

Dr Thomas White

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RESEARCH INTERESTS

High energy density physics, non-equilibrium plasmas, inertial confinement fusion, warm dense matter, quantum molecular dynamics, x-ray scattering, laser-matter interactions

EDUCATION

DPhil.	Atomic and Laser Physics. Trinity College, University of Oxford, UK Supervisor: Prof. Gianluca Gregori	Sept 2010 – Jan 2015
MPhys.	Physics. University of Bath, UK (First Class with Honors)	Sept 2006 – July 2010

APPOINTMENTS

Clemons-Magee Professor in Physics	Department of Physics, University of Nevada, Reno, NV	July 2022 - Present
Associate Professor	Department of Physics, University of Nevada, Reno, NV	July 2022 - Present
Graduate Director (Physics)	Department of Physics, University of Nevada, Reno, NV	Feb 2022 - Present
Assistant Professor	Department of Physics, University of Nevada, Reno, NV	Sept 2017 – June 2022
Visiting Scientist	Lawrence Livermore National Laboratory, Livermore, CA	Oct 2018 - Present
Research Assistant	Department of Physics, University of Oxford, UK	Dec 2015 – Aug 2017
Visiting Researcher	Institute of Shock Physics, Imperial College London, UK	Dec 2015 – Aug 2017
Research Associate	Institute of Shock Physics, Imperial College London, UK	Feb 2014 – Dec 2015
Undergraduate Researcher	Rutherford Appleton Laboratory, UK	July 2009 – Dec 2009

GRANTS AND FUNDING

Secured over \$2.2M in research grants as Sole PI

Current

B667157: **Thermal transport under high pressure and high temperature** (Sole PI: T. White)
Lawrence Livermore National Laboratory (LLNL) subcontract
11/2024 – 05/2026, \$60,000

PHY-2409354: **PHY-EPSC: Hydrodynamics of strongly-coupled plasmas: experiments, simulations and theory**
(Sole PI: T. White)
National Science Foundation (US-UK Research Collaboration)
10/2024 – 09/2027, \$575,000

DE-NA0004039: **Electron-Ion Equilibration in Dense and Quantum Plasmas** (Sole PI: T. White)
National Nuclear Security Association (HEDLP)
10/2021 – 09/2025, \$607,925

PHY-2045718: **CAREER: Non-Adiabatic Effects in Dense Plasmas** (Sole PI: T. White)
National Science Foundation
01/2021 – 12/2025, \$750,000

Previous

B645544: **Development of X-Ray Fresnel Refractive Diffractive Radiography** (Sole PI: T. White)
Lawrence Livermore National Laboratory (LLNL) subcontract
12/2020 – 9/2022, \$110,470

Mutual Diffusion at the Extreme Light Laboratory (Sole PI: T. White)

LaserNetUS/Department of Energy

05/2021, \$20,363

DE-SC0019268: Investigation into the transport properties of planetary interiors through inelastic X-ray scattering experiments and quantum molecular dynamics (Sole PI: T. White)

Department of Energy, Fusion Energy Sciences (HEDLP)

08/2018 – 08/2020, \$150,000

AWARDS

LeMay Award for Excellence in Teaching (Semi-Finalist)	University of Nevada, Reno	March 2024
Clemons-Magee Endowed Professor in Physics	University of Nevada, Reno	July 2022 - Present
Regents' Rising Researcher Award (Shortlisted)	Nevada System of Higher Ed.	December 2021
Paul and Judy Bible Teaching Excellence Award (Nominated)	University of Nevada, Reno	December 2021
Mousel-Feltner Excellence in Research Award	University of Nevada, Reno	April 2021
NSF CAREER Award	National Science Foundation	January 2021
NIF Discovery Science Campaign	Lawrence Livermore Nat. Lab.	December 2021
Culham Thesis Prize for the Best Ph.D. Thesis in Plasma Physics	Institute of Physics, UK	May 2016
Ayliffe prize for Best Undergraduate GPA	University of Bath, UK	July 2010

SELECT PUBLICATIONS

1. T. G. White *et al.* **Surviving the Entropy Catastrophe: Exploring the Ultimate Limit of Superheating** Nature (2025, Accepted)
2. C. H. Allen *et al.* **Measurement of interfacial thermal resistance in high-energy-density matter** Nature Communications **16**, 1986 (2025)
3. T. G. White *et al.* **Speed of sound in methane under conditions of planetary interiors** Physical Review Research **6**, LP22029 (2024)
4. P. Tzeferacos *et al.* **Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma** Nature Communications **9**, 591 (2018)
5. T. G. White *et al.* **Orbital-free density-functional theory simulations of the dynamic structure factor of warm dense aluminum** Physical Review Letters **111**, 175002 (2013)

49 Peer-Reviewed Publications, $N > 1800$ citations, h -index=24 (See complete publication list below)

SELECT RECENT PRESENTATIONS

1. **Heat transport across warm dense matter interfaces (invited)**
18th International Conference on the Physics of Non-Ideal Plasmas, Oxford, UK (September 16 - 19, 2024)
2. **Electron-Ion Equilibration in Warm Dense Metals (invited)**
Second Transport Coefficient Workshop, LLNL (July 24 - 27, 2023)
3. **Measuring Dynamic Properties of Warm Dense Matter with High-Resolution Inelastic X-ray Scattering**
American Physical Society DPP – Mini-conference on Transport Properties (Oct 11, 2022)
4. **Measuring transport properties in warm dense matter: particle and thermal diffusion**
Seminar, Plasma Science and Fusion Center, MIT (Oct 28, 2021)
5. **Fresnel Diffractive Radiography at OMEGA and NIF (Invited)**
Physics Colloquium, Universität Rostock (July 8, 2021)
6. **Ion Modes in Warm Dense Methane (Invited)**
Lawrence Livermore National Laboratory High Energy Density Science Center's seminar (May 13, 2019)

STUDENTS AND POSTDOCTORAL SUPERVISION

Michael Larsen	<i>Ph.D. Student</i>	2024 -
Brittany Callin	<i>Ph.D. Student</i>	2024 -
Damien Batayeh	<i>Ph.D. Student</i>	2024 -
Sarah Prins	<i>Ph.D. Student</i>	2022 -
Travis Griffin	<i>Ph.D. Student</i>	2021 -
Jaya Sicard	<i>Undergraduate Student (McNair Scholar)</i>	2022 -
Hunter Stramel	<i>Undergraduate Student</i>	2024 -
Daniel Haden	<i>Postdoctoral Scholar (Now working at Thermofisher Scientific)</i>	2021 - 2023
Matthew Oliver	<i>Postdoctoral Scholar (Now scientist at Central Laser Facility, UK)</i>	2018 - 2020
William (Alex) Angermeier	<i>Ph.D. Student (Now a postdoctoral scholar at LANL)</i>	2018 - 2023
Cameron Allen	<i>Ph.D. Student (Now a postdoctoral scholar at LANL)</i>	2018 - 2023

Previous Undergraduate Advisees:

Landon Morrison, Leonardo Rodriguez, Jacob Molina, Tyreis Gatson, Emily Chau, Wataru Hayashi, Ryan Davis, Garrett Van Mourik, Jacob Excel, Jacob Sprague

TEACHING EXPERIENCE

Phys 771	High-Performance Simulation of Dense Plasmas	Spring 2023
Grad. 778	Elements of Research Computing (2 x 3 hour workshops on HPC use)	Fall 2021-2023
Phys. 701	Classical Mechanics	Spring 2019-2022, 2024
Phys. 701	Mathematical Physics	Fall 2018-2024
Phys. 740	Fluid Dynamics	Spring 2018, 2024
Phys. 404/604	Computational Techniques in Physics	Fall 2017
Phys. 497	Senior Thesis (Capstone Projects)	Spring 2018-2024
Phys. 693	Special Problems (Topics include DFT-MD, Molecular Dynamics)	2017-2024

EXPERIMENTAL RESEARCH CAMPAIGNS (T. WHITE PI)

Electron-Ion Equilibration in Metals	European Free Electron Laser, Germany	Oct 2024
Measurements of Thermal Conductivity in Warm Dense Iron	Omega Laser Facility, LLE, USA	Q1 2024/25
Measurements of Thermal Conductivity in Warm Dense Matter	Linac Coherent Light Source, USA	Nov 2022
Mutual Diffusion in Warm Dense Deuterium at the NIF	National Ignition Facility, LLNL, USA	Nov 2022
Thermal Conductivity in Warm Dense Matter	Omega Laser Facility, LLE, USA	Q2 2022/23
Electron-Ion Equilibration in Metals	Linac Coherent Light Source, USA	May 2022
Diffraction Radiography and Community Commissioning Exp.	European Free Electron Laser, Germany	Q2 2021
Development of a Fresnel Diffraction Radiography Diagnostic	Extreme Light Laboratory, Uni. Neb, Lincoln	Q2 2021
High-Resolution meV X-ray Scattering from Warm Dense Gold	Linac Coherent Light Source, USA	Q4 2020
Mutual Diffusion in Warm Dense Matter	Omega Laser Facility, LLE, USA	Q3 2020

SERVICE AND SYNERGISTIC ACTIVITIES

Strongly Coupled Coulomb Systems (SCCS) 2025 Organizer	2023-Present
Sagebrushers Podcast Season 3 Episode 4 w/ Brian Sandoval	2024
NSF ECLIPSE Meeting Organizing Committee	2023-2024
Department of Physics Justice, Equity, Diversity, and Inclusion (JEDI) Committee	2021-Present
Chair of Jupiter Laser Facility Executive Committee	2021-Present
High Energy Density Science Association (Vice Chair)	2024-Present
High Energy Density Science Association (Steering Committee)	2021-2024
Director of Graduate Studies (Physics Program, UNR)	2021-Present
Intense-light USers Engagement (i-USE) Committee (Diversity, Equality and Inclusion officer)	2021-2022
American Physical Society Division of Plasma Physics (APS DPP) Program Committee	2021
American Physical Society Division of Plasma Physics (APS DPP) PRIDE Committee	2021-2022
Served as NSF/DOE/NNSA Proposal Peer Reviewer	2017-Present
College of Science Podcast (Interview with Dr Gabriela González (LIGO))	Nov 2019
Happy Hour with a Scientist (Laboratory Astrophysics: Explosions, Lasers and Supernova)	April 2018

FULL PUBLICATION LIST

Submitted

- 50 J. Vorberger, F. Graziani, D. Riley, A.D. Baczewski, I. Baraffe, M. Bethkenhagen, S. Blouin, M.P. Böhme, M. Bonitz, M. Bussmann, A. Casner, W. Cayzac, P. Celliers, G. Chabrier, N. Chamel, D. Chapman, M. Chen, J. Cléroutin, G. Collins, F. Coppari, T. Döppner, T. Dornheim, L.B. Fletcher, D.O. Gericke, S. Glenzer, A.F. Goncharov, G. Gregori, S. Hamel, S.B. Hansen, N.J. Hartley, S. Hu, O.A. Hurricane, V.V. Karasiev, J.J. Kas, B. Kettle, T. Kluge, M.D. Knudson, A. Kononov, D. Kraus, A. Kritcher, S. Malko, G. Massacrier, B. Militzer, Z.A. Moldabekov, M.S. Murillo, B. Nagler, N. Nettelmann, P. Neumayer, B.K. Ofori-Okai, I.I. Oleynik, M. Preising, A. Pribram-Jones, T. Ramazanov, A. Ravasio, R. Redmer, B. Rethfeld, A.P.L. Robinson, G. Röpke, F. Soubiran, C.E. Starrett, G. Steinle-Neumann, P.A. Sterne, S. Tanaka, A.P. Thompson, S.B. Trickey, T. Vinci, S.M. Vinko, L. Wang, A.J. White, T.G. White, U. Zastrau, E. Zurek, P. Tolias
- Roadmap for warm dense matter physics**
Plasma Physics and Controlled Fusion

Published/Accepted

2025

- 49 T. G. White, T. D. Griffin, D. Haden, H. J. Lee, E. Galtier, E. Cunningham, D. Khaghani, A. Descamps, L. Wollenweber, B. Armentrout, C. Convery, K. Appel, L. B. Fletcher, S. Goede, J. B. Hastings, J. Iratcabal, E. E. McBride, J. Molina, G. Monaco, L. Morrison, H. Stramel, S. Yunus, U. Zastrau, S. H. Glenzer, G. Gregori, D. O. Gericke, and B. Nagler.
- Surviving the Entropy Catastrophe: Redefining the Limit of Superheating**
Nature
- 48 C.H. Allen, M. Oliver, D.O. Gericke, N. Brouwer, L. Divol, G.E. Kemp, O.L. Landen, L. Morrison, Y. Ping, M.O. Schölmerich, N. Shaffer, C. Spindloe, P.A. Sterne, W.R. Theobald, T. Döppner, T.G. White
- Measurement of interfacial thermal resistance in high-energy-density matter**
Nature Communications **16**, 1983 (2025)

2024

- 47 H. Poole, M. K. Ginnane, M. Millot, H. M. Bellenbaum, G. W. Collins, S. X. Hu, D. Polsin, R. Saha, J. Topp-Mugglestone, T. G. White, D. A. Chapman, J. R. Rygg, S. P. Regan, and G. Gregori
Multi-Messenger Measurements of the Static Structure of Shock-Compressed Liquid Silicon at 100 GPa
Physical Review Research **6**, 023144 (2024)
- 46 T.G. White, H. Poole, E.E. McBride, M. Oliver, A. Descamps, L.B. Fletcher, W.A. Angermeier, C.H. Allen, K. Appel, F.P. Condamine, C.B. Curry, F. Dallari, S. Funk, E. Galtier, E.J. Gamboa, M. Gauthier, P. Graham, S. Goede, D. Haden, J.B. Kim, H.J. Lee, B.K. Ofori-Okai, S. Richardson, A. Rigby, C. Schoenwaelder, P. Sun, B.L. Witte, T. Tschentscher, U. Zastra, B. Nagler, J.B. Hastings, G. Monaco, D.O. Gericke, S.H. Glenzer, G. Gregori
Speed of sound in methane under conditions of planetary interiors
Physical Review Research **6**, L022029 (2024)
- 45 A. Descamps, B. K. Ofori-Okai, O. Bistoni, Z. Chen, E. Cunningham, L. B. Fletcher, N. J. Hartley, J. B. Hastings, D. Khaghani, M. Mo, B. Nagler, V. Recoules, R. Redmer, M. Schorner, D. G. Senesky, P. Sun, H-E. Tsai, T. G. White, S. H. Glenzer and E. E. McBride
Evidence for phonon hardening in laser-excited gold using x-ray diffraction at a hard x-ray free electron laser
Science Advances **10** (6), eadh5272 (2024)

2023

44. T. G. White, J. Dai, and D. Riley
Dynamic and transient processes in warm dense matter
Philosophical Transactions of the Royal Society A **381**, 20220223 (2023)
43. W. A. Angermeier, B. S. Scheiner, N. R. Shaffer, and T G. White
Disentangling the Effects of Non-Adiabatic Interactions upon Ion Dynamics within Warm Dense Hydrogen
Philosophical Transactions of the Royal Society A **381**, 20230034 (2023)
42. M.O.Schoelmerich, T. Doppner, C. H. Allen, L. Divol, M. Oliver, D. Haden, M. Biener, J. Crippen, J. Delora-Ellefson, B. Ferguson, D. Gericke, A. Goldman, A. Haid, C. Heinbockel, D. Kalantar, Z. Karmiol, G. Kemp, J. Kroll, O. L. Landen, N. Masters, Y. Ping, C. Spindloe, W. Theobald, and T. G. White
Developing a platform for Fresnel diffractive radiography with 1 μ m spatial resolution at the National Ignition Facility
Review of Scientific Instruments **94**, 013104 (2023)

2022

41. AFA Bott, L. Chen, P Tzeferacos, CAJ Palmer, AR Bell, R Bingham, A Birkel, DH Froula, J Katz, M Koenig, MW Kunz, CK Li, H-S Park, R Petrasso, JS Ross, B Reville, D Ryu, FH Séguin, TG White, AA Schekochihin, DQ Lamb, G Gregori
Insensitivity of a turbulent laser-plasma dynamo to initial conditions
Matter and Radiation at Extremes **7**, 046901 (2022)
40. M. Oliver, C. Allen, L. Divol, Z. Karmiol, O. Landen, Y. Ping, M. Schölmerich, W. Theobald, T.Döppner, and T. G. White
Diffraction Enhanced Imaging Utilizing a Laser-Produced X-ray Source
Review of Scientific Instruments **93** (9), 093502 (2022)

39. A. Descamps, B. K. Ofori-Okai, Z. Chen, L. B. Fletcher, S. H. Glenzer, N. J. Hartley, J. B. Hasting, D. Khaghani, M. Mo, B. Nagler, V. Recoules, R. Redmer, M. Schörner, P. Sun, T. G. White and E. E. McBride
Towards performing high resolution inelastic X-ray scattering measurements at hard XFELs coupled with energetic laser drivers
Journal of Synchrotron Radiation **29**, 931-938 (2022)
 38. C. H. Allen, M. Oliver, L. Divol, O. L. Landen, Y. Ping, M. Schoelmerich, R. Wallace, R. Earley, W. Theobald, T. G. White, T. Doeppner
Toward an integrated platform for characterizing laser-driven, isochorically heated plasmas with 1 μm spatial resolution
Applied Optics **61** (8), 1987-1993 (2022)
 37. J. M. Molina and T. G. White
Inclusion of Energy Loss in Models of Laser Irradiated Gold Films via Classical Molecular Dynamics
Matter and Radiation at Extremes **7** (3), 036901 (2022)
- 2021**
36. W. A. Angermeier and T. G. White
An investigation into the approximations used in wave packet molecular dynamics for the study of warm dense matter
Plasma **4**(2), 294-308 (2021)
 35. AFA Bott, P Tzeferacos, L Chen, CAJ Palmer, A Rigby, A Bell, R Bingham, A Birkel, C Graziani, DH Froula, J Katz, M Koenig, MW Kunz, CK Li, J Meinecke, F Miniati, R Petrasso, H-S Park, BA Remington, B Reville, JS Ross, D Ryu, D Ryutov, F Séguin, TG White, AA Schekochihin, DQ Lamb, G Gregori
Time-resolved turbulent dynamo in a laser plasma
PNAS **118**(11), e2015729118 (2021)
 34. L Wollenweber, TR Preston, A Descamps, V Cerantola, A Comley, JH Eggert, LB Fletcher, G Geloni, DO Gericke, SH Glenzer, S Göde, J Hastings, OS Humphries, A Jenei, O Karnbach, Z Konopkova, R Loetzsch, B Marx-Glowna, EE McBride, D McGonegle, G Monaco, BK Ofori-Okai, CAJ Palmer, C Plückthun, R Redmer, C Strohm, I Thorpe, T Tschentscher, I Uschmann, JS Wark, TG White, K Appel, G Gregori, U Zastra
High-resolution inelastic x-ray scattering at the high energy density scientific instrument at the Free-Electron Laser
Review of Scientific Instruments **92**, 013101 (2021)
- 2020**
33. RA Davis, WA Angermeier, RKT Hermsmeier, TG White
Ion modes in dense ionized plasmas through nonadiabatic molecular dynamics
Phys. Rev. Research **2**, 043139 (2020)
 32. Adrien Descamps, BK Ofori-Okai, K Appel, V Cerantola, A Comley, JH Eggert, LB Fletcher, DO Gericke, S Göde, O Humphries, O Karnbach, A Lazicki, R Loetzsch, D McGonegle, CAJ Palmer, C Plueckthun, TR Preston, R Redmer, DG Senesky, C Strohm, I Uschmann, TG White, L Wollenweber, G Monaco, JS Wark, JB Hastings, U Zastra, G Gregori, SH Glenzer, EE McBride
An approach for the measurement of the bulk temperature of single crystal diamond using an X-ray free electron laser
Scientific Reports **10**, 14564 (2020)
 31. LE Chen, AFA Bott, P Tzeferacos, A Rigby, A Bell, R Bingham, C Graziani, J Katz, M Koenig, CK Li, R Petrasso, H-S Park, JS Ross, D Ryu, TG White, B Reville, J Matthews, J Meinecke, F Miniati, EG Zweibel, S Sarkar, AA Schekochihin, DQ Lamb, DH Froula, G Gregori

Transport of High-energy Charged Particles through Spatially Intermittent Turbulent Magnetic Fields

The Astrophysical Journal **892** 114 (2020)

2019

30. Brett Larder, DO Gericke, Scott Richardson, Paul Mabey, TG White, Gianluca Gregori
Fast nonadiabatic dynamics of many-body quantum systems
Science Advances **5**(11), eaaw1634 (2019)
29. TG White, MT Oliver, P Mabey, M Kühn-Kauffeldt, AFA Bott, LNK Döhl, AR Bell, R Bingham, R Clarke, J Foster, G Giacinti, P Graham, R Heathcote, M Koenig, Y Kuramitsu, DQ Lamb, J Meinecke, Th Michel, F Miniati, M Notley, B Reville, D Ryu, S Sarkar, Y Sakawa, MP Selwood, J Squire, RHH Scott, P Tzeferacos, N Woolsey, AA Schekochihin, G Gregori
Supersonic plasma turbulence in the laboratory
Nature Communications **10**, 1758 (2019)

2018

28. EE McBride, TG White, A Descamps, LB Fletcher, K Appel, FP Condamine, CB Curry, F Dallari, S Funk, E Galtier, M Gauthier, S Goede, JB Kim, HJ Lee, BK Ofori-Okai, M Oliver, A Rigby, C Schoenwaelder, P Sun, Th Tschentscher, BBL Witte, U Zastrau, G Gregori, B Nagler, J Hastings, SH Glenzer, G Monaco
Setup for meV-resolution inelastic X-ray scattering measurements and X-ray diffraction at the Matter in Extreme Conditions endstation at the Linac Coherent Light Source
Review of Scientific Instruments **89**, 10F104 (2018)
27. JC Wood, DJ Chapman, K Poder, NC Lopes, ME Rutherford, TG White, F Albert, KT Behm, N Booth, JSJ Bryant, PS Foster, S Glenzer, E Hill, K Krushelnick, Z Najmudin, BB Pollock, S Rose, W Schumaker, RHH Scott, M Sherlock, AGR Thomas, Z Zhao, DE Eakins, SPD Mangles
Ultrafast Imaging of Laser Driven Shock Waves using Betatron X-rays from a Laser Wakefield Accelerator
Scientific Reports **8**, 11010 (2018)
26. P Tzeferacos, A Rigby, AFA Bott, AR Bell, R Bingham, A Casner, F Cattaneo, EM Churazov, J Emig, F Fiuza, CB Forest, J Foster, C Graziani, J Katz, M Koenig, C-K Li, J Meinecke, R Petrasso, H-S Park, BA Remington, JS Ross, Dongsu Ryu, D Ryutov, TG White, B Reville, Francesco Miniati, AA Schekochihin, DQ Lamb, DH Froula, G Gregori
Laboratory evidence of dynamo amplification of magnetic fields in a turbulent plasma
Nature Communications **9**, 591 (2018)
24. A Rigby, J Katz, AFA Bott, TG White, P Tzeferacos, DQ Lamb, DH Froula, G Gregori
Implementation of a Faraday rotation diagnostic at the OMEGA laser facility
High Power Laser Science and Engineering, **6**, E49 (2018)

2017

23. SA Muller, DN Kaczala, HM Abu-Shawareb, EL Alfonso, LC Carlson, M Mauldin, P Fitzsimmons, D Lamb, P Tzeferacos, L Chen, G Gregori, A Rigby, A Bott, TG White, D Froula, J Katz
Evolution of the design and fabrication of astrophysics targets for Turbulent Dynamo (TDYNO) experiments on OMEGA
Fusion Science and Technology **73**, 434–445 2018

23. M Oliver, T White, P Mabey, M Kühn-Kauffeldt, L Döhl, R Bingham, R Clarke, P Graham, R Heathcote, M Koenig, Y Kuramitsu, DQ Lamb, J Meinecke, T Michel, Francesco Miniati, M Notley, B Reville, S Sarkar, Y Sakawa, Alexander A Schekochihin, P Tzeferacos, N Woolsey, H-S Park, G Gregori
Magneto-optic probe measurements in low density-supersonic jets
JINST **12** P12001 (2017)
 22. TG White, A Tikku, MF Alves Silva, G Gregori, A Higginbotham, DE Eakins
Identifying deformation mechanisms in molecular dynamics simulations of laser shocked matter
Journal of Computational Physics **350**, 16-24 (2017)
 21. AFA Bott, C Graziani, P Tzeferacos, TG White, DQ Lamb, G Gregori, AA Schekochihin
Proton imaging of stochastic magnetic fields
Journal of Plasma Physics, 83(6), 905830614. doi:10.1017/S0022377817000939
 20. TG White, JRW Patten, K - H Wan, AD Pullen, DJ Chapman, DE Eakins
A single camera three - dimensional digital image correlation system for the study of adiabatic shear bands
Strain **53**, (3) e12226 (2017)
 19. P Tzeferacos, A Rigby, A Bott, AR Bell, R Bingham, A Casner, F Cattaneo, EM Churazov, J Emig, N Flocke, F Fiuza, CB Forest, J Foster, C Graziani, J Katz, M Koenig, C-K Li, J Meinecke, R Petrasso, H-S Park, BA Remington, JS Ross, D Ryu, D Ryutov, K Weide, TG White, B Reville, F Miniati, AA Schekochihin, DH Froula, G Gregori, DQ Lamb
Numerical modeling of laser-driven experiments aiming to demonstrate magnetic field amplification via turbulent dynamo
Physics of Plasmas **24**, 041404 (2017)
 18. P Mabey, S Richardson, TG White, LB Fletcher, SH Glenzer, NJ Hartley, J Vorberger, DO Gericke, G Gregori
A strong diffusive ion mode in dense ionized matter predicted by Langevin dynamics
Nature Communications volume 8, Article number: 14125 (2017)
- 2016**
17. Michael E Rutherford, David J Chapman, Thomas G White, Michael Drakopoulos, Alexander Rack, Daniel E Eakins
Evaluating scintillator performance in time-resolved hard X-ray studies at synchrotron light sources
J. Synchrotron Rad. **23**, 685-693 (2016)
 16. TD Swinburne, MG Glavicic, KM Rahman, NG Jones, J Coakley, DE Eakins, TG White, V Tong, D Milathianaki, GJ Williams, D Rugg, AP Sutton, D Dye
Picosecond dynamics of a shock-driven displacive phase transformation in Zr
Phys. Rev. B **93**, 144119 (2016)
- 2015**
15. U Zastrau, P Sperling, C Fortmann-Grote, A Becker, T Bornath, R Bredow, T Döppner, T Fennel, LB Fletcher, E Förster, S Göde, G Gregori, M Harmand, V Hilbert, T Laarmann, HJ Lee, T Ma, KH Meiwes-Broer, JP Mithen, CD Murphy, M Nakatsutsumi, P Neumayer, A Przystawik, S Skruszewicz, J Tiggesbäumker, S Toleikis, TG White, SH Glenzer, R Redmer, T Tschentscher
Ultrafast electron kinetics in short pulse laser-driven dense hydrogen
J. Phys. B: At. Mol. Opt. Phys. **48** 224004 (2015)

14. LB Fletcher, HJ Lee, T Döppner, E Galtier, B Nagler, P Heimann, C Fortmann, S LePape, T Ma, M Millot, A Pak, D Turnbull, DA Chapman, DO Gericke, J Vorberger, T White, G Gregori, M Wei, B Barbrel, RW Falcone, C-C Kao, H Nuhn, J Welch, U Zastra, P Neumayer, JB Hastings, SH Glenzer
Ultrabright X-ray laser scattering for dynamic warm dense matter physics
Nature Photonics volume 9, pages274–279(2015)
 13. NJ Hartley, P Belancourt, DA Chapman, T Döppner, RP Drake, DO Gericke, SH Glenzer, D Khaghani, S LePape, T Ma, P Neumayer, A Pak, L Peters, S Richardson, J Vorberger, TG White, G Gregori
Electron-ion temperature equilibration in warm dense tantalum
High Energy Density Physics 14, 1-5 (2015)
- 2014**
12. LB Fletcher, HJ Lee, B Barbrel, M Gauthier, E Galtier, B Nagler, T Döppner, S LePape, T Ma, A Pak, D Turnbull, T White, G Gregori, M Wei, RW Falcone, P Heimann, U Zastra, JB Hastings, SH Glenzer
Exploring Mbar shock conditions and isochorically heated aluminum at the Matter in Extreme Conditions end station of the Linac Coherent Light Source
Review of Scientific Instruments 85, 11E702 (2014)
 11. TG White, P Mabey, DO Gericke, NJ Hartley, HW Doyle, D McGonegle, DS Rackstraw, A Higginbotham, G Gregori
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