

Curriculum Vitae: Dr. Guido Mueller

Professor

Department of Physics
University of Florida
Gainesville, FL, 32611

email: mueller@phys.ufl.edu
Tel.: 352-392-8521
Fax: 352-331-8473

Professional Appointments:

Professor, since 2012, University of Florida

Associate Professor, 2007-2012, University of Florida

Assistant Professor, 2003-2007, University of Florida

Visiting Scientist, 2002-2003, Goddard Space Flight Center

Research Scientist, 2000-2003, University of Florida

Postdoctoral Scholar, 1998-1999, University of Florida

Advisors: Prof. Dr. David Reitze, Prof. Dr. David Tanner

JSPS-Postdoctoral Fellow, 1998, University of Electro-Communication

Advisor: Prof. Dr. Ken-ichi Ueda

Education:

Ph.D. in Physics, 1993-1998, University of Hannover

Thesis Advisor: Prof. Dr. Karsten Danzmann

Diploma in Physics, 1987-1993, University of Hannover

Thesis Advisor: Prof. Dr. Dieter Meschede

Awards, Affiliations, Honors, Services:

- Member of the L3-Study Team (NASA) (since 2015)
- Member of the Gravitational Observatory Advisory Team (ESA committee w. US/NASA participants) (2014-2016)
- Chair of the GW-SIG (2012-2015)
- Executive Committee of NASAs Physics of the Cosmos Program Analysis Group (PhysPAG) (2011-2015)
- Ex-Officio member of the LISA International Science Team (2006-2011)
 - Co-Chair of the Interferometry Working group of the LISA International Science Team
 - Member of the LISA Integrated Technical Advisory Team
- Member of the Ligo Science Collaboration (LSC) (since 1998)
 - Chair of the Laser and Auxiliary Systems working group (2011-2013)
 - Technical Advisor to the LIGO Oversight Committee (2011-2013)
 - LIGO Program Advisory Committee

- International Educator of the Year Award (Junior Category), University of Florida, 2006
- Member of organizing committees for multiple scientific meetings, symposia, and workshops
- Reviewed numerous publications for different scientific journals
- Graduate student college Department of Physics University of Hannover 1993-1997

Research

Axion-like particle search

- We work on a heterodyce single photon detection scheme for ALPS
- We support the ongoing work and design of ALPS IIa and ALPS IIc.

LISA Interferometry Measurement System

- My group tested time delay interferometry (TDI) and ranging techniques with LISA-like signal delays. Our TDI experiments were the first to demonstrate the cancellation of laser frequency noise in the TDI signals and showed how the signals can be used to find the range or signal travel time between lasers.
- We measured the fidelity of components for the laser ranging and communication system for the LISA interferometry.
- We studied frequency stabilization methods including different versions of arm locking and integrated them with different pre-stabilization methods.
- We measured the stability of several materials to study if they meet the stringent $\text{pm}/\sqrt{\text{Hz}}$ requirements for LISA.
- We study the mechanical stability and methods to reduce the back-scatter in an on-axis telescopes for LISA.
- We study ways to simplify manufacturability and ease of integration of an optical bench for LISA

Gravitational Reference Sensor

- We assembled a testbed for the Gravitational Reference Sensor for future LISA-like space missions. The testbed will use a four testmass torsion pendulum similar to the testbed of the University of Trento.
- We developed an optical readout system for the torsion pendulum

Advanced LIGO

- We developed one of the initial length sensing and control schemes and the first alignment sensing and control scheme for Advanced LIGO.
- We also derived requirements for the laser beam pointing into the Advanced LIGO interferometer and track the requirements between the laser, the input optics, and the main interferometer for the IO.
- We studied a new optical layout for Advanced LIGO which stabilizes the spatial mode of the laser field within the recycling cavities. This new design has been implemented for Advanced LIGO and our group has developed the Advanced LIGO design.
- We developed a new ring heater for Advanced LIGO and started experimental and numerical tests for the thermal correction system for Advanced LIGO
- We are setting up an experiment to measure coating thermal noise within the Advanced LIGO band at cryogenic temperatures.
- We designed, fabricated and installed the Input Optics subsystem for Advanced LIGO.

International REU for Gravitation

- Developed a NSF-funded program which currently sends on average 15 US undergraduate students each year to our international partners in Europe, Australia, and Asia

Funding (active last five years):

1. University of Florida LISA Interferometry Simulator
Agency: National Aeronautics and Space Administration (NASA)
Dates: 04/01/08-03/31/12
Budget: \$690000
Principal Investigator: Guido Mueller
2. Interspacecraft ranging, clock synchronization, and communication using pseudo random noise in optical interferometry
Agency: National Aeronautics and Space Administration (NASA)
Dates: 03/09-02/12
Budget: \$ 537277
PI: Guido Mueller
3. Study of the stability of an athermal telescope spacer and the evaluation and extension of the LTP frequency stabilization concept for the LISA mission
Agency: Goddard Space Flight Center/NASA
Dates: 05/01/10-04/30/12
Budget: \$110,000
Principle Investigator: Guido Mueller
4. Research on the Thermal Correction System and Thermal Coating Noise
Agency: National Science Foundation
Dates: 11/01/10-10/31/13
Budget: \$700,000
Principle Investigator: Guido Mueller

5. International REU site for Gravitational Physics
Agency: National Science Foundation
Dates: 04/01/10-03/31/15
Budget: \$768,010
Principle Investigator: Bernard Whiting, Co-I: Guido Mueller
6. Systematic Tests of TDI and the fiber link for LISA
Agency: NASA
Dates: 04/15/2011-04/14/2013
Budget: \$200,000
PI: Guido Mueller
7. Laser frequency stabilization and stray light issues for LISA and other Multi-spacecraft missions
Agency: NASA
Dates: 01/15/12-01/14/15
Budget: \$430,000
PI: Guido Mueller
8. The Input Optics Subsystem of Advanced LIGO
Agency: CalTech/NSF
Dates: 04/01/2008-03/30/2014
Budget: \$5,240,006
PI: Guido Mueller (Replaced David Reitze in 08/2011), Co-I: David Tanner
9. Analysis of Back-reflected and Scattered Light for LISA
Agency: NASA/NESSF (Fellowship) for Aaron Spector
Dates: 09/01/2011-08/31/2013
Budget: \$60,000
PI: Guido Mueller
10. Installation and Commissioning Work on Advanced LIGO,
Agency: CalTech/NSF
Dates: 04/01/14-09/30/14
Budget: \$55,231
PI: Guido Mueller, Co-I: David Tanner
11. Thermal coating noise at low temperatures and low loss Faraday Isolators
Agency: NSF
Dates: 11/01/2013-10/31/2016
Budget: \$430,000
PI: Guido Mueller
Comment: merged with #12
12. Devices and materials for the instrument science of advanced gravitational-wave detectors
Agency: NSF
Dates: 06/01/2015-05/31/2017
Budget: \$600,000
PI: David Tanner, Co-I: Guido Mueller
13. Optical Bench for LISA-like missions,
Agency: NASA

- Dates: 03/01/2015-12/31/2017
Budget: \$650,000
PI: Guido Mueller, Co-I: John Conklin
14. Advanced inertial sensors for gravitational wave astrophysics
Agency: NASA
Dates: 05/01/2015-04/30/2020
Budget: \$861,513
PI: John Conklin, Co-I: Guido Mueller
15. IREU
Agency: NSF
Dates: 02/01/2015-01/31/2020
Budget: \$1,130,359
PI: Bernard Whiting, Co-I: Guido Mueller
16. Any light particle search (ALPS) collaboration
Agency: NSF
Dates: 07/01/2015-06/30/2018
Budget: \$1,053,000
PI: Guido Mueller, Co-I: David Tanner
17. Light in strong magnetic fields: Axions, para-photons, and Vacuum QED Program name/sponsoring
Agency: Heising-Simons
Dates: 04/01/2018-03/31/2019
Budget: \$793,615
PI: Guido Mueller, Co-I: David Tanner

Students and Postdoctoral Scholars supervised:

Former Students:

1. Rachel Cruz, Ph.D. 2006: *Development of the UF LISA Benchtop Simulator for Time Delay Interferometry*
Next Position: Physics Instructor, University of North Florida, Jacksonville, FL (moved to Germany in 2011)
2. James Ira Thorpe, Ph.D. 2006: *Laboratory Studies of Arm-locking using the Laser Interferometry Space Antenna Simulator at the University of Florida*
Next position: Staff Scientist at Goddard Space Flight Center
3. Rodrigues Delgadillo, Masters 2007
Next position: Graduate Student at the University of Miami
4. Alix Preston, Ph.D. 2010: *Stability of materials for use in space-based interferometric missions*
Next position: Postdoctoral Associate at Goddard Space Flight Center
5. Yinan Yu, Ph.D. 2011: *Arm locking for Laser Interferometer Space Antenna*
Next position: Postdoctoral Associate at the University of Virginia
6. Shawn Mitryk, Ph.D. 2012: *Laser noise mitigation through time delay interferometry for space-based gravitational wave interferometers using the UF laser interferometry simulator*
Next position: SpaceX
7. Dylan Sweeney, Ph.D. 2012: *Laser Communications for LISA and the University of Florida Interferometry Simulator*
Next position: Corvid Technologies

8. Chris Mueller (Ph.D. 2014), *Techniques for resonant optical interferometry with applications to the advanced LIGO gravitational wave detector*,

Next position: Advanced Optowave

9. Aaron Spector (Ph.D. 2015), *Investigations of the telescope back-reflection for space-based interferometric gravitational wave detectors*.

Next position: Postdoctoral Assistant at DESY-Hamburg, Germany

10. Michael Hartmann (Ph.D. 2014), Measurement of thermal noise in dielectric mirrors and parallel phase modulation for gravitational-wave detectors,

Next position: Postdoctoral Assistant at Laboratoire National des Champs Magnetiques Intenses, Toulouse, France

11. Johannes Eichholz (Ph.D. expected 2015), *Heterodyne interferometry assisted digital laser frequency stabilization for measuring coating Brownian noise at cryogenic temperatures*,

Next position: Postdoctoral Assistant at California Institute of Technology

Former Postdoctoral scholars:

1. Volker Quetschke, Novel electro-optic modulators and modulation methods for high power gravitational wave detectors; investigations of thermally-induced optical effects in LIGO optical elements

Next Position: Assistant Professor, Physics Department, University of Texas Brownsville

2. Sridhar Guntaka, University of Florida LISA Interferometry Simulator

Last known Position: Dublin Institute of Technology

3. Vinzenz Wand, University of Florida LISA Interferometry Simulator

Next Position: Staff Scientist at Astrium, Germany

4. Muzammil Arain, Stable Recycling Cavities and Thermal Correction System for Advanced LIGO

Next Position: Scientist, KLA Tencor, San Jose

5. Josep Sanjuan, Telescope studies for LISA

Next Position: DLR-Germany/University Bremen

6. Paul Fulda, Advanced LIGO alignment sensing and control, thermal adaptive optics, commissioning Advanced LIGO

Next Position: LISA Group @ GSFC/NASA

Current Students:

1. Andrew Chilton (Ph.D. expected 2018), *Optical Bench for LISA*

2. Zachary Bush (Ph.D. expected 2018), *Heterodyne single photon detection for ALPS*

3. Harald Hollis (Ph.D. expected 2020), *Vacuum birefringence experiment at ALPS*

4. Gustavo Sanchez (Ph.D. expected 2020): Angular sensing and control and adaptive optics for Advanced GW detectors

Current Postdoctoral scholars:

1. Giacomo Ciani, Thermal Coating Noise for Advanced LIGO, Low noise torsion pendula and optical bench design for LISA

2. Simon Barke, Optical Design and single photon detection scheme for ALPS, Design for vacuum birefringence experiment at ALPS

Committees:

Department:

- Graduate Student Advisory Committee (GSAC)

- since 2012
- Chair since 2014
- Graduate Recruiting and Admissions Committee (GRAC)
 - 2006-2012
 - Chair 2010-2012

College:

- International Committee College of Liberal Arts and Sciences
 - 2009-2012

Teaching:

Courses taught:

- Phys 4803, Laboratory Physics 2 (Fall 2003, 2004, 2005, Spring 2005, 2006, Spring 2011, Spring 2015)
 - This course is taken by 5 to 18 undergraduate students usually majoring in Physics, Chemistry, or Astronomy
- Phys 2048, Physics 1 (Mechanics) with Calculus Lecturer (Fall 2008, Fall 2009)
 - This course is taken by 500 to 700 engineering students
- Phys 2053, Physics 1 (Mechanics) w/o Calculus, Lecturer (Fall 2010)
 - This course is taken by 500-700 non-engineering (pre-med, pre-vet, etc.) students
- Phys 2054, Physics 1 (E&M) w/o Calculus, Lecturer (Fall 2006)
 - This course is taken by 500-700 non-engineering (pre-med, pre-vet, etc.) students
- Phys 2054, Discussion Sections (Fall 2007, Spring 2010)
 - These are the discussion sections (25 to 30 students each) of Phys 2054
- Phys 4422, Optics (Spring 2007, 2008, 2009)
 - This course is taken by 5 to 10 undergraduate students usually majoring in Physics or Astronomy
- Phys 4802, Electronic Lab (Fall 2011, Fall 2012, Spring 2013, Fall 2013, Fall 2014, Fall 2015, Fall 2016)
 - This course is typically taken by 10 to 14 undergraduate students mostly majoring in Physics
- Phy 7097, Quantum Optics (Spring 2012)

- This course was taken by 10 Physics Graduate Students
- Phy 6920, Graduate Student Seminar (Spring 2016)
 - This course was taken by over 30 Physics Graduate Students

Personal Data:

Date of Birth: February 20, 1967

Married to Ines Mueller, two children

Citizenship: German, US

Language: English, German

Book Chapters:

1. Beverly Berger, ... Guido Mueller, ... William Weber, Receiving Gravitational Waves in General Relativity and Gravitation - A Centennial Perspective, Edited by Abhay Ashtekar, Beverly Berger, James Isenberg, Malcolm MacCallum, Cambridge University Press, ISBN 9781107037511 (2015)

Book chapters submitted or under review:

1. Guido Mueller, Chapter with Working title: Laser Interferometer Gravitational Wave Antenna, Ed. Eric Plagnol, Gerard Auger. expected to be published by World Scientific in Fall 2016
2. Guido Mueller, Gravitational Wave Instrumentation, Ed. David Burrows, expected to be publ. by World Scientific Publishing Company late 2016
3. Guido Mueller, Eric Genin, Chapter with Working title: The Input Optics subsystem or how to prepare the light for injection in Advanced Interferometric Gravitational-wave Detectors. Ed. David Reitze, Peter Saulson, expected to be published by World Scientific Book

Refereed Publications:

1. LVC, GW150914: The Advanced LIGO detectors in the era of first discoveries, Phys. Rev. Lett. 116, 131103 (2016)
2. LVC, GW150914: Implications for the stochastic gravitational wave background from binary black holes, Phys. Rev. Lett. 116, 131102 (2016)
3. LVC, Characterization of transient noise in the Advanced LIGO interferometers relevant to gravitational wave signal GW150914, Classical and Quantum Gravity, 33(13) (2016)
4. LVC, Properties of the binary black hole merger GW150914, Phys. Rev. Lett. 116, 241102 (2016)
5. LVC, Observing gravitational-wave transient GW150914 with minimal assumptions, Phys. Rev. D 93, 122004 (2016)
6. LVC, Localization and broadband follow-up of the gravitational-wave candidate GW150914, The Astrophysical Journal Letters, 826:L13 (8pp), (2016)
7. Chris Mueller et al., The Advanced LIGO Input Optics, Rev. Sci. Instrum. 87, 014502 (2016)
8. LVC, Searches for continuous gravitational waves from nine young supernova remnants, Astrophys.Jour. 813, 39/1–39 (2015)
9. LVC, Characterization of the LIGO detectors during their sixth science run. Class. Quantum Grav. 32 (2015) 105012
10. LVC, Narrow-band search of continuous gravitational-wave signals from Crab and Vela pulsars in Virgo VSR4 data, Phys. Rev. D 91 (2015) 022004

11. LVC, A directed search for gravitational waves from Scorpius X-1 with initial LIGO, *Phys. Rev. D* 91 (2015) 062008
12. LSC, Advanced LIGO, *Class. Quantum Grav.* 32 (2015) 074001
13. LVC, Observation of Gravitational Waves from a Binary Black Hole Merger, *Phys. Rev. Lett.* 116, 061102 (2016)
14. LVC, Astrophysical Implications of the Binary Black-Hole Merger GW150914, *ApJL*, 818, L22, 2016
15. LVC, Prospects for observing and localizing gravitational-wave transients with Advanced LIGO and Advanced Virgo, *Living Rev. Relativity* 19, 1 (2016)
16. LVC, All-sky search for long-duration gravitational wave transients with initial LIGO, *Phys. Rev. D* 93, 042005/1–19 (2016)
17. LVC, Search of the Orion spur for continuous gravitational waves using a loosely coherent algorithm on data from LIGO interferometers, *Phys. Rev. D* 93, 042006/1–14 (2016)
18. LVC, First low frequency all-sky search for continuous gravitational wave signals, *Phys. Rev. D* 93, 042007/1–26 (2016)
19. Chris Mueller et al., In situ characterization of the thermal state of . . . , *Class. Quantum Grav.* 32 (2015) 135018
20. Johannes Eichholz, David B. Tanner, and Guido Mueller, Heterodyne laser frequency stabilization for long baseline optical interferometry in space-based gravitational wave detectors, *Phys. Rev. D* 92, 022004 (2015)
21. LSC, Searching for stochastic gravitational waves using data from the two co-located LIGO Hanford detectors, *Phys. Rev. D* 91 (2015) 022003
22. LSC, Multimessenger Search for Sources of Gravitational Waves and High-energy Neutrinos: Results for Initial LIGO-Virgo and IceCube, *Phys. Rev. D* 90 (2014) 102002
23. LSC, Improved Upper Limits on the Stochastic Gravitational-Wave Background from 2009-2010 LIGO and Virgo Data, *Phys. Rev. Lett* 113 (2014) 231101
24. M. T. Hartman, V. Quetschke, D. B. Tanner, D. H. Reitze, and G. Mueller, Parallel phase modulation scheme for interferometric gravitational-wave detectors, *Optics Express*, Vol. 22, Issue 23, pp. 28327-28337 (2014)
25. Yinan Yu, Guido Mueller, Arm locking for space-based laser interferometry gravitational wave observatories, *Phys. Rev. D* 90, 062005 (2014)
26. LSC, Methods and results of a search for gravitational waves associated with gamma-ray bursts using the GEO600, LIGO, and Virgo detectors, *Phys. Rev. D* 89 (2014), 122004
27. LSC, Search for gravitational radiation from intermediate mass black hole binaries in data from the second LIGO-Virgo joint science run, *Phys. Rev. D* 89 (2014) 122003
28. LSC, First all-sky search for continuous gravitational waves from unknown sources in binary systems, *Phys. Rev. D* 90 (2014), 062010

29. LSC, First Searches for Optical Counterparts to Gravitational-wave Candidate Events, *The Astrophysical Journal Supplement Series* 02/2014; 211(7), 1:25.
30. LSC, Constraints on cosmic (super)strings from the LIGO-Virgo gravitational-wave detectors, *Phys. Rev. Lett.* 112 (2014) 131101
31. LSC, Application of a Hough search for continuous gravitational waves on data from the 5th LIGO science run, *Class. Quantum Grav.* 31 (2014) 085014
32. LSC, The NINJA-2 project: Detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations, *Class. Quantum Grav.* 31 (2014) 115004
33. LSC, Implementation of an F-statistic all-sky search for continuous gravitational waves in Virgo VSR1 data, *Class. Quantum Grav.* 31 (2014) 165014
34. LSC, Search for gravitational wave ringdowns from perturbed intermediate mass black holes in LIGO-Virgo data from 2005-2010, *Phys. Rev D* 89 (2014) 102006
35. LSC, Search for gravitational waves associated with gamma-ray bursts detected by the Interplanetary Network, *Phys. Rev. Lett.* 113 (2014) 011102
36. LVC, A search for long-lived gravitational-wave transients coincident with long gamma-ray bursts, *Phys. Rev. D* 88, 122004/1–13 (2013).
37. LVC, Directed search for continuous gravitational waves from the Galactic center, *Phys. Rev. D* 88, 102002/1–13 (2013).
38. LVC, Parameter estimation for compact binary coalescence signals with the first generation gravitational-wave detector network, *Phys. Rev. D* 88, 062001/1–24 (2013)
39. LVC, Antares, A first search for coincident gravitational waves and high energy neutrinos using LIGO, Virgo, and ANTARES data from 2007, *J. Cosmol. Astropart. Phys.* 6, 008/1–39 (2013).
40. LVC, Enhanced sensitivity of the LIGO gravitational wave detector by using squeezed states of light, *Nature Phot.* 7, 613–619 (2013).
41. Zhanwei Liu, Paul Fulda, Muzammil A. Arain, Luke Williams, Guido Mueller, D.B. Tanner, and D.H. Reitze, Feedback control of optical beam spatial profiles using thermal lensing, *Appl. Optics* 26, 6452–6457 (2013).
42. LSC, Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data, *Phys. Rev. D* 87 (2013) 042001
43. LSC, Search for Gravitational Waves from Binary Black Hole Inspiral, Merger and Ringdown in LIGO-Virgo Data from 2009-2010, *Phys. Rev. D* 87 (2013) 022002
44. LSC, Implementation and testing of the first prompt search for gravitational wave transients with electromagnetic counterparts, *Astron Astrophys* 539 (2012) A124
45. LSC, Search for Gravitational Waves from Low Mass Compact Binary Coalescence in LIGO's Sixth Science Run and Virgo's Science Runs 2 and 3, *Phys. Rev D* 85 (2012) 082002
46. LSC, First Low-Latency LIGO+Virgo Search for Binary Inspirals and their Electromagnetic Counterparts, *Astron Astrophys* 541 (2012) A155

47. LSC, Upper limits on a stochastic gravitational-wave background using LIGO and Virgo interferometers at 600-1000 Hz, *Phys. Rev. D* 85 (2012) 122001
48. LSC, Implications for the Origin of GRB 051103 from LIGO Observations, *Astrophys. J.* 755 (2012) 2
49. LSC, Search for Gravitational Waves from Intermediate Mass Binary Black Holes, *Phys. Rev. D* 85 (2012) 102004
50. LSC, All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run, *Phys. Rev. D* 85 (2012) 122007
51. LSC, Virgo data characterization and impact on gravitational wave searches, *Class. Quantum Grav.* 29 (2012) 155002
52. LSC, Swift Follow-Up Observations Of Candidate Gravitational-Wave Transient Events, *ApJS* 203 (2012) 28
53. LSC, Search for gravitational waves associated with gamma-ray bursts during LIGO science run 6 and Virgo science run 2 and 3, *Astrophys. J.* 760 (2012) 12
54. Shawn J. Mitryk* and Guido Mueller, Hardware-based demonstration of time-delay interferometry and TDI-ranging with spacecraft motion effects, *Phys Rev D*, 122006, 86(12) 2012
55. J.I. Collar, R. Essig, J.A. Jaros, A. Afanasev, O. Baker, B. Batell, J. Beacham, F. Bossi, J. Boyce, M. Buckley, G. Carosi, R. Cowan, A. Denig, B. Echenard, A. Freyberger, A. Gasparian, Y. Gershtein, M. Graham, P.W. Graham, A. Haas, J. Hartnett, I. Irastorza, J. Jaeckel, I. Jaegle, M. Lamm, A. Lindner, W.C. Louis, D. McKeen, H. Merkel, G. Mills, L.A. Moustakas, G. Mueller, M. Pivovarov, R. Povey, S. Rajendran, J. Redondo, A. Ringwald, P. Schuster, M. Schwarz, P. Sikivie, K. Sigurdson, J. Steffen, S. Stepanyan, M. Strassler, D. Tanner, M. Tobar, N. Toro, A. Upadhye, S. Vahsen, R. Van de Water, J. Vogel, D. Walker, A. Weltman, W. Wester, N. Weiner, G. Wiedemann, B. Wojtsekhowski, and K. Zioutas, New light, weakly coupled particles, in *Fundamental Physics at the Intensity Frontier*, J.L. Hewett, H. Weerts, R. Brock, J. Butler, B. Casey, et al. (ANL-HEP-TR-12-25, SLAC-R-991, arXiv:1205.2671 [hep-ex], 11 May 2012).
56. J. Sanjuan, D. Korytov, G. Mueller, R. Spannagel, C. Braxmaier, A. Preston, and J. Livas, Silicon carbide telescope dimensional stability for space-based gravitational wave detectors, *Rev. Sci. Instrum.* 83, 116107 (2012)
57. Dylan Sweeney and Guido Mueller, Experimental Verification of Clock Noise Transfer and Components for Spaced Based Gravitational Wave Detectors, *Optics Express*, Vol. 20 Issue 23, pp.25603-25612 (2012)
58. Oleg V. Palashov, Dmitry S. Zheleznov,, Alexander V. Voitovich, Victor V. Zelenogorsky, Eugene E. Kamenetsky, Efim A. Khazanov, Rodica M. Martin, Katherine L. Dooley, Luke Williams, Antonio Lucianetti, Volker Quetschke, Guido Mueller, David H. Reitze, David B. Tanner, Eric Genin, Benjamin Canuel, and Julien Marque, High-vacuum compatible high-power Faraday isolators for gravitational-wave interferometers, *JOSA B*, Vol. 29, Issue 7, pp. 1784-1792 (2012)
59. Aaron Spector and Guido Mueller. Back-reflection from a Cassegrain telescope for space-based interferometric gravitational-wave detectors 2012 *Class. Quantum Grav.* 29 205005

60. LSC, All-sky search for periodic gravitational waves in the full S5 LIGO data, *Phys. Rev. D* 85 (2012) 022001
61. Katherine Dooley et al, Thermal effects in the Input Optics of the Enhanced Laser Interferometer Gravitational-Wave Observatory interferometers, *Review of Scientific Instruments* 83, 033109 (2012)
62. LSC, Beating the spin-down limit on gravitational wave emission from the Vela pulsar, *Astrophys. J.* 737 (2011) 93, 37 pg.
63. R.S. Ottens, V. Quetschke, Stacy Wise, A.A. Alemi, R. Lundock, G. Mueller, D.H. Reitze, D.B. Tanner, B. F. Whiting, Near-Field Radiative Heat Transfer between Macroscopic Planar Surfaces, *Phys. Rev. Letter*, 014301 (2011)
64. J. Sanjuan, A. Preston, D. Korytov, A. Spector, A. Freise, G. Dixon, J. Livas, G. Mueller, Carbon fiber reinforced polymer dimensional stability investigations for use on the laser interferometer space antenna mission telescope, *Review of Scientific Instruments* 82, 124501 (2011)
65. Alix Preston, Guido Mueller, Bonding SiC to SiC using sodium silicate solution, *International Journal of Applied Ceramic Technology*, doi: 10.1111/j.1744-7402.2011.02644.x
66. Yinan Yu, Shawn Mitryk, Guido Mueller, Experimental validation of dual/modified dual arm locking for LISA, *Class. Quantum Gravity*, 28, 094009 (2011)
67. LSC, Search for Gravitational Wave Bursts from Six Magnetars, *Astrophys. J.* 734 (2011) L35
68. LSC, Search for gravitational waves from binary black hole inspiral, merger and ringdown, *Astrophys. J.* 734 (2011) L35
69. Yinan Yu, Shawn Mitryk, Guido Mueller, Experimental Validation of Dual/Modified Dual Arm Locking for LISA, *Class. Quant. Grav.* 28 094009 (2011), 11 pg
70. LSC, Beating the spin-down limit on gravitational wave emission from the Vela pulsar, *Astrophys. J.* 737 (2011) 93
71. LSC, A gravitational wave observatory operating beyond the quantum shot-noise limit, *Nature Physics* 7 (2011) 962
72. LSC, Directional limits on gravitational waves using LIGO S5 science data, *Phys. Rev. Lett.* 107 (2011) 271102,
73. Alix Preston, Guido Mueller, Bonding SiC to SiC using a sodium silicate solution, *International Journal of Applied Ceramic Technology*, Vol. 8(1), (2011), <http://onlinelibrary.wiley.com/doi/10.1111/1744-7402.2011.02644.x/abstract>, 8 pg
74. LSC, Search for Gravitational Wave Bursts from Six Magnetars, *Astrophys. J.* 734 (2011) L35, 9 pg.
75. LSC, Search for gravitational waves from binary black hole inspiral, merger and ringdown, *Phys. Rev. D* 83 (2011) 122005, 20 pg

76. Richard Ottens, V. Quetschke, Stacy Wise, A.A. Alemi, R. Lundock² G. Mueller, D.H. Reitze, D.B. Tanner, B.F. Whiting, Near-field radiative heat transfer between macroscopic planar surfaces, *Phys. Rev. Lett.* 107 014301 (2011), 4 pg
77. Nergis Mavalvala, David McClelland, Guido Mueller, D.H. Reitze, Roman Schnabel, Benno Willke, Lasers and optics: looking towards third generation gravitational wave detectors, (invited), *General Relativity and Gravitation*, Volume 43, Issue 2, pp.569-592, 2011
78. LSC, A search for gravitational waves associated with the August 2006 timing glitch of the Vela pulsar, *Phys. Rev. D* 83 (2011) 042001, 13 pg.
79. LSC, Calibration of the LIGO Gravitational Wave Detectors in the Fifth Science Run, *Nucl. Instrum. Meth. A* 624 (2010) 223-240
80. LSC, First search for gravitational waves from the youngest known neutron star, *Astrophys. J.* 722 (2010) 1504-1513
81. Shawn J. Mitryk, Vinzenz Wand, Guido Mueller, Verification of Time Delay Interferometry Techniques Using the University of Florida LISA Interferometric Simulator, *Class. Quant. Grav.* 27 084012 (2010), 10 pg
82. LSC, Search for Gravitational Waves from Compact Binary Coalescence in LIGO and Virgo Data from S5 and VSR1, *Phys. Rev. D* 82 (2010) 102001, 11 pg
83. LSC, Predictions for the Rates of Compact Binary Coalescences Observable by Ground-based Gravitational-wave Detectors, *Class. Quantum Grav.* 27 (2010) 173001, 25 pg
84. LSC, All-sky search for gravitational-wave bursts in the first joint LIGO-GEO-Virgo run, *Phys. Rev. D* 81 (2010) 102001, 20pg
85. LSC, Search for gravitational-wave inspiral signals associated with short Gamma-Ray Bursts during LIGO's fifth and Virgo's first science run, *Astrophys. J.* 715 (2010) 1453-1461
86. LSC, Searches for gravitational waves from known pulsars with S5 LIGO data, *Astrophys. J.* 713 (2010) 671-685
87. LSC, Search for gravitational-wave bursts associated with gamma-ray bursts using data from LIGO Science Run 5 and Virgo Science Run 1, *Astrophys. J.* 715 (2010) 1438-1452
88. J. Harms , F. Acernese , F. Barone , I. Bartos , M. Beker , J. F. J. van den Brand , N. Christensen , M. Coughlin , R. DeSalvo , S. Dorsher , J. Heise , S. Kandhasamy , V. Mandic , S. Márka , G. Mueller , L. Naticchioni , T. O'Keefe , D. S. Rabeling , A. Sajeve , T. Trancynger, V. Wand, Characterization of the seismic environment at the Sanford Underground Laboratory, South Dakota, *Class. Quant. Grav.* 27 (2010) 225011, 22 pg
89. Guido Mueller, Pierre Sikivie, D. B. Tanner, and Karl van Bibber, Detailed design of a resonantly enhanced axion-photon regeneration experiment, *Phys. Rev. D* 80 (2009) 072004, 10pg
90. Arain, Muzammil A; Mueller, Guido, On the Interference of two Gaussian Beams and their ABCD Matrix Representation, *Optics Express*, 17(21) (2009) 19181-19189
91. LSC, The path to the enhanced and advanced LIGO gravitational-wave detectors, *Class. Quantum Grav.* 26(11) (2009) 1114013, 8 pg

92. J.C. Livas, J.I Thorpe, K. Numata, S. Mitryk, G. Mueller, V. Wand, Frequency tunable, pre-stabilized lasers for LISA via sideband locking, *Class. Quant. Grav.* 26(9) (2009) 094016, 10 pg
93. Arain, Muzammil A; Korth, William Z; Williams, Luke F; Martin, Rodica M; Mueller, Guido; Tanner, D B; Reitze, David H, Adaptive control of modal properties of optical beams using photothermal effects, *Optics Express* 17(22), (2010) 2767-2781
94. LSC, An upper limit on stochastic gravitational-wave background of cosmological origin, *Nature* 460 (2009) 990-995
95. LSC, Observation of a kilogram-scale oscillator near its quantum ground state, *New J. Phys.* 11 (2009) 073032, 13pg.
96. LSC, Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGO's fifth science run, *Phys. Rev. D* 80 (2009) 047101, 8 pg
97. LSC, The Einstein@Home search for periodic gravitational waves in early S5 LIGO data, *Phys. Rev. D* 80 (2009) 042003, 14pg
98. LSC, Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data, *Phys. Rev. D* 80 (2009) 062001, 9 pg
99. LSC, Search for gravitational-wave bursts in the first calendar year of LIGO's fifth science run, *Phys Rev D* 80 (2009) 102001, 26 pg
100. LSC, Stacked search for gravitational waves from the 2006 SGR 1900+14 storm, *Astrophys. J.* 701 (2009) L68-L74
101. LSC, Search for high frequency gravitational-wave bursts in the first calendar year of LIGO's fifth science run, *Phys Rev D* 80 (2009) 102002, 14 pg
102. LSC, First LIGO search for gravitational wave bursts from cosmic (super)strings, *Phys Rev D* 80 (2009) 062002, 11 pg
103. LSC, Search for gravitational waves from low mass binary coalescences in the first year of LIGO's S5 data, *Phys. Rev. D* 79 (2009) 122001, 14 pg
104. LSC, All-sky LIGO Search for Periodic Gravitational Waves in the Early S5 Data, *Phys. Rev. Lett.* 102 (2009) 111102, 6pg
105. LSC, LIGO: The Laser Interferometer Gravitational-Wave Observatory, *Rep. Prog. Phys.* 72 (2009) 076901, 25 pg
106. LSC, The Einstein@Home search for periodic gravitational waves in LIGO S4 data, *Phys. Rev. D* 79 (2009) 022001, 29 pg
107. Barriga, Pablo; Arain, Muzammil A; Mueller, Guido; Zhao, Chunong; Blair, David G, Optical design of the proposed Australian International Gravitational Observatory, *Optics Express*, 17(4), 2149-2165 (2009)
108. Muzammil A. Arain; Guido Mueller, Design of the Advanced LIGO recycling cavities, *Optics Express*, 16(14), (2008) 10018-10032

109. Alix Preston, Benjamin Balaban, Guido Mueller, Hydroxide-Bonding Strength Measurements for Space-Based Optical Missions, *International Journal of Applied Ceramic Technology* 5(4) (2008) 365-372
110. LSC, Search for Gravitational Wave Bursts from Soft Gamma Repeaters, *Phys. Rev. Lett.* 101 (2008) 211102, 6pg
111. LSC, Beating the spin-down limit on gravitational wave emission from the Crab pulsar, *Astrophys. J. Lett.* 683 (2008) L45-L49
112. LSC, Implications for the Origin of GRB 070201 from LIGO Observations, *Astrophys. J.* 681 (2008) 1419-1430
113. LSC, Astrophysically triggered searches for gravitational waves: status and prospects, *Class. Quantum Grav.* 25 (2008) 114051, 12 pg
114. LSC, Detection confidence tests for burst and inspiral candidate events, *Class. Quantum Grav.* 25 (2008) 184006, 12 pg
115. LSC, All-sky search for periodic gravitational waves in LIGO S4 data, *Phys. Rev. D* 77 (2008) 022001, 38 pg
116. LSC, Search for gravitational waves from binary inspirals in S3 and S4 LIGO data, *Phys. Rev. D* 77 (2008) 062002, 13 pg
117. LSC, First joint search for gravitational-wave bursts in LIGO and GEO600 data, *Class. Quantum Grav.* 25 (2008) 245008, 21 pg.
118. LSC, Search of S3 LIGO data for gravitational wave signals from spinning black hole and neutron star binary inspirals. *Phys. Rev. D* 78 (2008) 042002, 19 pg
119. LSC, Search for Gravitational Waves Associated with 39 Gamma-Ray Bursts Using data from the Second, Third, and Fourth LIGO Runs, *Phys. Rev. D* 77 (2008) 062004, 22 pg
120. LSC, A Joint Search for Gravitational Wave Bursts with AURIGA and LIGO, *Class. Quantum Grav.* 25 (2008) 095004, 16 pg
121. Muzammil A. Arain, Volker Quetschke, Joseph Gleason, Luke F. Williams, Malik Rakhmanov, Jinho Lee, Rachel J. Cruz, Guido Mueller, D. B. Tanner, and David. H. Reitze , Adaptive beam shaping by controlled thermal lensing in optical elements, *Applied Optics* 46(12) (2007) 2153-2165
122. LSC, First Cross-Correlation Analysis of Interferometric and Resonant-Bar Gravitational-Wave Data for Stochastic Backgrounds, *Phys. Rev. D* 76 (2007) 022001, 17 pg
123. LSC, Upper limit map of a background of gravitational waves, *Phys. Rev. D* 76 (2007) 082003, 11 pg
124. LSC, Searching for Stochastic Background of Gravitational Waves with LIGO, *Astrophys. J.* 659 (2007) 918-930
125. LSC, Upper Limits on Gravitational Wave Emission from 78 Radio Pulsars, *Phys. Rev. D* 76 (2007) 042001, 20 pg

126. LSC, Search for gravitational-wave bursts in LIGO data from the fourth science run, *Class. Quantum Grav.* 24 (2007) 5343-5369
127. LSC, Search for gravitational wave radiation associated with the pulsating tail of the SGR 1806-20 hyperflare of December 27, 2004 using LIGO, *Phys. Rev. D* 76 (2007) 062003, 12 pg
128. LSC, Coherent searches for periodic gravitational waves from unknown isolated sources and Scorpius X-1: results from the second LIGO science run, *Phys. Rev. D* 76 (2007) 082001, 35 pg
129. LSC, Joint LIGO and TAMA300 search for gravitational waves from inspiralling neutron star binaries, *Phys. Rev. D* 73 (2006) 102002, 10 pg
130. LSC, Search for gravitational waves from binary black-hole inspirals in LIGO data, *Phys. Rev. D* 73 (2006) 062001, 17 pg
131. Guido Mueller, *LISA Interferometry Proceedings of SPIE Vol. 6268: Advances in Stellar Interferometry*, Ed. John Monnier, Markus Schoeller, William Danchi (2006) 685-695
132. Alix Preston, Rachel Cruz, J.Ira Thorpe, Guido Mueller, Rod Delgado, *Dimensional Stability of Hexology SA Silicon Carbide and Zerodur Glass Using Hydroxide-Catalysis Bonding for Optical Systems in Space Proceedings of SPIE Vol. 6273: Optomechanical Technologies for Astronomy*, Ed. Eli Atad-Ettedgui, Joseph Antebi, Dietrich Lemke (2006) 649-656
133. Rachel J Cruz, James I Thorpe, Alix Preston, Rodrigo Delgado, Michael Hartman, Shawn Mitryk, Aaron Worley, Gabriel Boothe, Sridhar R Guntaka, Sergei Klimenko, Davod B. Tanner, Guido Mueller, *The LISA benchtop simulator at the University of Florida*, *Class. Quant. Grav* 23 S751 (2006), 10 pg
134. LSC, Search for Gravitational Wave Bursts in LIGO's Third Science Run *Class. Quant. Grav.* 23 (2006) S29-S39
135. LSC, Search for black hole ringdown signals in LIGO S4 data, *Class. Quantum Grav.* 23 (2006) S709-S713
136. LSC, Overview of LIGO Scientific Collaboration inspiral searches, *Class. Quantum Grav.* 23 (2006) S705-S707
137. LSC, Identifying correlated environmental noise in co-located interferometers with application to stochastic gravitational wave analysis, *Class. Quantum Grav.* 23 (2006) S693-S704
138. LSC, Multidimensional classification of kleineWelle triggers from LIGO science run, *Class. Quantum Grav.* 23 (2006) S661-S672
139. LSC, Status of LIGO at the start of the fifth science run, *Class. Quantum Grav.* 23 (2006) S653-S660
140. LSC, The Status of GEO600, *Class. Quantum Grav.* 23 (2006) S643-S651
141. LSC, Status of the LIGO detectors, *Class. Quantum Grav.* 23 (2006) S51-S56
142. LSC, Reducing gravitational wave false alarms using signals at the antisymmetric port in LIGO detectors, *Class. Quantum Grav.* 23 (2006) S17-S22

143. V. Quetschke, J. Gleason, M. Rakhmanov, J. Lee, L. Zhang, K.Y. Franzen, C. Leidel, G. Mueller, R. Amin, D.B. Tanner, and D.H. Reitze, Adaptive control of laser modal properties *Opt. Lett.* 31(2) (2006) 217-219
144. Guido Mueller, Beam Jitter Coupling in Advanced LIGO, *Optics Express* 13(18) (2005) 7118-7132
145. Ira Thorpe, Guido Mueller, Experimental Verification of Arm-locking for LISA using Electronic Phase Delay, *Physics Letters A* 342(3) (2005) pg. 199-204
146. LSC, Upper Limits on Stochastic Background of Gravitational Waves *Phys. Rev. Lett.* 95 (2005) 221101, 6 pg
147. LSC, Limits on Gravitational-Wave Emission from Selected Pulsars Using LIGO Data, *Phys. Rev. Lett.* 94, 181103 (2005), 6 pg
148. LSC, First all-sky upper limits from LIGO on the strength of periodic gravitational waves using Hough transform *Phys. Rev. D* 72 (2005) 102004, 22 pg
149. LSC, Search for gravitational waves from galactic and extra-galactic binary neutron stars, *Phys. Rev. D* 72 (2005) 082001, 22 pg
150. LSC, Search for Gravitational waves from Primordial Black Hole Binary Coalescences in the Galactic Halo, *Phys. Rev. D* 72 (2005) 082002, 8 pg
151. LSC, Upper limits from the LIGO and TAMA detectors on the rate of gravitational-wave bursts, *Phys. Rev. D* 72 (2005) 122004, 16 pg
152. LSC, Upper limits on gravitational wave bursts in LIGO's second science run, *Phys. Rev. D* 72 (2005) 062001, 25 pg
153. Volker Quetschke, Joseph Gleason, Christina Leidel, Michelle Snider, Jinho Lee, Malik Rakhmanov, Liang Zhang¹, Guido Mueller, David Reitze, and David Tanner, A thermal adaptive mode-matching telescope for interferometric gravitational wave detectors in *Laser Beam Shaping VI* edited by F.M. Dickey and D.L. Shealy (SPIE Vol. 5876, Bellingham, Washington, 2005) pp. 128-136
154. Ira Thorpe, Guido Mueller, Electronic Phase Delay - a first step towards a bench-top model of LISA, *Class. Quant. Grav.* 22(10) (2005) S227-S235 This paper was selected by the editorial board of CQG as a highlight paper in 2004/2005.
155. LSC, Searching for gravitational waves from known pulsars, *Class. Quantum Grav.* 22 (2005) S1277-S1282
156. LSC, Wide parameter search for isolated pulsars using the Hough transform, *Class. Quantum Grav.* 22 (2005) S1265-S1275
157. LSC, Report on the first binary black hole inspiral search in LIGO data, *Class. Quantum Grav.* 22 (2005) S1119-S1127
158. LSC, Status of the joint LIGO-TAMA300 inspiral analysis, *Class. Quantum Grav.* 22 (2005) S1109-S1118
159. LSC, Using the INSPIRAL program to search for gravitational waves from low-mass binary inspiral, *Class. Quantum Grav.* 22 (2005) S1097-S1107

160. LSC, Veto studies for LIGO inspiral triggers, *Class. Quantum Grav.* 22 (2005) S1059-S1068
161. LSC, Gravitational wave burst vetoes in the LIGO S2 and S3 data analyses, *Class. Quantum Grav.* 22 (2005) S1051-S1058
162. LSC, Improvements in strain calibration for the third LIGO science run, *Class. Quantum Grav.* 22 (2005) S985-S994
163. LSC, Search for gravitational waves associated with the gamma ray burst GRB030329 using the LIGO detectors, *Phys. Rev. D* 72 (2005) 042002, 17 pg
164. Stacy Wise, V. Quetschke, A.J. Deshpande, G. Mueller, D.H Reitze, D.B. Tanner, B.F. Whiting, Y. Chen, A. Tuennermann, E.Kley, T. Clausnitzer, Phase effects in the diffraction of light: beyond the grating equation, *Phys. Rev. Lett.* 95, 013901 (2005), 4 pg
165. James Ira Thorpe, Rachel Jean Cruz, Shannon Reynier Sankar, Guido Mueller, Paul McNamara, First step toward a benchtop model of the Laser Interferometer Space Antenna, *Optics Letters* 29(24) (2004) 2843-2845
166. Efim Khazanov, Nikolay Andreev, Anatoly Malshakov, Oleg Palashov, Anatoly Poteomkin, Alexander Sergeev, Andrey Shaykin, Victor Zelenogorsky, Igor Ivanov, Rupal Amin, Guido Mueller, D.B. Tanner, D.H. Reitze, Compensation of thermally induced modal distortions in Faraday isolators, *IEEE Journal of Quantum Electronics* 40(10) (2004) 1500-1510
167. LSC, Analysis of first LIGO Data for stochastic gravitational waves, *Phys. Rev. D* 69 (2004) 122004, 24 pg
168. LSC, Analysis of LIGO data for gravitational waves from binary neutron stars, *Phys. Rev. D* 69 (2004) 122001, 16 pg
169. LSC, Setting upper limits on the strength of periodic gravitational waves from PSR J1939-2134 using the first science data from GEO600 and LIGO Detectors, *Phys. Rev. D* 69 (2004) 082004, 16 pg
170. LSC, First upper limits from LIGO on gravitational wave bursts, *Phys. Rev. D* 69 (2004) 102001, 21 pg
171. LSC, Detector description and performance for the first coincidence observations between LIGO and GEO, *Nucl. Instrum. Meth. A* 517 (2004) 154-179
172. Guido Mueller, Tom Delker, D.B. Tanner, David Reitze, Dual Recycled Cavity Enhanced Michelson Interferometer for Gravitational Wave Detection, *Appl. Optics* 42(7) (2003) 1257-1268
173. Ken Strain, Guido Mueller³, Tom Delker¹, David Reitze, D.B. Tanner, James E. Mason, Phil Willems, Daniel Shaddock, David McClelland, Length Sensing in Advanced LIGO, *Appl. Optics* 42(7) (2003) 1244-1256
174. Guido Mueller, Qi-ze Shu, Rana Adhikari, D. B. Tanner, David Reitze, Daniel Sigg, Nergis Mavalvala, Jordan Camp, Determination and optimization of mode matching into optical cavities by heterodyne detection, *Optics Letters* 25 (4) (2000) 266-268
175. Guido Mueller, Ken-ichi Ueda, Stabilization of Injection Locking using Polarization Spectroscopic Technique, *Jpn. J. Appl. Phys.* 37 (1998) 3313-3318

176. G. Mueller, M. Mueller, A. Wicht, R.-H. Rinkleff, K. Danzmann, Optical Resonator with steep internal dispersion, *Phys. Rev. A* 56(3) (1997) 2385-2389
177. A. Wicht, K. Danzmann, M. Fleischhauer, M. Scully, G. Mueller, R.-H. Rinkleff, White-light cavities, atomic phase coherence, and gravitational wave detectors, *Opt. Comm* 134, pp. (1997) 431-439
178. G. Mueller, A. Wicht, R. Rinkleff, K. Danzmann, A new kind of heterodyne measurement of Coherent Population Trapping in an atomic beam, *Optics Communications* 127, pp. (1996) 37-43
179. A. Hoepe, D. Haubrich, G. Mueller, W. G. Kaenders, D. Meschede, Neutral Cesium Atoms in Strong Magnetic-Quadrupole Fields at Sub-Doppler Temperatures *Europhys. Lett.*, 22(9), pp. (1993) 669-674

Reports/Non-refereed publications:

1. <http://spie.org/x109319.xml>
2. *Experimental Verification of Clock Noise Transfer and Components for LISA and UFLIS*, Dylan Sweeney, Guido Mueller, accepted by *Journal of Physics: Conference Series*
3. *Heterodyne Laser Frequency Stabilization for the Laser Interferometer Space Antenna*, Johannes Eichholz, Steven Hochman, Sebastian Hild, Guido Mueller, accepted by *Journal of Physics: Conference Series*
4. *Arm locking with Doppler estimation errors*, Yinan Yu, Vinzenz Wand, Shawn Mitryk, Guido Mueller, 2010 *J. Phys.: Conf. Ser.* 228 012044
5. *Implementation of armlocking with a delay of 1 second in the presence of Doppler shifts*, Vinzenz Wand, Yinan Yu, Shawn Mitryk, Dylan Sweeney, Alix Preston, David Tanner, Guido Mueller, James Ira Thorpe, Jeffrey Livas, *J. Phys.: Conf. Ser.* 154 (2009) 012024
6. *Benchmark Models of LISA Interferometry at the University of Florida*, James I. Thorpe, Rachel J. Cruz, Shawn Mitryk, G.T.S. Reddy, Guido Mueller, NSTC, Washington 2007
7. *Laser communication, clock synchronization, and ranging in interferometric space missions*, Rodrigo Delgadillo, Wan Wu, Ira Thorpe, Shawn Mitryk, Volker Quetschke, Guido Mueller, NSTC, Washington 2007
8. *Stable Materials and Bonding Techniques for SpaceBased Optical Systems*, Alix Preston, Benjamin Balaban, Gabriel Boothe, Guido Mueller, NSTC, Washington 2007
9. *Time Delay Interferometry using the UF-LISA Benchmark Simulator*, Rachel J. Cruz, James I. Thorpe, Michael Hartman, Guido Mueller, 6th International LISA Symposium, *AIP Conf. Proc.* 873, pp. 319-325 (2006)
10. *Dimensional Stability of Hexoloy SA® Silicon Carbide and Zerodur™ Materials for the LISA Mission*, Alix Preston, Rachel J. Cruz, J. Ira Thorpe, Guido Mueller, G. Trask Boothe, Rodrigo Delgadillo, and Sridhar R. Guntaka, 6th International LISA Symposium, *AIP Conf. Proc.* 873, pp. 369-373 (2006)

11. *Arm-Locking in a LISA-like Hardware Model: A Status Report*, J. I. Thorpe, R. J. Cruz, M. Hartman, and G. Mueller, 6th International LISA Symposium, AIP Conf. Proc. 873, pp. 661-667 (2006)
12. *LISA Data Issues Taskforce Report*, Pete Bender, Neil Cornish, Lee Samuel Finn, Guido Mueller, Marcello Sallusti, Bonny Shoemaker, Jean-Yves Vinet, LIST-Internal Report (2006)
13. *Laser frequency stabilization for LISA*, Guido Mueller, Paul McNamara, James Ira Thorpe, Jordan Camp, NASA Technical Publication TP-2005-212790 (2005).
14. *Laser Interferometer Space Antenna Simulator* R.J. Cruz, J.I. Thorpe, G. Mueller, Laser Physics **15**(7) (2005) pp. 1056-1061
15. *40m DC readout review, report and recommendations* Peter Fritschel, Nergis Mavalvala, Guido Mueller, Fred Raab, Daniel Sigg, Ken Strain, LIGO-T050168-00-R, 2004
16. *Mode Matching in Advanced LIGO* Guido Mueller, Stacy Wise, LIGO-T020026-00-D, 2003
17. *EO-Modulators for Advanced LIGO* Guido Mueller, LIGO-T020025-00-D, 2003
18. *Longitudinal and angular alignment requirements for Advanced LIGO Mode Cleaner* Guido Mueller, LIGO-T020024-00-D, 2003
19. *Sideband Sensing in Advanced LIGO* Guido Mueller, LIGO-T020023-00-D, 2003
20. *Pointing Requirements in Advanced LIGO* Guido Mueller, LIGO-T020022-01-D, 2003
21. *Sideband Requirements in Advanced LIGO* Guido Mueller, LIGO-T020021-00-D, 2003
22. *Advanced LIGO Input Optics Design Requirements Document* G. Mueller, R. Amin, M. Rakhmanov, D. H. Reitze, D.B. Tanner, S. Wise, LIGO-T020020-00-D, 2002
23. *Advanced LIGO Input Optics Conceptual Design Document* R. Amin, G. Mueller, M. Rakhmanov, D. H. Reitze, D. B. Tanner, S. Wise, LIGO-T020027-00-D, 2000
24. *Reference Design Document for the Advanced LIGO Optics* G. Mueller, D. H. Reitze, H. Rong, D. B. Tanner, S. Yoshida, and J. Camp, LIGO-T010002-00-D, LIGO Technical Document, 2000
25. *Measurement of Self-Induced Beam Effects in Transmissive Optics for LIGO* Rana Adhikari, Jordan Camp, Nergis Mavalvala, Guido Mueller, David Reitze, Daniel Sigg, David Tanner, LIGO-T980021-00-D, 1998

Invited Presentations

1. *Gravitationswellen: Der Beginn einer neuen Ära in der Astronomie*, Kant-Society, Minden, Germany (July 2016)
2. *Wanted-Gravity Messenger*, Porta-Gymnasium, Porta Westfalica, Germany (July 2016)
3. *Wanted-Gravity Messenger*, Eastside Highschool, Gainesville, FL (June 2016)
4. *Wanted-Gravity Messenger*, Herder-Gymnasium, Minden, Germany (June 2016)
5. *Laser Interferometry: A new tool for Astrophysics*, Colloquium, UTRGV, (November 2015)

6. *LISA R&D activities in the US*, Sino-German Symposium, AEi-Hannover (September 2015)
7. *LISA - A space-based gravitational wave observatory*, CGC-Miami Meeting, Ft. Lauderdale (December 2014)
8. *(e)LISA: Status/Options in US*, eLISA Consortium Meeting, Zürich (March 2014)
9. *LISA in US*, eLISA Consortium Meeting, Guido Mueller, John Conklin, Milan, (December 2014)
10. *Space-based gravitational wave observatories: Learning from the past, moving towards the future*, Neil Cornish, Guido Mueller, Bulletin of the APS-April meeting, H8.00006, (April 2014)
11. *Resonantly Enhanced Axion Regeneration: Pushing the Limits*, Guido Mueller, David Tanner, Pierre Sikivie, DESY-Seminar, Hamburg, (August 2014)
12. *Space-based gravitational wave observatories: Learning from the past, moving towards the future*, Guido Mueller, AAS Meeting in Washington DC, (January 2014)
13. *Space-based gravitational wave observatories: Learning from the past, moving towards the future*, Guido Mueller, PCOS Townhall Meeting @ AAS (January 2014)
14. *Laser interferometry in Gravitational wave and Axion detectors*, Guido Mueller, DESY-Seminar, Hamburg, (May 2013)
15. *eLISA*, Guido Mueller, GWADW, Elba, (May 2013)
16. *LISA in the light of eLISA*, HEAD Meeting, Monterey, (April 2013)
17. *LISA/SGO in the US*, Gravitational Waves: New Frontier, Seoul National University, (January 2013)
18. *Status of a Future Gravitational-Wave Mission*, Robin Stebbins, Guido Mueller, PCOS Town Hall meeting @AAS, (January 2013)
19. *GW-SAG Status and Plans*, AAS Meeting, Long Beach (January 2013)
20. *LISA, the situation in the US*, eLISA Consortium Meeting, Paris (October 2012)
21. *The Status of LISA*, Colloquium, Department of Astronomy, UF (September 2012)
22. *Space-based Gravitational wave observatory*, NASA-Langley, (August 2012)
23. *GWSAG Inaugural meeting*, PHYSPAG meeting, Washington DC (August 2012)
24. *Space born detector in the US*, Marcell Grossman 13, Stockholm (July 2012)
25. *Advanced LIGO, Prospects and Status*, LISA Symposium, Paris (May 2012)
26. *Squeezing in Resonantly Enhanced Axion-Photon Regeneration*, Vistas in Axion Physics, UWA (April 2012)
27. *Laser Interferometry over 5 million km*, Guido Mueller, GWADW, Elba, 03/24/2011

28. *Gravitational Wave Astrophysics and Astronomy in the next decade*, Guido Mueller, Phys-Pag@APS meeting, April APS meeting, Anaheim, 05/01/2011
29. *LISA – The Laser Interferometer Space Antenna*, Guido Mueller, Colloquium, Florida State University, 01/13/2011
30. *Current Status of UFLIS*, Guido Mueller, LIST-WG2 Meeting, Heidelberg, 12/10/2010
31. *International REU for Gravitational Physics*, Guido Mueller, Bernard Whiting, SESAPS Meeting in Baton Rouge, 11/08/2010
32. *The interferometry measurement system of LISA*, Guido Mueller, GR 19, Mexico City, 07/05/2010
33. *UFLIS: The University of Florida LISA Interferometer Simulator*, Guido Mueller, COSPAR, Bremen, 07/17/2010
34. *LISA – The Laser Interferometer Space Antenna*, Colloquium, Guido Mueller, University of Minnesota, 10/13/2010
35. *LISA Technology – A status report*, Gravitational Waves 2010, Guido Mueller, University of Minnesota, 10/16/2010
36. *LISA Interferometry: Testing under relevant conditions*, Guido Mueller, LISA Symposium, Stanford, 06/20/2010
37. *The Science and Technology of LISA*, Guido Mueller, APS-April Meeting, Denver 2009, D5.00002
38. *Resonantly enhanced axion-photon regeneration: Pushing the limits*, Guido Mueller, D.B. Tanner, Sikivie-Fest, Gainesville (2010)
39. *Gravitational Waves (GW): A New Window to the Universe*, Guido Mueller, Astrophysics Seminar Fermilab (September 2008)
40. *LISA Interferometry and UFLIS*, Guido Mueller, LISA/DECIGO Workshop, Tokyo (November 2008)
41. *LISA: A Space-Based Gravitational Wave Detector*, Laser Science Conference 23, San Jose 2007
42. *LISA Optics and Interferometry*, NSF/DFG Workshop, Washington, 2007
43. *Parametric Instabilities and the geometry of the recycling cavities*, Parametric Instability workshop, Perth-Gingin 2007
44. *LISA*, Annual Meeting of the Southeastern Section of the APS (SESAPS), Williamsburg, Virginia, November 2006
45. *LISA Interferometry: Basic Principles and critical components*, High Energy Astrophysics Seminar, Stanford, July 2006
46. *LISA: Gravitational Wave Detection in Space*, Colloquium, Department of Physics, Trinity College, February 2006
47. *LISA and LIGO*, Colloquium, Department of Physics, University of Florida, January 2006

48. *Design of Stable Power-Recycling Cavities*, Volker Quetschke, Guido Mueller, Gingin Workshop on Gravitational Wave Detection, October 2005
49. *Status of LIGO*, Towards a 3rd generation European Gravitational Wave Observatory, Exploratory Workshop of the European Science Foundation, Perugia, Italy, September 2005
50. *Input Optic requirements and components for High Power lasers*, Towards a 3rd generation European Gravitational Wave Observatory, Exploratory Workshop of the European Science Foundation, Perugia, Italy, September 2005
51. *Interferometric Gravitational Wave Detectors: LIGO and LISA*, Colloquium, Inst. for Applied Physics, University of Bonn, September 2004
52. *LIGO: Status Quo and the Future*, Guido Mueller for the LSC, Symposium on Modern Problems of Laser Physics, Novosibirsk, August 2004
53. *LISA and Beyond Einstein*, Colloquium, Dep. of Physics, University of Florida, January 2004

Presentations and Posters presented at Professional Conferences/Meetings (incomplete):

1. Telescope Back-reflection in space-based gravitational wave detectors, AAS Meeting, Long Beach, (January 2013)
2. Parallel Modulation with MZ interferometer, LVC Meeting, Rome (September 2012)
3. aLIGO Faraday Isolator and Modecleaner at LLO, LVC Meeting, Rome (September 2012)
4. Advanced LIGO Input Optics, LVC Meeting, Rome (September 2012)
5. Adaptive Optical Element, LVC Meeting, Rome (September 2012)
6. LISA/SGO: The status at NASA, LVC Meeting, Cambridge (March 2012)
7. Advanced LIGO Faraday Isolator, LVC Meeting, Cambridge (March 2012)
8. HAM Aux Suspensions, LVC Meeting, Cambridge (March 2012)
9. *Laser Stabilization and Material Studies for the Laser Interferometer Space Antenna (LISA)*, Amanda Cordes, ... Guido Mueller, Poster, AAS-meeting, Boston, May 2011
10. *Laser Noise Stabilization, Processing, and Extraction Simulation for the LISA mission at the University of Florida*, Yinan Yu, ... Guido Mueller, Poster, AAS-meeting, Boston, May 2011
11. *QOTF, MRI & CGA*, Guido Mueller, LVC Meeting, Arcadia, 03/15/2011
12. *Parallel Phase Modulation for Advanced LIGO*, Michael Hartman, Volker Questchke, Benjamin Wu, Muzamil Arain, David Reitze, David Tanner, Guido Mueller, SESAPS Meeting in Baton Rouge, 11/08/2010
13. *LISA telescope spacer investigations*, J. Sanjuan, A. Preston. D. Korytov, L. Williams, G. Mueller, J. Livas, P. Arsenovic, J. Generie, J. Howard, R. Stebbins, COSPAR, Bremen, 07/17/2010
14. *Experiments in Laser Communication for LISA at the University of Florida*, D. Sweeney, ... , Guido Mueller, COSPAR, Bremen, 07/17/2010

15. *Heterodyne stabilization as a possible laser frequency stabilization technique for LISA*, J. Eichholz, . . . , Guido Mueller, COSPAR, Bremen, 07/17/2010
16. *Hardware verification of laser noise cancellation and gravitational wave extraction using time-delay interferometry*, S. Mitryk, . . . , Guido Mueller, COSPAR, Bremen, 07/17/2010
17. *Advanced arm-locking experiments in the presence of Doppler error on UFLIS*, Yinan Yu, . . . , Guido Mueller, COSPAR, Bremen, 07/17/2010
18. *Realistic arm locking experiments on UFLIS*, Yinan Yu, . . . , Guido Mueller, 8th LISA Symposium, Stanford 2010
19. *Laser Communication and Ranging for LISA at UF*, Dylan Sweeney, . . . , Guido Mueller, 8th LISA Symposium, Stanford 2010
20. *LISA telescope spacer investigations*, Josep Sanjuan, . . . , Guido Mueller, 8th LISA Symposium, Stanford 2010
21. *Multipliers Vs. Dividers*, Simon Barke, . . . , Guido Mueller, Karsten Danzmann, 8th LISA Symposium, Stanford 2010
22. *The University of Florida LISA Interferometry Simulator*, Darsa Donelan, . . . , Guido Mueller, 8th LISA Symposium 2010
23. *Heterodyne Laser Frequency Stabilization*, Johannes Eichholz, . . . , Guido Mueller, 8th LISA Symposium 2010
24. *Time Delay Interferometry*, Shawn Mitryk, 8th Amaldi Conference, New York 2009
25. *The University of Florida LISA Interferometry Simulator*, Vinzenz Wand, Guido Mueller, 7th LISA Symposium, Barcelona June 2008
26. *Back Link Fiber Stability Measurement*, Alix Preston, Guido Mueller, 7th LISA Symposium, Barcelona June 2008
27. *Laser Communication and Ranging for LISA*, Dylan Sweeney, Guido Mueller, 7th LISA Symposium, Barcelona June 2008
28. *Planned armlocking experiments with variable Doppler shifts on UFLIS*, Yinan Yu, Guido Mueller, 7th LISA Symposium, Barcelona June 2008
29. *The UF LISA Interferometry Simulator (UFLIS)*, Vinzenz Wand, Guido Mueller, Yinan Yu, Shawn Mitryk, David Tanner, Alix Preston, Dylan Sweeney, 37th Cospar Scientific Assembly, Montreal, July 2008
30. *UFLIS: The University of Florida Laser Interferometry Simulator*, Guido Mueller, James Thorpe, Rachel Cruz, Sridhar Guntaka, Yinan Yu, Shawn Mitryk, Alix Preston, David Tanner, Amaldi Conference, Sydney, 2007
31. *Dimensional Stability of Materials for SpaceBased Missions*, Alix Preston, Benjamin Balaban, Gabriel Boothe, Guido Mueller, APS April Meeting, Jacksonville, 2007
32. *Faraday Isolator Performance at High Laser Power*, R.M. Martin, V. Quetschke, G. Mueller, D.H. Reitze, D.B. Tanner, APS April Meeting, Jacksonville, 2007

33. *Adaptive Heating for Thermal Compensation in Advanced LIGO*, Muzammil Arain, David Reitze, D.B. Tanner, Guido Mueller, Phil Willems, APS April Meeting, Jacksonville, 2007
34. *Requirement for and characterization of electrooptic modulators for nextgeneration gravitational wave detector*, Wan Wu, Volker Quetschke, Ira Thorpe, Rodrigo Delgadillo, Guido Mueller, David Reitze, David Tanner, APS April Meeting, Jacksonville, 2007
35. *UFLIS: The University of Florida LISA Interferometry Simulator*, Yinan Yu, Sridhar Guntaka, Rachel Cruz, James Thorpe, Shawn Mitryk, David Tanner, Guido Mueller, APS April Meeting, Jacksonville, 2007
36. *Benchtop Models of LISA Interferometry at the University of Florida*, James I. Thorpe, Rachel J. Cruz, Shawn Mitryk, G.T.S. Reddy, Guido Mueller, NSTC, Washington 2007
37. *Laser communication, clock synchronization, and ranging in interferometric space missions*, Rodrigo Delgadillo, Wan Wu, Ira Thorpe, Shawn Mitryk, Volker Quetschke, Guido Mueller, NSTC, Washington 2007
38. *Stable Materials and Bonding Techniques for SpaceBased Optical Systems*, Alix Preston, Benjamin Balaban, Gabriel Boothe, Guido Mueller, NSTC, Washington 2007
39. *The LISA benchtop simulator at the University of Florida*, Rachel Cruz, James Ira Thorpe, Sridhar Guntaka, Guido Mueller, Southeastern Section of the APS, Willimasburg, Virginia, November 2006
40. *LISA Interferometry*, Guido Mueller, TeV II workshop, Madison, WS, August 2006
41. *Time Delay Interferometry using the UF LISA Benchtop Simulator*, Rachel Cruz, Guido Mueller, 6th LISA Symposium, Goddard Space Flight Center, Greenbelt 2006
42. *Arm-locking in a LISA like Hardware Model*, Ira Thorpe, Guido Mueller, 6th LISA Symposium, Goddard Space Flight Center, Greenbelt 2006
43. *Dimensional Stability of Hexology SA Silicon Carbide and Zerodur Materials for the LISA mission*, T. S. R. Guntaka, Alix Preston, Guido Mueller, Rachel Cruz, Gabriel Boothe, 6th LISA Symposium, Goddard Space Flight Center, Greenbelt 2006
44. *Laser Communication and ranging for interferometric space missions*, Rod Delgadillo, Guido Mueller, 6th LISA Symposium, Goddard Space Flight Center, Greenbelt 2006
45. *LISA Interferometry* Guido Mueller, SPIE Conference: Advances in Stellar Interferometry, Orlando 2006
46. *Dimensional Stability of Hexology SA Silicon Carbide and Zerodur Glass Using Hydroxide-Catalysis Bonding for Optical Systems in Space* Alix Preston, Rachel Cruz, J.Ira Thorpe, Guido Mueller, Rod Delgadillo SPIE Conference: Advances in Stellar Interferometry, Orlando 2006
47. *Adaptive Mode matching in Stable Recycling cavities in Advanced LIGO*, G. Mueller, M.A. Arain, V. Quetschke, D.H. Reitze, D.B. Tanner, APS Meeting, Dallas, April 2006
48. *LISA Interferometer Test Bench at UF*, Sridhar Reddy Guntaka, Rachel J. Cruz, J. Ira Thorpe, Michael Hartman, David B. Tanner, Guido Mueller, APS Meeting, Dallas, April 2006

49. *Progress towards experimental verification of arm locking for LISA*, J. Ira Thorpe, Shawn Mytrik, Rachel Cruz, Guido Mueller, APS Meeting, Dallas, April 2006
50. *Electro-optic Modulator for Advanced LIGO* Wan Wu, Rodrigo Delgadillo, Volker Quetschke, Guido Mueller, David Reitze, David Tanner, LSC Meeting, MIT, Cambridge, MA, November 2005
51. *Stable Recycling Cavities* Guido Mueller, Muzammil Arain, Volker Quetschke, LSC Meeting, MIT, Cambridge, MA, November 2005
52. *Experimental Verification of Arm Locking for LISA*, J. Ira Thorpe, Shawn Mytrik, Guido Mueller, SESAPS Meeting, Gainesville, November 2005
53. *Measurement of residual amplitude modulation in the electro-optic modulator for Advanced LIGO*, Wan Wu, Guido Mueller, David Reitze, David Tanner, SESAPS Meeting, Gainesville, November 2005
54. *Implementation of Time Delay Interferometry using the UF LISA simulator*, Rachel J. Cruz, Michael Hartman, Guido Mueller, SESAPS Meeting, Gainesville, November 2005
55. *Low absorption thermally adjustable telescope*, J. Gleason, V. Quetschke, M. Rakhmanov, J. Lee, G. Mueller, D.H. Reitze, D.B. Tanner, SESAPS Meeting, Gainesville, November 2005
56. *White Light Cavities: Do not use Gratings* S Wise, Volker Quetschke, A.J. Deshpande, Guido Mueller, David Reitze, David Tanner, Bernard Whiting, Yanbei Chen, A Tunnermann, Ernst-Bernhard Kley, Tina Clausnitzer, LSC Meeting, Hanford, WA, August 2005
57. *Stable Recycling Cavities for Advanced LIGO* Guido Mueller, LSC Meeting, Hanford, WA, August 2005
58. *Adaptive Mode Matching for Advanced LIGO* Volker Quetschke, Joe Gleason, Christina Seidel, Michelle Snyder, Malik Rakhmanov, Liang Zhang, Guido Mueller, David Reitze, David Tanner, LSC Meeting, Hanford, WA, August 2005
59. *Experimental Test of Time Delay Interferometry* Ira Thorpe, Rachel Cruz, Shannon Sankar, Rod Delgadillo, Derek Mulder, Guido Mueller, 5th International LISA Symposium, Estec, July 2004
60. *On the Phase of Light Diffracted by Gratings* S Wise, Volker Quetschke. A.J. Deshpande, Guido Mueller, David Reitze, David Tanner, Bernard Whiting, Yanbei Chen, A Tunnermann, Ernst-Bernhard Kley, Tina Clausnitzer, Aspen Winter Conference, February 2004
61. *A Bench-Top Model of a Space-Based Interferometer* Ira Thorpe, Rachel Cruz, Guido Mueller, Aspen Winter Conference, February 2004,
62. *Coupling of frequency dependent length changes to the light phase in a double grating setup* Guido Mueller, Volker Quetschke, David Reitze, David Tanner, Bernard Whiting, Stacy Wise, LSC Meeting, Livingston, LA, March 2004
63. *High Power Components for Advanced LIGO* Rupal Amin, N. Andreev, Joe Gleason, Efim Khazanov, Christina Leidel, A. Mal'shakov, Mike Marquez, Guido Mueller, Rachel Parks, Oleg Pashin, Anatoly Poteomkin, David Reitze, Andrey Shaykin, David Tanner, Luke Williams, Victor Zelenogorsky, LSC Meeting, Hannover, Germany, August 2003

64. *Linewidth-Broadened Fabry-Perot Cavities for Future Gravitational Wave Detectors* Tina Clausnitzer, Ernst-Bernhard Kley, Guido Mueller, David Reitze, David Tanner, Andreas Tuennermann, S Wise, Aspen Winter Conference, 2003
65. *White Light Cavities* Guido Mueller, David Reitze, David Tanner, Stacy Wise, LSC Meeting, Livingston, LA, March 2003
66. *Passive compensation of thermally induced modal distortions in optical components* R. Amin, G. Mueller, R. Lundock, D. H. Reitze, D. B. Tanner, Annual Meeting of the Optical Society of America, Orlando, FL, October 1, 2002.
67. *Faraday Isolators and Electro-optical Modulators: A Progress Report* G. Mueller, R. Amin, R. Lundock, D. Guagliardo, D. H. Reitze, D. B. Tanner, LSC Meeting, Hanford, WA, August 2001.
68. *Thermal Effects in Faraday Isolators and Modulators* G. Mueller, R. Amin, D. B. Tanner, and D. H. Reitze, 4th Edoardo Amaldi Conference on Gravitational Waves, Perth, Australia, July, 2001. (International Meeting)
69. *The X-Coupled Interferometer* Guido Mueller, 4th Edoardo Amaldi Conference on Gravitational Waves, Perth, Australia, July, 2001. (International Meeting)
70. *Demonstration and characterisation of a tabletop cavity-enhanced, dual recycled interferometer* Dave Reitze, Tom Delker, Guido Mueller, David Tanner, 4th Edoardo Amaldi Conference on Gravitational Waves, Perth, Australia, July, 2001. (International Meeting)
71. *Thermal Headaches in Advanced LIGO Input Optics* Rupal Amin, Dave Guagliardo, Guido Mueller, David Reitze, David Tanner, Stacy Wise, LSC Meeting, Livingston, LA, March 2001
72. *Reference Design for the LIGO II Input Optics* G. Mueller, D. B. Tanner, D. H. Reitze, and J. Camp, LSC Meeting, Hanford, WA, August, 2000
73. *Status of the dual recycled, cavity enhanced Michelson interferometer* T. Delker, G. Mueller, D. B. Tanner, and D. H. Reitze, LSC Meeting, Livingston, LA, March 2000.
74. *Measurement and Optimization of Mode Matching into Optical Cavities Using Heterodyne Detection* G. Mueller, Q. Shu, R. Adhikari, D. B. Tanner, D. H. Reitze, D. Sigg, N. Malvala, and J. Camp, paper TuMM3, 1999 Annual Meeting of the Optical Society of America, San Jose, CA, October 3, 1999. (International Meeting)