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Martin P. McHugh

Personal:

Born 25 September, 1963, Louisville, Kentucky, USA.

Degrees:

B.S. Physics, 1985, University of Rochester (cum laude)
M.S. Physics, 1987, University of Colorado
Ph.D. Physics, 1992, University of Colorado

Thesis:

advisor – Professor Jim Faller
title - Precision tests of gravitation: liquid-supported torsion balance experiments and a tower experiment

Professional Associations: American Physical Society

Languages: English, French

Experience:

August 2006 – present : Associate Professor, Loyola University New Orleans.

August 2006 – July 2009, August 2012 - present : Chair of the Department of Physics, Loyola University New Orleans

August 2000 – July 2006 : Assistant Professor, Loyola University New Orleans.

August 1996 – July 2000 : Senior Postdoctoral Researcher, Louisiana State University.

January 1994 - July 1996 : Postdoctoral Research, Observatoire de Besançon, France.

February - June 1994 : Instructor, Université de Franche-Comté, Besançon, France.

January 1992 - December 1993 : Phillips Laboratory Scholar Program, Hanscom Air Force Base, Bedford MA.

June 1986 - December 1991 : Research Assistant, Joint Institute for Laboratory Astrophysics, University of Colorado.

September 1985 - May 1986 : Teaching Assistant, University of Colorado.

Research Grants:

Princeton University Library Research Grant, “Biographical Research of Robert H. Dicke”, May 1, 2010 – April 30, 2011, \$3500.00.

PI - Martin McHugh

National Science Foundation “RUI: stochastic background searches with the LIGO and ALLEGRO detectors” Award number PHY-0355372

June 1, 2004 – May 31, 2007, \$105,000.00

PI- Martin McHugh

National Science Foundation “RUI: Search for a Stochastic Background of Gravitational Radiation with LIGO and the ALLEGRO Resonant Detector” Award number PHY-0140369 August 1, 2002 – July 31, 2004, \$101,310.00

PI- Martin McHugh

Loyola University Committee of Grants and Leaves “LIGO Project Research”

September 1, 2001 – August 31, 2002, \$2500.00

PI – Martin McHugh

Teaching Grants:

Louisiana Board of Regents, “Interdisciplinary Laboratory Training: Introducing Biophysics into Physics Laboratory Courses”

August 2005 – May 2006, \$31,755.00

PI- Armin Kargol, co-PI Creston King, co-PI Martin McHugh.

Traditional and Undergraduate Enhancement, State of Louisiana Board of Regents, “Mathematical Modeling Laboratory: Praxis and Curriculum Development in Physics”.

Contract number LEQSF(2002-03)-ENH-TR-44,

June 1, 2002 – May 31, 2003, \$23,766.00 (an additional \$10,864.70 contributed by the College of Arts and Sciences)

PI - Creston King, Co-PI Martin McHugh.

Publications :**refereed journals:**

1. *IGEC2: A 17-month search for gravitational wave bursts in 2005–2007* Phys. Rev. D **82**, 022003 (2010) P. Astone, L. Baggio, M. Bassan, M. Bignato, M. Bonaldi, P. Bonifazi, G. Cavallari, M. Cerdonio, E. Coccia, L. Conti, S. D'Antonio, [M. di Paolo Emilio](#), F. Drago, V. Fafone, P. Falferi, S. Foffa, P. Fortini, S. Frasca, G. Giordano, W. O. Hamilton, J. Hansen, W. W. Johnson, N. Liguori, S. Longo, M. Maggiore, F. Martin, A. Marini, **M. P. McHugh**, R. Mezzena, P. Miller, Y. Minenkov, A. Mion, G. Modestino, A. Moleti, D. Nettles, A. Ortolan, G. V. Pallottino, G. Pizzella, S. Poggi, G. A. Prodi, V. Re, A. Rocchi, F. Ronga, F. Salemi, R. Sturani, L. Taffarello, R. Terenzi, G. Vedovato, A. Vinante, M. Visco, S. Vitale, J. Weaver, J. P. Zendri and P. Zhang (July 15, 2010)

2. *Search for gravitational-wave bursts associated with gamma-ray bursts using data from LIGO Science Run 5 and Virgo Science Run 1*, ApJ **715** 1438 (2010) <http://arxiv.org/abs/0908.3824>
3. *Searches for gravitational waves from known pulsars with science run 5*, ApJ **713** 671 (2010) [arXiv:0909.3583](http://arxiv.org/abs/0909.3583)
4. *Search for High Frequency Gravitational Wave Bursts in the First Calendar Year of LIGO's Fifth Science Run*, Phys. Rev. D **80**, 102002 (2009) [arXiv:0904.4910](http://arxiv.org/abs/0904.4910)
5. *Search for gravitational-wave bursts in the first year of the fifth LIGO Science Run*, Phys. Rev. D **80**, 102001 (2009) [arXiv:0905.0020](http://arxiv.org/abs/0905.0020)
6. *An upper limit on the stochastic gravitational-wave background of cosmological origin*, Nature **460** 990 (2009) <http://arxiv.org/abs/0910.5772>
7. *Observation of a kilogram-scale oscillator near its quantum ground state*, New J. Phys. **11** 073032 (2009)
8. *Search for gravitational waves from low mass compact binary coalescence in 186 days of LIGO's fifth science run*, Phys. Rev. D **80**, 047101 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0905.3710>
9. *Einstein@Home search for periodic gravitational waves in early S5 LIGO data*, Phys. Rev. D **80**, 042003 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0905.1705>
10. *Search for gravitational wave ringdowns from perturbed black holes in LIGO S4 data*, Phys. Rev. D **80**, 062001 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0905.1654>
11. *Stacked Search for Gravitational Waves from the 2006 SGR 1900+14 Storm* ApJ **701** L68-L74 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0905.0005>
12. *First LIGO search for gravitational wave bursts from cosmic (super)strings*, Phys. Rev. D **80**, 062002 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0904.4718>
13. *Search for gravitational waves from low mass binary coalescences in the first year of LIGO's S5 data*, Phys. Rev. D **79**, 122001 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0901.0302>
14. *LIGO: the Laser Interferometer Gravitational-Wave Observatory* Rep. Prog. Phys. **72** 076901 (2009), the LIGO Scientific Collaboration <http://arxiv.org/abs/0711.3041>
15. *All-sky LIGO Search for Periodic Gravitational Waves in the Early S5 Data*, Phys. Rev. Lett. **102**, 111102 (2009), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0810.0283>

16. *Search for Gravitational Wave Bursts from Soft Gamma Repeaters*, Phys. Rev. Lett. **101**, 211102 (2008), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0808.2050>
17. *Beating the Spin-Down Limit on Gravitational Wave Emission from the Crab Pulsar*, Ap. J. Lett. **683**, L45 (2008), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0805.4758>
18. *Implications for the Origin of GRB 070201 from LIGO Observations*, Ap. J. **681**, 1419 (2008), the LIGO Scientific Collaboration, K. Hurley, <http://arxiv.org/abs/0711.1163>
19. *Search of S3 LIGO data for gravitational wave signals from spinning black hole and neutron star binary inspirals*, Phys. Rev. D **78**, 042002 (2008), the LIGO Scientific Collaboration (<http://www.ligo.org>), <http://arxiv.org/abs/0712.2050>
20. *Search for gravitational waves associated with 39 gamma-ray bursts using data from the second, third, and fourth LIGO runs*, Phys. Rev. D **77**, 062004 (2008), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0709.0766>
21. *Search for gravitational waves from binary inspirals in S3 and S4 LIGO data*, Phys. Rev. D **77**, 062002 (2008), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0704.3368>
22. *All-sky search for periodic gravitational waves in LIGO S4 data*, Phys. Rev. D **77**, 022001 (2008), the LIGO Scientific Collaboration, <http://arxiv.org/abs/0708.3818>
23. *A joint search for gravitational wave bursts with AURIGA and LIGO*, Class. Quantum Grav. **25**, 095004 (2008), the LIGO Scientific Collaboration and the AURIGA Collaboration, <http://www.iop.org/EJ/abstract/0264-9381/25/9/095004/>
24. *Search for gravitational-wave bursts in LIGO data from the fourth science run*, Class. Quantum Grav. **24**, 5343-5369 (2007), the LIGO Scientific Collaboration, <http://www.iop.org/EJ/abstract/0264-9381/24/22/002/>
25. *Upper limit map of a background of gravitational waves*, Phys. Rev. D **76**, 082003 (2007), <http://arxiv.org/abs/astro-ph/0703234> the LIGO Scientific Collaboration (<http://www.ligo.org>)
26. *Searches for periodic gravitational waves from unknown isolated sources and Scorpius X-1: Results from the second LIGO science run*, Phys. Rev. D **76**, 082001 (2007), <http://arxiv.org/abs/gr-qc/0605028> the LIGO Scientific Collaboration (<http://www.ligo.org>)
27. *Upper limits on gravitational wave emission from 78 radio pulsars*, Phys. Rev. D **76**, 042001 (2007), <http://arxiv.org/abs/gr-qc/0702039> the LIGO Scientific Collaboration (<http://www.ligo.org>), M. Kramer, A. G. Lyne
28. *Search for gravitational wave radiation associated with the pulsating tail of the SGR 1806-20 hyperflare of 27 December 2004 with LIGO*, Phys. Rev. D **76**, 062003 (2007), <http://arxiv.org/abs/astro-ph/0703419> the LIGO Scientific Collaboration (<http://www.ligo.org>)

29. *First cross-correlation analysis of interferometric and resonant-bar gravitational-wave data for stochastic backgrounds*, Phys. Rev. D **76**, 022001 (2007), <http://arxiv.org/abs/gr-qc/0703068> , the LIGO Scientific Collaboration (<http://www.ligo.org>) and the ALLEGRO collaboration (<http://gravity.phys.lsu.edu/>)
30. *Searching for a Stochastic Background of Gravitational Waves with LIGO*, Ap. J. **659**, 918 (2007), <http://www.arxiv.org/abs/astro-ph/0608606> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
31. *Joint LIGO and TAMA300 Search for Gravitational Waves from Inspiralling Neutron Star Binaries*, Phys. Rev. D **73**, 102002 (2006), <http://arxiv.org/abs/gr-qc/0512078> the LIGO Scientific Collaboration (<http://www.ligo.org>) and the TAMA collaboration (<http://tamago.mtk.nao.ac.jp/>)
32. *Search for gravitational waves from binary black hole inspirals in LIGO data*, Phys. Rev. D **73**, 062001 (2006), <http://www.arxiv.org/abs/gr-qc/0509129>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
33. *Search for gravitational wave bursts in LIGO's third science run*, Class. Quantum Grav. **23**, S29-S39 (2006), <http://www.arxiv.org/abs/gr-qc/0511146>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
34. *Upper Limits on a Stochastic Background of Gravitational Waves*, Phys. Rev. Lett. **95**, 221101 (2005) <http://www.arxiv.org/abs/astro-ph/0507254>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
35. *First all-sky upper limits from LIGO on the strength of periodic gravitational waves using the Hough transform*, Phys. Rev. D **72**, 102004 (2005), <http://www.arxiv.org/abs/gr-qc/0508065> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
36. *Upper limits from the LIGO and TAMA detectors on the rate of gravitational-wave bursts*, Phys. Rev. D. **72**, 122004 (2005), <http://www.arxiv.org/abs/gr-qc/0507081> , the LIGO Scientific Collaboration (<http://www.ligo.org>) and the TAMA collaboration (<http://tamago.mtk.nao.ac.jp/>)
37. *Search for Gravitational Waves from Primordial Black Hole Binary Coalescences in the Galactic Halo*, Phys. Rev. D **72**, 082002 (2005) <http://www.arxiv.org/abs/gr-qc/0505042>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
38. *Search for gravitational waves from galactic and extra--galactic binary neutron stars*, Phys. Rev D **72**, 082001 (2005), <http://www.arxiv.org/abs/gr-qc/0505041>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
39. *Upper limits on gravitational wave bursts in LIGO's second science run*, Phys. Rev. D **72**, 062001 (2005), <http://www.arxiv.org/abs/gr-qc/0505029> , the LIGO Scientific Collaboration (<http://www.ligo.org>)

40. *Calibration of the ALLEGRO resonant detector*, Class. Quantum Grav. **22** (2005) S965-S973. <http://stacks.iop.org/0264-9381/22/S965> **Martin P. McHugh**, Warren W. Johnson, William O. Hamilton, Jonathan Hanson, Ik Siong Heng, Daniel McNeese, Phillip Miller, Damon Nettles, Jordan Weaver and Ping Zhang
41. *A Data Analysis Technique for the LIGO-ALLEGRO Stochastic Background Search*, Class. Quantum Grav. **22** (2005) S1087-S1096. John T. Whelan, Sukanta Bose, Jonathan Hanson, Ik Siong Heng, Warren W. Johnson, **Martin P. McHugh** and Ping Zhang
42. *A Search for Gravitational Waves Associated with the Gamma Ray Burst GRB030329 Using the LIGO Detectors*, Phys. Rev. D **72**, 042002 (2005) <http://www.arxiv.org/abs/gr-qc/0501068>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
43. *Limits on Gravitational-Wave Emission from Selected Pulsars Using LIGO Data*, Phys. Rev. Lett. **94**, 181103 (2005) <http://www.arxiv.org/abs/gr-qc/0410007>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
44. *Optimal combination of signals from co-located gravitational wave interferometers for use in searches for a stochastic background*, Phys. Rev. D **70**, 062001 (2004) <http://www.arxiv.org/abs/gr-qc/0403093> Albert Lazzarini, Sukanta Bose, Peter Fritschel, **Martin McHugh**, Tania Regimbau, Kaice Reilly, Joseph D. Romano, John T. Whelan, Stan Whitcomb and Bernard F. Whiting
45. *Analysis of first LIGO science data for stochastic gravitational waves*, Phys. Rev. D **69**, 122004 (2004) <http://www.arxiv.org/abs/gr-qc/0312088> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
46. *First upper limits from LIGO on gravitational wave bursts*, Phys. Rev. D **69**, 102001 (2004) <http://www.arxiv.org/abs/gr-qc/0312056> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
47. *Analysis of LIGO data for gravitational waves from binary neutron stars*, Phys. Rev. D **69**, 122001 (2004) <http://www.arxiv.org/abs/gr-qc/0308069> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
48. *Setting upper limits on the strength of periodic gravitational waves from PSR J1939 + 2134 using the first science data from the GEO600 and LIGO detectors*, Phys. Rev. D, **69**, 082004 (2004) <http://www.arxiv.org/abs/gr-qc/0308050>, the LIGO Scientific Collaboration (<http://www.ligo.org>)
49. *Detector Description and Performance for the First Coincidence Observations between LIGO and GEO*, Nuclear Inst. and Methods in Physics Research A, Vol. **517/1-3**, pp. 154-179 (2004) B. Abbott et al., <http://www.arxiv.org/abs/gr-qc/0308043> , the LIGO Scientific Collaboration (<http://www.ligo.org>)
50. *Stochastic background search correlating ALLEGRO with LIGO engineering data*, Class.Quant.Grav. **20** (2003) S689-S695, John T. Whelan, Edward Daw, Ik Siong Heng, **Martin P McHugh** and Albert Lazzarini

51. *Methods and results of the IGEC search for burst gravitational waves in the years 1997–2000*, Phys. Rev. D **68**, 022001 (2003), P. Astone, D. Babusci, L. Baggio, M. Bassan, D. G. Blair, M. Bonaldi, P. Bonifazi, D. Busby, P. Carelli, M. Cerdonio, E. Coccia, L. Conti, C. Cosmelli, S. D'Antonio, V. Fafone, P. Falferi, P. Fortini, S. Frasca, G. Giordano, W. O. Hamilton, I. S. Heng, E. N. Ivanov, W. W. Johnson, A. Marini, E. Mauceli, **M. P. McHugh**, R. Mezzena, Y. Minenkov, I. Modena, G. Modestino, A. Moleti, A. Ortolan, G. V. Pallottino, G. Pizzella, G. A. Prodi, L. Quintieri, A. Rocchi, E. Rocco, F. Ronga, F. Salemi, G. Santostasi, L. Taffarello, R. Terenzi, M. E. Tobar, G. Torrioli, G. Vedovato, A. Vinante, M. Visco, S. Vitale, and J. P. Zendri
52. *Allegro: Noise performance and the ongoing search for gravitational waves*, Classical and Quantum Gravity **19**, 1889-1895 (2002), I.S. Heng, E. Daw, J. Giaime, W.O. Hamilton, **M.P. McHugh** and W.W. Johnson
53. *Progress on stochastic background search codes for LIGO*, Classical and Quantum Gravity **19**, 1521-1527 (2002) (gr-qc/0110019), John T. Whelan, Warren G. Anderson, Martha Casquette, Mario C. Díaz, Ik Siong Heng, **Martin McHugh**, Joseph D. Romano, Charlie W. Torres Jr., Rosa M. Trejo and Alberto Vecchio
54. *Search for gravitational wave bursts from the network of resonant detectors*, Classical and Quantum Gravity **19**, 1367-1375 (2002), P. Astone, L. Baggio, D. Busby, M. Bassan, D.G. Blair, M. Bonaldi, P. Bonifazi, P. Carelli, M. Cerdonio, E. Coccia, L. Conti, C. Cosmelli, S. D'Antonio, V. Fafone, P. Falferi, P. Fortini, S. Frasca, W.O. Hamilton, I.S. Heng, E.N. Ivanov, W.W. Johnson, C. R. Locke, A. Marini, E. Mauceli, **M.P. McHugh**, R. Mezzena, Y. Minenkov, I. Modena, G. Modestino, A. Moleti, A. Ortolan, G. V. Pallottino, G. Pizzella, G. A. Prodi, L. Quintieri, A. Rocchi, E. Rocco, F. Ronga, F. Salemi, G. Santostasi, L. Taffarello, R. Terenzi, M.E. Tobar, G. Vedovato, A. Vinante, M. Visco, S. Vitale and J.P. Zendri
55. *First search for gravitational wave bursts with a network of detectors*, Phys. Rev. Lett **85**, 5046-5050, (2000), Z.A. Allen, P. Astone, L. Baggio, D. Busby, M. Bassan, D.G. Blair, M. Bonaldi, P. Bonifazi, M. Cerdonio, E. Coccia, L. Conti, C. Cosmelli, V. Crivelli Visconti, S. D'Antonio, V. Fafone, P. Falferi, P. Fortini, S. Frasca, W.O. Hamilton, I.S. Heng, E.N. Ivanov, W.W. Johnson, M. Kingham, C. R. Locke, A. Marini, V. Martinucci, E. Mauceli, **M.P. McHugh**, R. Mezzena, Y. Minenkov, I. Modena, G. Modestino, A. Moleti, A. Ortolan, G. V. Pallottino, G. Pizzella, G. A. Prodi, E. Rocco, F. Ronga, F. Salemi, G. Santostasi, L. Taffarello, R. Terenzi, M.E. Tobar, G. Vedovato, A. Vinante, M. Visco, S. Vitale, L. Votano and J.P. Zendri
56. *Initial operation of the international gravitational event collaboration*, International Journal of Modern Physics D **9**, 237-245 (2000), G. A. Prodi, I.S. Heng, Z.A. Allen, P. Astone, L. Baggio, M. Bassan, D.G. Blair, M. Bonaldi, P. Bonifazi, P. Carelli, M. Cerdonio, E. Coccia, L. Conti, C. Cosmelli, V. Crivelli Visconti, S. D'Antonio, V. Fafone, P. Falferi, P. Fortini, S. Frasca, W.O. Hamilton, E.N. Ivanov, W.W. Johnson, C. R. Locke, A. Marini, V. Martinucci, E. Mauceli, **M.P. McHugh**, R. Mezzena, Y. Minenkov, I. Modena, G. Modestino, A. Moleti, A. Ortolan, G. V. Pallottino, G. Pizzella, E. Rocco, F. Ronga, F. Salemi, G. Santostasi, L. Taffarello, R. Terenzi, M.E. Tobar, G. Vedovato, A. Vinante, M. Visco, S. Vitale, L. Votano and J.P. Zendri

57. *The Allegro Gravitational Wave Detector*, International Journal of Modern Physics D **9**, 229-232 (2000), **M.P. McHugh**, Z. Allen, W.O. Hamilton, W.W. Johnson, and G. Santostasi
58. *Search for gravitational radiation with the Allegro and Explorer detectors*, Phys. Rev. D **59**, 122001-1 - 122001-6, (1999), P. Astone, M. Bassan, P. Bonifazi, P. Carelli, E. Coccia, C. Cosmelli, V. Fafone, S. Frasca, K. Geng, W. O. Hamilton, W. W. Johnson, E. Mauceli, **M. P. McHugh**, S. Merkowitz, I. Modena, G. Modestino, A. Morse, G. V. Pallottino, M. A. Papa, G. Pizzella, N. Solomonson, R. Terenzi, M. Visco, and N. Zhu
59. *Calibration and sensitivity of resonant-mass gravitational wave detectors*, Phys. Rev. D **59**, 062002-1-062002-17, (1999), A. Morse, W. O. Hamilton, W. W. Johnson, E. Mauceli and **M. P. McHugh**.
60. *Pulsar timing and the upper limits on a gravitational wave background : a Bayesian approach*, Phys. Rev. D **54**, 5993-6000, (1996) **M. P. McHugh**, G. Zalamansky, F. Verotte and E. Lantz.
61. *Cut-off frequencies and noise power-law model of spectral density : adaptation of the multivariate method for irregularly spaced timing data using the lowest mode estimator approach*, 1995 IEEE Transactions on Ultrasonics, Ferroelectrics, and Frequency Control, 43, 3, 403 (1996), F. Verotte, G. Zalamansky, **M. McHugh** and E. Lantz.
62. *A test of Newton's inverse square law of gravitation using the 300-m tower at Erie, Colorado*, Journal of Geophysical Research **96**, 20 073-20 092 (1991), J.C. Cruz, J.C. Harrison, C.C. Speake, T.M. Niebauer, **M.P. McHugh**, P.T. Keyser, J.E. Faller, J. Makinen and R.B. Beruff .
63. *Test of the inverse square law of gravitation using the 300m tower at Erie, Colorado*, Phys. Rev. Lett. **65**, 1967- 1971 (1990), C. C. Speake, T.M. Niebauer, **M.P. McHugh**, P.T. Keyser, J.E. Faller, J.Y. Cruz, J.C. Harrison, J. Makinen and R.B. Beruff.
64. *Gyroscope-weighing experiment with a null result*, Phys. Rev. Lett. **64**, 825-826 (1990), J.E. Faller, W.J. Hollander, P.G. Nelson and **M.P. McHugh**.
65. *Galilean test for the fifth force*, Phys. Rev. Lett. **59**, 609-612 (1987), T.M. Niebauer, **M.P. McHugh** and J.E. Faller.

Selected conference proceedings/web publications:

1. *Binary Neutron Star Inspiral Search in LIGO S1*, 5th Edoardo Amaldi Conference on Gravitational Waves. (<http://xxx.lanl.gov/abs/gr-qc/0310049>), Gabriela González for the LIGO Science Collaboration (<http://www.ligo.org>)
2. *Resonant detectors and interferometers can work together*, in Gravitational-Wave Detection, Proceedings of SPIE Vol. 4856, (Mike Cruise, Peter Saulson; Eds. 2003) p. 230-237, William O. Hamilton, Marc A. Burgamy, Daniel M. Busby, Edward J. Daw, J. Duran, Joseph A. Giaime, Jonathan Hanson, Ik S. Heng, Warren W. Johnson, **Martin P. McHugh**, Phillip Miller, Damon Nettles, J. T. Whelan

3. *The Allegro Gravitational Wave Detector*, in Proceedings of the Ninth Marcel Grossmann meeting on general relativity (V.G. Gurzadyan, R.T. Jantzen and R. Ruffini, World Scientific, Singapore, 2002), pp. 1904-1905, **M.P. McHugh**, Z. Allen, I.S. Heng, W.O. Hamilton, W.W. Johnson, and G. Santostasi
4. *A search for periodic gravitational radiation with the Allegro detector*, (<http://xxx.lanl.gov/abs/gr-qc/0007023>) E. Mauceli, **M. P. McHugh**, W. O. Hamilton, W. W. Johnson, , and A. Morse
5. *A two-mode transducer for the Allegro antenna*, Second Edoardo Amaldi Conference on Gravitational Waves, (E. Coccia, G. Veneziano and G. Pizzella, World Scientific, 1998), pp. 413-417, **M. P. McHugh**, C. Frajuca, Z. K. Geng, W.O. Hamilton, W.W. Johnson, E. Mauceli, A. Morse, N.D. Solomonson
6. *Limits on a stochastic background of gravitational waves*, in Pulsars: Problems and Progress IAU colloquium 160, Sydney, Australia, January 8-12 1996, **M. P. McHugh**, G. Zalamansky, F. Verotte and E. Lantz.
7. *Estimation of the upper limit on the level of an undetected noise*, in IEEE International Frequency Control Symposium, pp. 875-879, Honolulu Hawai (USA), June 1996, F. Verotte, G. Zalamansky, **M. McHugh**, et E. Lantz.
8. *Spectral analysis of irregularly spaced timing data: comparison of several methods*, in 10th European Frequency and Time Forum, pp. 544-549, Brighton (United Kingdom), March 1996, F. Verotte, G. Zalamansky, **M. McHugh**, et E. Lantz.
9. *Long term stability prediction of millisecond pulsar timing by multi-variance analysis*, July 1995. Symp. UAI 172, Paris, France, F. Verotte, G. Zalamansky, **M. McHugh**.
10. *Cut-off frequencies and noise power-law model of spectral density: adaptation of the multivariate method using the structure function approach*, Ninth European Frequency and Time Forum, Besançon, France, 1995, F. Verotte, E. Lantz, **M. McHugh** and G. Zalamansky.
11. *Test of coherent neutrino detection using sapphire crystals*, in Perspectives in Neutrinos, Atomic Physics and Gravitation, Proceedings of the Moriond Conference, Villar sur Ollon, Switzerland (O. Fackler and J. Tran Thanh Vân, Eds., Editions Frontières, Gif sur Yvette, France 1993), **M.P. McHugh** and P.T. Keyser.
12. *Test of Newton's inverse square law of gravity using the 300m tower at Erie, Colorado: Newton vindicated on the plains of Colorado*, in New and Exotic Phenomena '90, Proceedings of the Moriond Conference, Les Arcs, France (O. Fackler and J. Tran Thanh Vân, Eds., Editions Frontières, Gif sur Yvette, France 1990), pp. 255 -262, C.C. Speake, T.M. Niebauer, **M.P. McHugh**, P.T. Keyser, J.E. Faller, J.Y. Cruz, J.C. Harrison, J. Makinen and R.B. Beruff.
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