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A. Professional preparation:

University of Rochester, Rochester, NY	BS	Optics	1982
University of Rochester, Rochester, NY	MS	Optics	1983
University of Rochester, Rochester, NY	PhD	Optics	1989
University of Oregon, Eugene, OR	PDRA	Physics	1989-1991

B. Appointments:

2019 -	Professor of Electrical and Computer Engineering, The Oho State University
2016 -	Professor, Department of Physics, The Ohio State University
2015	Visiting Professor, Department of Physics, The Ohio State University
2015	Interim Chair, Department of Physics, Duke University
2013 - 2015	Professor of Electrical and Computer Engineering, Duke University
2011 - 2105	Robert C. Richardson Professor of Physics, Duke University
2007 - 2011	Professor of Physics and Biomedical Engineering, Duke University
2005 - 2011	Chair, Department of Physics, Duke University
2004 - 2006	Bass Professor of Physics and Biomedical Engineering, Duke University
2001 - 2015	Director, Quantum Optoelectronics Laboratory, Fitzpatrick Photonics Institute, Duke University
2002 - 2004	Anne T. and Robert M. Bass Associate Professor of Physics and Associate Professor of Biomedical Engineering, Duke University
2000 - 2002	Associate Professor of Physics and Biomedical Engineering, Duke University
1999 - 2003	Associate Director, Center for Nonlinear and Complex Systems, Duke University
1999 - 2000	Associate Professor of Physics and Assistant Research Professor of Biomedical Engineering, Duke University
1995 - 1998	Assistant Professor of Physics and Biomedical Engineering, Duke University
1992 - 1995	Assistant Professor of Physics, Duke University
1989 - 1991	Research Associate, University of Oregon (Advisor: Thomas Mossberg)
1982 - 1989	Graduate Research Assistant, University of Rochester (Advisor: Robert Boyd)

C. Products: 226 scholarly works

Representative Publications

1. A. Aragoneses, N. T. Islam, M. Eggleston, A. Lezama, J. Kim, and D. J. Gauthier, 'Bounding the outcome of a two-photon interference measurement using weak coherent states,' Opt. Lett. **43**, 3806 (2018).
2. N.T. Islam, C.C.W. Lim, C. Cahall, J. Kim, and D.J. Gauthier, 'Provably secure and high-rate quantum key distribution with time-bin qudits,' Sci. Adv. **3**, e1701491 (2017).
3. C. Cahall, K.L. Nicolich, T. Islam, G.P. Lafyatis, A.J. Miller, D.J. Gauthier, J. Kim, 'Multi-Photon Detection using a Conventional Superconducting Nanowire Single-Photon Detector,' Optica **4**, 1534 (2017).

4. M. Mirhosseini, O. S. Magaña-Loaiza, M. N. O'Sullivan, B. Rodenburg, M. Malik, M. P. J. Lavery, M. J. Padgett, D. J. Gauthier, and R. W. Boyd, 'High-dimensional quantum cryptography with twisted light,' New J. Physics **17**, 033033 (2015).
5. H. Zheng, D.J. Gauthier, and H. U. Baranger, 'Waveguide-QED-Based Photonic Quantum Computation,' Phys. Rev. Lett. **111**, 090502 (2013).
6. S. D. Cohen, H. L. D. S. Cavalcante, D. J. Gauthier, 'Subwavelength position sensing using nonlinear feedback and wave chaos,' Phys. Rev. Lett. **107**, 254103 (2011).
7. J. A. Greenberg, B. L. Schmittberger, and D. J. Gauthier, 'Bunching-induced optical nonlinearity and instability in cold atoms,' Opt. Express **19**, 22535 (2011)
8. K. E. Callan, L. Illing, Z. Gao, D. J. Gauthier, and E. Schöll, 'Broadband chaos generated by an opto-electronic oscillator,' Phys. Rev. Lett. **104**, 113901 (2010).
9. R. W. Boyd and D. J. Gauthier, 'Controlling the Velocity of Optical Pulses,' Science **326**, 1074 (2009).
10. Z. Zhu, D. J. Gauthier, and R. W. Boyd, 'Stored light in an optical fiber via Stimulated Brillouin Scattering,' Science **318**, 1748 (2007).
11. H. Jeong, A. M. C. Dawes, and D. J. Gauthier, 'Direct observation of optical precursors in a region of anomalous dispersion,' Phys. Rev. Lett. **96**, 143901 (2006).
12. A. M. C. Dawes, L. Illing, S. M. Clark, and D. J. Gauthier, 'All-optical switching in rubidium vapor,' Science **308**, 672 (2005).
13. Y. Okawachi, M. S. Bigelow, J. E. Sharping, Z. Zhu, A. Schweinsberg, D. J. Gauthier, R. W. Boyd, and A. L. Gaeta, 'Tunable All-Optical Delays via Brillouin Slow Light in an Optical Fiber,' Phys. Rev. Lett. **94**, 153902 (2005).
14. M. D. Stenner, D. J. Gauthier, and M. A. Neifeld, 'The speed of information in a 'fast light' optical medium,' Nature **425**, 695 (2003).
15. R. W. Boyd and D. J. Gauthier, ' "Slow" and "Fast" Light,' An Invited Chapter in Progress in Optics, Vol. 43, E. Wolf, Ed. (Elsevier, Amsterdam, 2002), Ch. 6, pp. 497-530.
16. D.J. Gauthier, Q. Wu, S.E. Morin and T.W. Mossberg, 'Realization of a continuous-wave, two-photon-optical laser,' Phys. Rev. Lett. **68**, 464 (1992).
17. Y. Zhu, D.J. Gauthier, S.E. Morin, Q. Wu, H.J. Carmichael and T.W. Mossberg, 'Vacuum Rabi splitting as a feature of linear dispersion theory: Analysis and experimental observations,' Phys. Rev. Lett. **64**, 2499 (1990).
18. D.J. Gauthier, M.S. Malcuit and R.W. Boyd, 'Polarization instabilities of counterpropagating laser beams in sodium vapor,' Phys. Rev. Lett. **61**, 1827 (1988).

D. Synergistic Activities:

Selected Honors and Awards: 2009, Outstanding Referee of the Physical Review and Physical Review Letters; 2006, Fellow of the Optical Society of America; 2002, Fellow of the American Physical Society; 1993, National Science Foundation Young Investigator; 1992, U.S. Army Research Office Young Investigator. *Broadening participation in science:* Mentored 11 Ph.D. students and 5 post-doctoral research associates from underrepresented groups. *Outreach to undergraduates and younger:* Mentored over 30 undergraduate independent study projects. *Recent Professional service:* (2016 -) Deputy Editor, Optica, Optical Society of America; (2015 -) Member, Strategic Advisory Board for the Quantum Enhanced Imaging Hub, Glasgow, UK; (2015 -) Member, Editorial Board, Physical Review E; (2011 – 2014) Chair, 2014 New Laser Scientist Workshop; (2012 – 2013) Co-Chair, 2013 Division of Laser Science Annual Meeting.