

# CURRICULUM VITAE

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## EMPLOYMENT

09/2006 - Assistant Professor of Physics  
Div. of Physics, Math and Astronomy  
California Institute of Technology

07/2004 - 08/2006 Postdoctoral Scholar  
LIGO Project  
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## EDUCATION

08/1998 - 07/2004 Ph.D. student in Physics  
at the Massachusetts Institute of Technology in Cambridge, MA  
Thesis: *Sensitivity and Noise Analysis of 4 km Laser Interferometric Gravitational Wave Antennae*;  
Supervisor: Prof. Rainer Weiss.

08/1996 - 05/1998 B.S. in Physics  
at the University of Florida in Gainesville, FL  
Project: *Optical Cavity Mode-Matching by RF Heterodyne Detection*;  
Supervisor: Prof. David Reitze.

01/1994 - 05/1996 A.S. in General Studies  
at Brevard Community College in Cocoa, FL

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## PUBLICATIONS

- O. Miyakawa, et. al., **Measurement of optical response of a detuned resonant sideband extraction gravitational wave detector**, *Phys. Rev. D*, **74**, (2006)
- LIGO Scientific Collaboration, **Joint LIGO and TAMA300 search for gravitational waves from inspiralling neutron star binaries**, *Phys. Rev. D*, **73**, 10 (2006)
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- LIGO Scientific Collaboration, **Limits on gravitational wave emission from selected pulsars using LIGO Data**, *Phys. Rev. Letters*, **94**, 18 (2005)
- W. Hua, et. al., **Low-frequency active vibration isolation for Advanced LIGO**, "Optical Fabrication, Metrology, and Material Advancements for Telescopes", *Proceedings of the SPIE*, **5500**, pp. 81-91 (2004)
- K. Goda, D. Ottaway, B. Connelly, R. Adhikari, and N. Mavalvala, **Frequency Resolving Spatiotemporal Wavefront Sensor**, *Optics Letters*, **29**, 13, pp. 1452 - 1454 (2004)
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- LIGO Scientific Collaboration, **First Upper Limits from LIGO on gravitational wave bursts**, *Phys. Rev. D*, **69**, 12 (2003)
- J. A. Giaime, E. J. Daw, M. Weitz, R. Adhikari, P. Fritschel, R. Abbott, R. Bork, and J. Heefner, **Feedforward reduction of the microseism disturbance in a long-baseline interferometric gravitational-wave detector**, *Rev. of Sci. Inst.*, pp. 218-224, January 2003
- R. Abbott, R. Adhikari, G. Allen, S. Cowley, E. Daw, D. DeBra, J. Giaime, G. Hammond, M. Hammond, C. Hardham, J. How, W. Hua, W. Johnson, B. Lantz, K. Mason, R. Mittleman, J. Nichol, S. Richman, J. Rollins, D. Shoemaker, G. Stapfer and R. Stebbins, **Seismic isolation for Advanced LIGO**, *Class. Quantum Grav.* 19 No 7 (7 April 2002) 1591-1597

G. Mueller, Q. Shu, R. Adhikari, D.B. Tanner, D. Reitze, D. Sigg and N. Mavalvala, **Determination and optimization of mode matching into optical cavities by heterodyne detection**, *Optics Letters*, Vol. 25, pp.266-268, February 2000

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Pasadena, CA,  
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