2015.

17. New Directions in High-Order Adaptive Methods for Computational Fluid Dynamics. K.J. Fidkowski. Symposium in Honor of Antony Jameson's 80th birthday. Stanford, CA. November 2014 (Invited).

18. A Scalable Algebraic p-Multigrid Preconditioner for High-Order DG Discretizations of Convection-Dominated Flows. K.J. Fidkowski. U.S. National Congress on Computational Mechanics. July 2013 (Keynote).

19. Output-based Adaptive Methods for Large-Scale Aerodynamics Simulations. K.J. Fidkowski. Jameson, Roe, van Leer Symposium. San Diego, CA. June 2013 (Invited).

20. Output-Based Adaptive Methods for Steady and Unsteady Aerodynamics. K.J. Fidkowski. RTWH-Aachen University Applied Mathematics Seminar, May 2013 (Invited).

21. UQ Applications in Multiphase Flow and an Adaptive MLS Sampling Method. I.M. Asher and K.J. Fidkowski. Society for Industrial and Applied Mathematics Conference on Computational Science and Engineering, February 2013.

22. Output-Based Adaptation for Hybridized Discontinuous Galerkin Methods. P.N. Klein, J.P.S. Dahm, and K.J. Fidkowski. Society for Industrial and Applied Mathematics Conference on Computational Science and Engineering, February 2013.

23. Output-based hp-adaptive Simulations of High- Reynolds Number Compressible Flows. M.A. Ceze and K.J. Fidkowski. Society for Industrial and Applied Mathematics Conference on Computational Science and Engineering, February 2013.

24. Output-Based hp-Adaptive Methods for Steady and Unsteady Aerodynamics. K.J. Fidkowski. ICES, University of Texas, September 2012 (Invited).

25. Drag Output Error Estimation for Numerical Simulations of Two-Dimensional Flows. K.J. Fidkowski. Iowa State University, March 2012 (Invited).

26. Output-Based Adaptive Simulations of Unsteady Flows. K.J. Fidkowski. University of Michigan SIAM Student Conference (Plenary talk), November 2011.

27. Output-Based Error Estimation and Adaptation for Uncertainty Quantification. I.M. Asher and K.J. Fidkowski. US National Congress on Computational Mechanics, July 2011.

28. Output-Based Adaptive Simulations of Unsteady Flows. 7th International Congress on Industrial and Applied Mathematics, July 2011.

29. Gradient-Enhanced Response Surfaces for Uncertainty Propagation in Radiation-Hydrodynamics Simulations. C.S. Miranda, J.P. Dahm, and K.J. Fidkowski. 7th International Congress on Industrial and Applied Mathematics, July 2011.

30. Adjoint-Based Numerical Error Estimation for the Unsteady Compressible Navier-Stokes Equations. K.J. Fidkowski and I.M. Asher. SIAM Conference on Computational Science and Engineering. March 2011.

31. Is My CFD Mesh Adequate? A Quantitative Answer. Gas Dynamics Research Colloquium, University of Michigan. January 2011.

32. Progress in Mesh-Adaptive Discontinuous Galerkin Methods for CFD, German Aerospace Center Seminar, May 2009 (Invited). (Similar presentation at NASA Ames in June 2009)

33. Towards Automated Mesh Adaptation Using Simplex Cut Cells. K.J. Fidkowski. Computational Research in Boston Seminar (Invited), October 2007. (Similar presentation at NASA Ames in December 2007, and at a Computation for Design and Optimization seminar in May 2008).

34. A Cut-Cell Adaptive Method for High-Order Discretizations of the Compressible Navier-Stokes Equations. K.J. Fidkowski. 2007 Computational Science Graduate Fellowship Conference in Washington D.C. June 2007.

35. An Automated, Adaptive Cut-Cell Method for Triangles and Tetrahedra. K.J. Fidkowski, University of Michigan, February 1, 2007.

36. p-Multigrid solution of high-order discontinuous Galerkin discretizations of the Euler and compressible Navier-Stokes equations. K.J. Fidkowski, D.L. Darmofal. 12th Copper Mountain Conference on Multigrid Methods in Copper Mountain, Colorado. April 3, 2005.

37. Shock capturing and robust output-based adaptation for DG. G.E. Barter, K.J. Fidkowski, D.L. Darmofal. 7th World Congress on Computational Mechanics in Los Angeles, CA. July 16, 2006.