

CURRENT POSITION Assistant Professor, Department of Nuclear Science and Engineering  
Massachusetts Institute of Technology  
Cambridge, Massachusetts, 02139 USA

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EDUCATION **University of California, Los Angeles, USA**  
Ph.D., Experimental Plasma Physics, 2008  
Thesis advisors: T.A. Carter, W. A. Peebles, L. Schmitz  
M.S., Physics, 2004

**University of Arizona, Tucson, Arizona USA**  
B.S., Physics and Mathematics 2003

HONORS AND AWARDS Office of Science, DOE Early Career Award, 2011-2016  
Marshall N. Rosenbluth Outstanding Doctoral Thesis Award in Plasma Physics, 2009  
DOE Fusion Energy Sciences Postdoctoral Fellowship (ORISE), 2008-2009  
Dissertation Year Fellowship, UCLA Department of Physics and Astronomy, 2007-2008  
DOE Fusion Energy Sciences Graduate Fellowship (ORISE) 2004-2007  
UCLA Graduate Student Research Fellowship 2003-2004  
Graesser Foundation Mathematics Scholarship 2002-2003  
University of Arizona Provost Scholarship 1999, 2000-2003  
Presidential Award for Excellence-Achievement, University of Arizona, 1999, 2000-2003  
Deans List or Honorable Mention, University of Arizona, 2000-2003  
DAAD Study Abroad Fellowship for Leipzig, Germany 1999-2000

## RESEARCH INTERESTS

plasma physics, turbulence and transport, plasma diagnostics (hardware development and synthetic/virtual diagnostic modeling), magnetic confinement fusion

## GROUP MEMBERS

- Graduate students: Choongki Sung, Cale Kasten
- Undergraduate students: Curran Oi, Victoria Winters,

## CURRENT RESEARCH PROJECTS

- Leader of DOE Joint Research Target 2012 Experiments: (1) Evolution of core turbulence across the L-I transition and (2) Boundary between ITG/TEM turbulence in high power L-mode plasmas
- Leader of International Tokamak Physics Activity (ITPA) Joint Experiment to Investigate Thomson Scattering-ECE discrepancy
- DOE Early Career Award project: Development of Correlation ECE radiometer for core turbulence measurements (grad student C. Sung and undergrad C. Oi)
- Universality of edge turbulence in tokamaks (undergrad student V. Winters)
- Fast Two-Color Interferometer for turbulence measurements (grad student C. Kasten)
- Transport-model validation; application of turbulence modeling and simulation to diagnostic design

(grad student N. Howard and Dr. M. Greenwald, PSFC)

- Experimental studies of edge and core turbulence via reflectometry (grad student A. Dominguez, with Dr. E. Marmor PSFC, in collaboration with Princeton Plasma Physics Laboratory)
- Search for the critical gradient determining turbulent electron heat transport (collaboration with Drs. J. DeBoo and C. C. Petty, General Atomics/DIII-D tokamak)
- Transport of fast ions by turbulence in tokamaks (collaboration with Drs. D. C. Pace, M. Van Zeeland, General Atomics/DIII-D tokamak; Prof. W. W. Heidbrink, University of California, Irvine)

## TEACHING

### Massachusetts Institute of Technology

- NSE 22.67 Plasma Diagnostics (Graduate).
- PHYS 8.03 Waves and Oscillations (Undergraduate, Recitation Instructor).
- NSE 22.071 Electronics, Signals and Measurement (Undergraduate)
- NSE 22.012 Seminar in Fusion and Plasma Physics (Undergraduate)

### University of Arizona

- Teaching Assistant, Math 125B Calculus II (Undergraduate)
- Tutor, Math Department (Undergraduate)

## SERVICE

### Department and Institute

- Undergraduate Recruiting Officer, Department of Nuclear Science and Engineering, MIT, 2012
- Faculty panel member, "MIT Postdocs: Mentoring and Career Development", MIT, 2012
- Graduate Registration Officer, Department of Nuclear Science and Engineering, MIT, 2009-present
- Graduate Committee, Department of Nuclear Science and Engineering, MIT, 2009-present
- Mentor, Graduate Women at MIT (GWAMIT), 2010-present
- Volunteer for PSFC Education and Outreach Events, 2010-present
- Speaker, "Discover NSE" events, 2009-present
- Speaker, "NSE Freshman Open House" events, 2009-present

### Community-wide

- Executive Committee, International Sherwood Fusion Theory Conference, 2011-present
- Founder of PSFC/C-Mod Turbulence Simulation User Group, 2010-present
- Referee for Physical Review Letters, Physics of Plasmas and Physica Scripta, , 2007-present
- Local Arrangement Coordinator, Meeting of American Physical Society, Division of Plasma Physics, 2012
- Scientific Program Committee, Meeting of American Physical Society, Division of Plasma Physics, 2011
- Physics operator for Alcator C-Mod tokamak, 2010
- Volunteer for Expand Your Horizons Education and Outreach Events, San Diego, CA, 2007-2009
- Local Organizing Committee, 15th Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating, 2008
- Volunteer for General Atomics Education and Outreach Group, 2006-2008
- UCLA Center For Multiscale Plasma Dynamics Winter School Student Organizing Committee, 2006-2008
- Dept. Physics and Astronomy Graduate Student Recruitment Student Organizing Committee, 2003-2005

## PUBLICATIONS AND PRESENTATIONS

*Invited Talks and Seminars*

8. A.E. White, “**Diagnosing Plasma Turbulence in Tomamaks,**” IAP Seminar at the MIT Plasma Science and Fusion Center Seminar, Cambridge, Massachusetts, USA, January 21, 2011
7. A.E. White, “**Correlation ECE measurements of turbulent electron temperature fluctuations in tokamaks**”, Isaac Newton Institute for Mathematical Sciences, Workshop on Kinetic-Scale Turbulence in Laboratory and Space Plasmas: Empirical Constraints, Fundamental Concepts and Unsolved Problems, Cambridge, UK, July 19-23, 2010
6. A.E. White, “**Turbulent Electron Temperature Fluctuation Measurements in the Core of the DIII-D Tokamak**”, Sixteenth Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating (EC-16), Sanya, China, 12-15, April 2010
5. A.E. White, “**Correlation ECE measurements of turbulent electron temperature fluctuations in tokamaks**”, MIT Plasma Science and Fusion Center, Spring Seminar, 2010
4. A.E. White “**Simultaneous Measurement of Electron Temperature and Density Fluctuations in the Core of DIII-D Plasmas,**” 51<sup>st</sup> APS-DPP Conference, Atlanta, GA, November 2009.
3. A.E. White “**Simultaneous Measurement of Electron Temperature and Density Fluctuations in the Core of DIII-D Plasmas and Comparison with Nonlinear Gyrokinetic Simulations,**” Physics Colloquium, UW Madison, May 6, 2009.
2. A.E. White “**Testing and Validating Nonlinear Gyrokinetic Turbulence Predictions Via Multi-Field Turbulence Profile Measurements,**” HTPD-17 Seventeenth High-Temperature Plasma Diagnostics Conference Albuquerque, New Mexico USA. 18-23 May 2008.
1. A.E. White “**Electron Temperature Fluctuations in the Core of High-Performance DIII-D Plasmas,**”, NI1.00002, 49<sup>th</sup> APS Division of Plasma Physics Conference, Orlando, FL, USA, November, 2007.

*First Author Publications*

11. A.E. White, D.C. Pace, W.W. Heidbrink, M.A. Van Zeeland, T.L. Rhodes, G.R. McKee, G. Wang, Z. Yan, J. Hillesheim, G. Staebler *Turbulent-transport of energetic ions in tokamak plasmas with on-axis neutral beam injection*, in submission, Nuclear Fusion, 2012
10. A.E. White, A.E. Hubbard, J.W. Hughes, P.T. Bonoli, M.E. Austin, A. Bader, R.W. Harvey, Y. Lin, Y. Ma, M.L. Reinke, S.J. Wukitch, *Investigation of the Thomson Scattering-ECE Discrepancy in ICRF Heated Plasmas at Alcator C-Mod*, submitted to Nuclear Fusion, 2012
9. A.E. White, P. Phillips, D.G. Whyte, A.E. Hubbard, C. Sung\*, J.W. Hughes, A. Dominguez, J. Terry, and I. Cziegler, *Electron temperature fluctuations associated with the weakly coherent mode in the edge of I-mode plasmas*, Nuclear Fusion, **51**, 113005 (2011)
8. A.E. White, N.T. Howard\*, D.R. Mikkelsen, M. Greenwald, J. Candy, R.E. Waltz, *Feasibility study for a correlation electron cyclotron emission turbulence diagnostic based on nonlinear gyrokinetic simulations*, Plasma Physics and Controlled Fusion, **53**,115003 (2011)
7. A.E. White, W.A. Peebles, T.L. Rhodes, G. Wang, *et al.*, *Correlation ECE measurements of turbulent electron temperature fluctuations in DIII-D*, Proceedings of the Sixteenth Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating (EC-16), Ed. Ron Prater, pp. 168 (2010)

6. A.E. White, W.A. Peebles, T.L. Rhodes, C.H. Holland, G. Wang, L. Schmitz, T.A. Carter, J.C. Hillesheim, E.J. Doyle, L. Zeng, G.R. McKee, G.M. Staebler, R.E. Waltz, J.C. DeBoo, C.C. Petty, and K.H. Burrell, *Measurements of the cross-phase angle between density and electron temperature fluctuations and comparison with gyrokinetic simulations*, Physics of Plasmas, **17**, 056103 (2010)
5. A.E. White, L. Schmitz, W.A. Peebles, T.L. Rhodes, T.A. Carter, G.R. McKee, M.W. Shafer, G.M. Staebler, K.H. Burrell, J.C. DeBoo, and R. Prater, *Simultaneous measurement of core electron temperature and density fluctuations during electron cyclotron heating on DIII-D*, Physics of Plasmas, **17**, 020701 (2010)
4. A.E. White, L. Schmitz, W.A. Peebles, T.A. Carter, *et al.*, *Measurements of electron temperature and density fluctuations and comparison to gyrokinetic simulation*, Proceedings of the Fifteenth Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating (EC-15), Ed. John Lohr, pp. 178 (2008)
3. A.E. White, L. Schmitz, W.A. Peebles, T.A. Carter, *et al.*, *A correlation electron cyclotron emission diagnostic and the importance of multifield fluctuation measurements for testing nonlinear gyrokinetic turbulence simulations*, Review of Scientific Instruments, **79**, 103505 (2008)
2. A.E. White, L. Schmitz, G.R. McKee, C. Holland, W.A. Peebles, T.A. Carter, M.W. Shafer, M.E. Austin, K.H. Burrell, J. Candy, J.C. DeBoo, E.J. Doyle, M.A. Makowski, R. Prater, T.L. Rhodes, G.M. Staebler, G.R. Tynan, R.E. Waltz, and G. Wang, *Measurements of core electron temperature and density fluctuations in DIII-D and comparison to nonlinear gyrokinetic simulations*, Physics of Plasmas, **15**, 056116 (2008)
1. A.E. White, S.J. Zweben, M.J. Burin, T.A. Carter, T.S. Hahm, J.A. Krommes, and R.J. Maqueda *Bispectral analysis of low- to high-confinement mode transitions in the National Spherical Torus Experiment*, Physics of Plasmas **13**, 072301 (2006)

### Co-Author Publications

23. N.T. Howard\*, M. Greenwald, A.E. White, M.L. Reinke, D. Ernst, Y. Podpaly, D.R. Mikkelsen, and J. Candy, *Measurement of plasma current dependent changes in impurity transport and comparison with nonlinear gyrokinetic simulation*, submitted for publication, Physics of Plasmas, 2012
22. E.S. Marmor, A. Dominguez, M.J. Greenwald, N. Howard, A.E. Hubbard, J.W. Hughes, C. Kessel, B. LaBombard, B. Lipschultz, M.L. Reinke, J.E. Rice, P. Snyder, J.L. Terry, A.E. White, D.G. Whyte, Alcator C-Mod Team, *Steady I-mode Plasmas in Alcator C-Mod*, submitted for publication, Physics of Plasmas, 2012
21. N.T. Howard\* *et al.*, *Quantitative comparison of experimental impurity transport with nonlinear gyrokinetic simulation in an Alcator C-Mod L-mode plasma*, submitted for publication, Nuclear Fusion, 2012
20. C. Holland *et al.*, *Testing gyrokinetic simulations of electron turbulence*, submitted for publication, Nuclear Fusion, 2012
19. M.W. Shafer, Raymond Fonck, George R. McKee, Christopher Holland, A.E. White and D.J. Schlossberg, *2D Properties of Core Turbulence on DIII-D and Comparison to Gyrokinetic Simulations*, accepted for publication, Physics of Plasmas, 2012
18. Christopher T. Holcomb, J.R. Ferron, Timothy C. Luce, J.C. DeBoo, J.M. Park, A.E. White, Francesca Turco, Terry Rhodes, E.J. Doyle, Lothar Schmitz, M.A. A. Van Zeeland and George R. McKee, *The effect of safety factor profile on transport in steady-state, high-performance scenarios*, accepted for publication, Physics of Plasmas, 2012

17. C.T. Holcomb, *et al.*, *The Effect of Safety Factor Profile On Transport in Steady-state, High-performance Scenarios*, accepted for publication, Nuclear Fusion, 2012
16. L. Schmitz, *et al.*, *Reduced electron thermal transport in low collisionality H-mode plasmas in DIII-D and the importance of TEM/ETG-scale turbulence*, Nuclear Fusion, **52** 023003 (2012)
15. J.R. Ferron *et al.*, *Optimization of the safety factor profile for high noninductive current fraction discharges in DIII-D*, Nuclear Fusion, **51** 063026 (2011)
14. G. Wang, *et al.*, *Multi-field/Multi-scale Turbulence Response to Electron Cyclotron Heating of DIII-D Ohmic Plasmas*, Physics of Plasmas, **51** 063026(2011)
13. T.L. Rhodes *et al.*, *L-mode validation studies of gyrokinetic turbulence simulations via multiscale and multifield turbulence measurements on the DIII-D tokamak*, Nuclear Fusion **18** 082504 (2011)
12. C. Holland, *et al.*, *Advances in validating gyrokinetic turbulence models against L- and H-mode plasmas*, Physics of Plasmas **18**, 056113 (2011)
11. J.C. DeBoo, C. Holland, T.L. Rhodes, L. Schmitz, G. Wang, A.E. White, M.E. Austin, E.J. Doyle, J. Hillesheim, W.A. Peebles, C.C. Petty, Z. Yan, and L. Zeng, *Probing plasma turbulence by modulating the electron temperature gradient*, Physics of Plasmas **17**, 056105 (2010)
10. T.L. Rhodes, W.A. Peebles, X. Nguyen, J.C. Hillesheim, L. Schmitz, A.E. White, and G. Wang, *Quasioptical design of integrated Doppler backscattering and correlation electron cyclotron emission systems on the DIII-D tokamak*, Rev. Sci. Instrum. **81**, 10D912 (2010)
9. J.C. Hillesheim, W.A. Peebles, T.L. Rhodes, L. Schmitz, A.E. White, and T.A. Carter, *New plasma measurements with a multichannel millimeter-wave fluctuation diagnostic system in the DIII-D tokamak (invited)*, Rev. Sci. Instrum. **81**, 10D907 (2010)
8. C. Holland, A.E. White, G.R. McKee, M.W. Shafer, *et al.*, *Implementation and application of two synthetic diagnostics for validating simulations of core tokamak turbulence*, Physics of Plasmas, **16**, 052301 (2009)
7. G.R. McKee, P. Gohil, D.J. Schlossberg, J.A. Boedo, K.H. Burrell, J.S. deGrassie, R.J. Groebner, R.A. Moyer, C.C. Petty, T.L. Rhodes, L. Schmitz, M.W. Shafer, W.M. Solomon, M. Umansky, G. Wang, A.E. White and X. Xu, *Dependence of the L- to H-mode power threshold on toroidal rotation and the link to edge turbulence dynamics*, Nuclear. Fusion **49** 115016 (2009)
6. L. Schmitz, A.E. White, G. Wang, J.C. DeBoo, J.S. deGrassie, G.R. McKee, J.C. Hillesheim, W.A. Peebles, T.L. Rhodes, T.A. Carter, E.D. Doyle, L. Zeng, K.H. Burrell, C.C. Petty, J. Kinsey, W.A. Solomon, G.M. Staebler and the DIII-D Team, *Observation of reduced core electron temperature fluctuations and intermediate wavenumber density fluctuations in H-mode plasmas*, Nuclear Fusion **49** 095004 (2009)
5. C. Holland, J. Candy, R.E. Waltz, A.E. White, G.R. McKee, M.W. Shafer, L. Schmitz and G.R. Tynan, *Validating simulations of core tokamak turbulence: current status and future directions*, J. Phys.: Conf. Ser. **125** 012043 (2008)
4. L. Schmitz, A.E. White, T.A. Carter, W.A. Peebles, T.L. Rhodes, K.H. Burrell, W. Solomon, and G.M. Staebler, *Observation of Reduced Electron-Temperature Fluctuations in the Core of H-Mode Plasmas*, Phys. Rev. Lett. **100**, 035002 (2008)
3. L. Schmitz, G. Wang, J.C. Hillesheim, T.L. Rhodes, W.A. Peebles, A.E. White, L. Zeng, T.A. Carter, and W. Solomon, *Detection of zonal flow spectra in DIII-D by a dual-channel Doppler backscattering system*, Rev. Sci. Instrum. **79**, 10F113 (2008)

2. S.J. Zweben, R.J. Maqueda, J.L. Terry, T. Munsat, J. R. Myra, D. Dippolito, D.A. Russell, J.A. Krommes, B. LeBlanc, T. Stoltzfus-Dueck, D.P. Stotler, K.M. Williams, C.E. Bush, R. Maingi, O. Grulke, S.A. Sabbagh, and A.E. White, *Structure and motion of edge turbulence in the National Spherical Torus Experiment and Alcator C-Mod* Physics of Plasmas **13**, 056114, (2006)
1. R.J. Taylor, T.A. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, D.C. Pace, L.W. Schmitz, A.E. White and T.F. Yates, *Particle pinch mitigated by radial currents in the electric tokamak*, Nuclear Fusion **45** 1634 (2005)

### Conference Presentations

54. **A.E. White**, P. Bonoli, A.E. Hubbard, J.W. Hughes, Y. Lin, Y. Ma, S.J. Wukitch, M.E. Austin, B.D. Bray, C.C. Petty, R.I. Pinsker, R. Prater, R.W. Harvey, *Investigation of the Thomson Scattering/ECE discrepancy at high temperature on Alcator C-Mod and DIII-D* [UP9.00020], American Physical Society - Division of Plasma Physics, Salt Lake City, UT, November 14-18, 2011
53. C. Sung\*, A.E. White, J. Irby, W.A. Peebles, X. Nguyen *New correlation electron cyclotron emission temperature fluctuation diagnostic for Alcator C-Mod*, [UP9.00019], American Physical Society - Division of Plasma Physics, Salt Lake City, UT, November 14-18, 2011
52. A. Dominguez\*, E.S. Marmor, J.L. Terry, J.W. Hughes, I. Cziegler, P. Ennever, T. Golfopoulos, A.E. Hubbard, B. LaBombard, B. Lipschultz, M. Porkolab, A.E. White, D.G. Whyte, *Comparison of edge fluctuation measurements and energy and particle transport for I-mode plasmas on Alcator C-Mod* [JO4.00004], American Physical Society - Division of Plasma Physics, Salt Lake City, UT, November 14-18, 2011
51. J.C. DeBoo, K.H. Burrell, C.C. Petty, S.P. Smith, A.E. White, C. Holland, E.J. Doyle, J.C. Hillesheim, T.L. Rhodes, L. Schmitz, G. Wang, L. Zeng, G.R. McKee, *Electron Profile Stiffness and Critical Gradient Studies in an L-mode Discharge in DIII-D* [UP9.00052], American Physical Society - Division of Plasma Physics, Salt Lake City, UT, November 14-18, 2011
50. M.A. Chilenski\*, T. Christensen, M. Greenwald, M.L. Reinke, J. Terry, A.E. White, P. Beiersdorfer, E. Magee, *Upgraded SXR/EUV Spectroscopy Capabilities for Alcator C-Mod* [UP9.00025], American Physical Society - Division of Plasma Physics, Salt Lake City, UT, November 14-18, 2011
49. **A.E. White** *Design of Tokamak Experiments and Fluctuation Diagnostics with Nonlinear Gyrokinetic Codes*, International Sherwood, Fusion Theory Conference, May 2 to May 4, 2011; Austin, Texas *Poster*
48. **A.E. White** *Correlation ECE and Doppler Backscattering Diagnostics for Alcator C-Mod*, [TP9.00068], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
47. R. Prater, R.J. Groebner, J. Lohr, P.A. Politzer, T.H. Osborne, M.E. Austin, E.J. Doyle, L. Zeng, R.W. Harvey, A.E. White, *Some New Results From Electron Cyclotron Heating Experiments on DIII-D*, [UP9.00037], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
46. L. Schmitz, C. Holland, T.L. Rhodes, G. Wang, J.C. Hillesheim, L. Zeng, W.A. Peebles, E.J. Doyle, G.R. McKee, A.E. White, K.H. Burrell, J.C. DeBoo, J.S. deGrassie, C.C. Petty, *Electron Thermal Transport and Multi-scale Turbulence in Low Collisionality H-mode Plasmas* [UP9.00047], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
45. C. Burns\*, S. Shehata\*, A.E. White, I. Cziegler, A. Dominguez, J.L. Terry, D.C. Pace, *Analysis tools for turbulence studies at Alcator C-Mod* [TP9.00067], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010

*Conference Presentations - Continued*

44. T.L. Rhodes, W.A. Peebles, L. Schmitz, E.J. Doyle, J.C. Hillesheim, L. Zeng, G. Wang, C.H. Holland, G.R. Tynan, A.E. White, G.R. McKee, Z. Yan, J.C. DeBoo, K.H. Burrell, C.C. Petty, D. Mikkelsen, *Multi-scale/Multi-field Turbulence Measurements to Rigorously Test Gyrokinetic Simulation Predictions on DIII-D*, [UP9.00046], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
43. C.T. Holcomb, J.R. Ferron, T.C. Luce, J.C. DeBoo, A.E. White, T.L. Rhodes, L. Schmitz, F. Turco, *Transport Dependence on Safety Factor Profile in DIII-D Steady-state Discharges* [UP9.00041], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
42. G. Wang, W.A. Peebles, T.L. Rhodes, J.C. Hillesheim, E.J. Doyle, L. Schmitz, L. Zeng, A.E. White, Z. Yan, G.R. McKee, J.C. DeBoo, C.C. Petty, K.H. Burrell, A.W. Leonard, G.M. Staebler, W.M. Solomon, *Multi-field/Multi-scale Turbulence Response to EC Heating of DIII-D Ohmic Plasmas* [UP9.00048], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
41. P. Namasondhi, C. Holland, R. Prater, J.C. DeBoo, J. Candy, G.M. Staebler, A.E. White, *Quantifying Statistical Uncertainty in Tokamak Transport Modeling* [JP9.00050], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
40. G.R. McKee, Z. Yan, R.J. Fonck, I.U. Uzun-Kaymak, T.L. Rhodes, L. Schmitz, C. Holland, A.E. White, *Variation of Turbulence and Transport with the  $T_e/T_i$  Ratio in H-mode Plasmas* [CO4.00009], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
39. F. Turco, T.C. Luce, J.R. Ferron, P.A. Politzer, M.A. Van Zeeland, S.P. Smith, A.M. Garofalo, A.D. Turnbull, C.T. Holcomb, A.E. White, M. Okabayashi, Y. In, H. Reimerdes, D.P. Brennan, R. Takahashi, *Impact of Current Profile on Transport and Stability in High Noninductive Fraction DIII-D Discharges* [CO4.00003], American Physical Society - Division of Plasma Physics, Chicago, IL, November 8-12, 2010
38. N. Howard\*, M. Greenwald, Y. Podpaly, M.L. Reinke, J.E. Rice, A.E. White, D.R. Mikkelsen, T. Puetterich, *Experimental and gyrokinetic investigation of core impurity transport in Alcator C-Mod* [PO4.00009],
37. C.T. Holcomb, J.R. Ferron, T.C. Luce, P.A. Politzer, J.C. DeBoo, T.W. Petrie, C.C. Petty, R.J. La Haye, A.E. White, F. Turco, E.J. Doyle, T.L. Rhodes, L. Zeng, *Dependence of Bootstrap Current, Stability, and Transport on the Safety Factor Profile in DIII-D Steady-state Scenario Discharges*, [CO4.00005], American Physical Society - Division of Plasma Physics Atlanta, GA, November 2-6, 2009
36. M.W. Shafer, G.R. McKee, R.J. Fonck, D.J. Schlossberg, Z. Yan, C. Holland, A.E. White, *2D Core Turbulence Properties on DIII-D*, [TP8.00007], American Physical Society - Division of Plasma Physics Atlanta, GA, November 2-6, 2009
35. G. Wang, W.A. Peebles, T.L. Rhodes, J.C. Hillesheim, E.J. Doyle, L. Schmitz, L. Zeng, A.E. White, G.R. McKee, C.C. Petty, K.H. Burrell, W.M. Solomon, *Core Turbulence and Flow Dynamics Across L-H Transition on DIII-D*, [TP8.00005] American Physical Society - Division of Plasma Physics Atlanta, GA, November 2-6, 2009
34. C. Holland, G.R. Tynan, T.L. Rhodes, W.A. Peebles, L. Schmitz, J.C. Hillesheim, G. Wang, L. Zeng, E.J. Doyle, G.R. McKee, Z. Yan, M.W. Shafer, A.E. White, J. Candy, R.E. Waltz, J.E. Kinsey, G.M. Staebler, J.C. DeBoo, R. Prater, K.H. Burrell, C.C. Petty, M.A. Makowski, *Experimental Tests of Elongation Scaling in Gyrokinetic Turbulence Simulations*, [TP8.00012], American Physical Society - Division of Plasma Physics Atlanta, GA, November 2-6, 2009

*Conference Presentations - Continued*

33. L. Schmitz, G. Wang, J.C. Hillesheim, W.A. Peebles, T.L. Rhodes, E.J. Doyle, L. Zeng, C. Holland, A.E. White, G.R. McKee, J.C. DeBoo, J.S. deGrassie, K.H. Burrell, C.C. Petty, *Measurements of the Wavenumber Spectrum of Multi-scale Turbulence in the Core of DIII-D H-mode Plasmas*, [TP8.00014], American Physical Society - Division of Plasma Physics Atlanta, GA, November 2-6, 2009
32. T.L. Rhodes, W.A. Peebles, L. Schmitz, J.C. Hillesheim, G. Wang, L. Zeng, E.J. Doyle, C. Holland, G.R. McKee, A.E. White, J.C. DeBoo, K.H. Burrell, C.C. Petty, *Turbulence and Transport Dependence on Plasma Shape in DIII-D*, [TP8.00006], American Physical Society - Division of Plasma Physics, Atlanta, GA, November 2-6, 2009
31. J.E. Ferron, T.C. Luce, P.A. Politzer, J.C. DeBoo, T.W. Petrie, C.C. Petty, R.J. La Haye, C.T. Holcomb, A.E. White, F. Turco, E.J. Doyle, T.L. Rhodes, L. Zeng, *Optimization of the Internal Magnetic Configuration for High Bootstrap Current Fraction and High Beta for Steady-state*, [JP8.00098], American Physical Society - Division of Plasma Physics, Atlanta, GA, November 2-6, 2009
30. **A.E. White** *Simultaneous Measurement of Electron Temperature and Density Fluctuations in the Core of DIII-D Plasmas*, Transport Task Force Meeting, San Diego - 17 April-1 May 2009 *Contributed talk*
29. **A.E. White** *Ratio of Electron Temperature and Density Fluctuation Amplitudes During ECH in DIII-D Ohmic and L-mode Discharges*, [PO3.00005], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008 *Contributed talk*
28. W.A. Peebles, T.L. Rhodes, A.E. White, G. Wang, J.C. Hillesheim, L. Schmitz, L. Zeng, E.J. Doyle, G.R. McKee, M.W. Shafer, J.C. DeBoo, M.A. Van Zeeland, *Multi-scale, Multi-field Turbulence Response During Electron Cyclotron Heating (ECH)*, [TP6.00009], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008
27. G. Wang, W.A. Peebles, T.L. Rhodes, J.C. Hillesheim, E.J. Doyle, L. Schmitz, A.E. White, L. Zeng, *Radial Correlation Length of Turbulent Density Fluctuations in DIII-D Plasmas* [TP6.00014], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008
26. J.C. DeBoo, G.M. Staebler, T.L. Rhodes, L. Schmitz, A.E. White, E.J. Doyle, W.A. Peebles, C. Holland, *Modulation of TEM Turbulence in DIII-D L-mode Discharges*, [PO3.00007], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008
25. T.L. Rhodes, W.A. Peebles, L. Schmitz, A.E. White, J. Hillesheim, G. Wang, L. Zeng, E.J. Doyle, G.R. McKee, M.W. Shafer, *Multi-scale Fluctuation Behavior During Balanced NBI H-mode in the DIII-D Tokamak*, [TP6.00010], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008
24. L. Schmitz, et al. *Reduction of TEM/ETG-scale Density Fluctuations in the Core and Edge of H-mode DIII-D Plasmas*, [YI2.00004], American Physical Society - Division of Plasma Physics Dallas, TX, November 17-21, 2008
23. **A.E. White** *Measurements of Electron Temperature Fluctuations*, 15th Joint Workshop on Electron Cyclotron Emission and Electron Cyclotron Resonance Heating, 10-13 March 2008, Yosemite National Park, California, USA *Contributed talk*
22. L. Zeng, T.L. Rhodes, E.J. Doyle, G. Wang, W.A. Peebles, A.E. White, T.E. Evans, R.A. Moyer, M.E. Fenstermacher, *Effect of RMP on Edge Density Profiles and Fluctuations in DIII-D*, [UP8.00026], American Physical Society - Division of Plasma Physics , Orlando, FL, November 12-16 , 2007.

*Conference Presentations - Continued*

21. R.A. Moyer, J.A. Boedo, V.A. Izzo, I. Joseph, S. Mordijck, D.L. Rudakov, J.H. Yu, T.E. Evans, N.H. Brooks, T.H. Osborne, P. Gohil, J.S. deGrassie, A.W. Leonard, M.E. Fenstermacher, C.J. Lasnier, J.G. Watkins, T.C. Jernigan, M. Jakubowski, O. Schmitz, G. Wang, A.E. White, L. Zeng, G.R. McKee, C. Rost, J.R. Dorris, *Particle Transport in RMP ELM Suppressed H-modes* [UP8.00027], American Physical Society - Division of Plasma Physics , Orlando, FL, November 12-16 , 2007.
20. J.C. DeBoo, C.C. Petty, G.M. Staebler, E.J. Doyle, T.L. Rhodes, L. Schmitz, G. Wang, A.E. White, G.R. McKee, *ITG and TEM Turbulence in DIII-D L-mode Discharges*, [UP8.00058], American Physical Society - Division of Plasma Physics , Orlando, FL, November 12-16 , 2007.
19. L. Schmitz, G. Wang, A.E. White, J. Justiniano, T.L. Rhodes, W.A. Peebles, *Doppler Reflectometry Measurements of Medium Wavenumber Density Fluctuations and Zonal Flows in DIII-D* [UP8.00056], American Physical Society - Division of Plasma Physics , Orlando, FL, November 12-16 , 2007.
18. G. Wang, W.A. Peebles, T.L. Rhodes, E.J. Doyle, L. Schmitz, A.E. White, L. Zeng, R. Nazikian, G.R. McKee *Radial Correlation Length of Density Fluctuations in DIII-D Plasmas* [UP8.00057], American Physical Society - Division of Plasma Physics , Orlando, FL, November 12-16 , 2007.
17. **A.E. White** *Experimental Study of Electron Temperature Fluctuations in the Core of the DIII-D Tokamak* Transport Task Force Meeting San Diego, CA 2007
16. **A.E. White**, L. Schmitz, T.A. Carter, W.A. Peebles, T.L. Rhodes, M.E. Austin, *Electron Temperature Fluctuations in DIII-D Using the New UCLA Correlation ECE Diagnostic* [GP1.00017], American Physical Society - Division of Plasma Physics Philadelphia, PA, October 30 - November 3, 2006
15. L. Schmitz, A.E. White, T.A. Carter, W.A. Peebles, T.L. Rhodes, G. Wang, M.E. Austin, *New Diagnostic for Doppler Reflectometry and Correlation Measurements of Electron Temperature and Density Fluctuations in DIII-D* [GP1.00018], American Physical Society - Division of Plasma Physics Philadelphia, PA, October 30 - November 3, 2006
14. **A.E. White**, M.J. Burin, T.A. Carter, T.S. Hahm, J.A. Krommes, R.J. Maqueda, S.J. Zweben *Bispectral Analysis of the L-H transition as seen in the NSTX GPI Data* [RP1.00016], American Physical Society - Division of Plasma Physics Denver CO, October 24-28, 2005
13. S.J. Zweben, R.J. Maqueda, J.L. Terry, D. D'Ippolito, O. Grulke, J.A. Krommes, T. Munsat, J. Myra, D. Russell, D. Stotler, T. Stoltzfus-Dueck, M. Umansky, A.E. White, K.M. Williams, X. Xu and the NSTX and Alcator C-Mod Teams *Structure and Motion of Edge Turbulence in NSTX and Alcator C-Mod*, [CI1b.00001], American Physical Society - Division of Plasma Physics Denver CO, October 24-28, 2005
12. **A.E. White et al.** *Observations of Inboard and Outboard Edge Turbulence in the UCLA Electric Tokamak.* Transport Task Force Meeting Napa, CA 2005
11. **A.E. White** *A Study of Electromagnetic Edge Turbulence in the UCLA Electric Tokamak* [BP1.116] American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
10. L.W. Schmitz, T.A. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, D. Pace, R.J. Taylor, A. White *Momentum Drive by Neutral Beams and ICRH in the Electric Tokamak* [BP1.118] American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
9. D.J. LaFonteese, R.J. Taylor, G.J. Morales, J.-L. Gauvreau, P.-A. Gourdain, L.W. Schmitz, T.A. Carter, D.C. Pace, A.E. White, *Fast Wave Profiling of the Electric Tokamak* [BP1.117] , American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004

*Conference Presentations - Continued*

8. J.-L. Gauvreau, T.C. Carter, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, D.C. Pace, L.W. Schmitz, R.J. Taylor, A.E. White, T.F. Yates, *Diagnostics upgrade in ET for equilibrium studies* [BP1.119] , American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
7. R.J. Taylor, T.C. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, D.C. Pace, L.W. Schmitz, A.E. White, T.F. Yates, *Initial neutral beam injection results on the UCLA Electric Tokamak* [BP1.120] , American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
6. P.-A. Gourdain, T.A. Carter, J.-L. Gauvreau, A. Grossman, D.J. Lafonteese, D.C. Pace, L.W. Schmitz, R.J. Taylor, A.E. White, T.F. Yates, *Neutral Beam Injection in the Electric Tokamak* [BP1.121] , American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
5. D.C. Pace, T.A. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, L. Schmitz, R.J. Taylor, A.E. White, T.F. Yates, *Investigation of Density Accumulation in the Electric Tokamak* [BP1.122], American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
4. T.F. Yates, R.J. Taylor, T.C. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, D.C. Pace, L.W. Schmitz, A.E. White, *Study of MHD Instabilities in ET near the Troyon Limit* [BP1.123], American Physical Society - Division of Plasma Physics Savannah, GA, November 15 - 19, 2004
3. **A.E. White** et al. *A study of poloidal asymmetries in edge turbulence in the UCLA Electric Tokamak*. Transport Task Force Meeting Salt Lake City, UT, April 29 - May 2, 2004
2. **A.E. White**, T.A. Carter, J.L. Gauvreau, P.A. Gourdain, A. Grossman, D.J. Lafonteese, D.C. Pace, L.W. Schmitz, R.J. Taylor, T.F. Yates *A study of poloidal asymmetries in edge turbulence in the UCLA Electric Tokamak* [FP1.047] American Physical Society - Division of Plasma Physics Albuquerque, NM, October 27 - 31, 2003
1. D.C. Pace, T.A. Carter, J.-L. Gauvreau, P.-A. Gourdain, A. Grossman, D.J. LaFonteese, L. Schmitz, R.J. Taylor, A.E. White, T.F. Yates, *Studies of Edge Turbulence and Barrier Formation During Giant Sawtooth Behavior in the Electric Tokamak* [FP1.045], American Physical Society - Division of Plasma Physics Albuquerque, NM, October 27 - 31, 2003