GRANT DAVID MEADORS

CURRENT ROLE	Postdoctoral Research Associate: Los Alamos National Laboratory
WORK ADDRESS	LANL, Mail Stop: B259, Los Alamos, NM 87545, USA
EMAIL	gdmeadors@lanl.gov

EDUCATION

University of Michigan, Ann Arbor	**PhD (& MS) in Physics**	2014 Dec (& 2009 Dec)
Reed College & visiting Trinity College Dublin	**BA in Physics**	2008 May
Portland Community College	**AS w/ Highest Honors &** $\Phi\Theta K$	2004 Mar

RESEARCH & PROFESSIONAL EXPERIENCE

Los Alamos National Lab	**Postdoctoral Research Associate**	2019 Feb/**present**
Monash University	**Postdoc, ARC Centre of Excellence (OzGrav)**	2018 Jan/2019 Feb
Max Planck (AEI Hannover)	**Postdoc, Astrophysical & Cosmological Relativity**	2015 Jan/2017 Dec
University of Michigan	**Grad. Student Research Assistant, LIGO**	2008 Aug/2014 Dec

SCHOLARSHIPS & AWARDS

Breakthrough Prize	**(to LVC) Special Prize in Fundamental Physics**	2016 May
Grav. Wave Int'l Committee	**GWIC & Braccini Thesis Hon. Mention**	2015 Apr
National Science Foundation	**Grad. Research Fellow. Program Hon. Mention**	2010 Apr
LIGO Academic Advisory Council	**LIGO Fellowship**	2009 Oct

OTHER RESEARCH & PROFESSIONAL EXPERIENCE

OzGrav (Committees)	**Equity & Diversity, Early Career Researcher**	2018 May/2019 Feb
LVC Allies	**Ally (& Chair from 2018 Mar)**	2016 Dec/2019 Feb
LIGO Magazine	**Assistant Editor**	2014 Nov/2016 Jul
Woodstock Elem. Science Outreach	**Electrical circuits & pathways (teaching)**	2005 Oct/2005 Dec
ΦΘK, AEI Chap., Int'l Hon. Soc.	**PCC Sylvania Membership Dir., VP Fellowship**	2003 Aug/2004 Aug

LIGO Caltech SURF REU	**Gravitational wave stochastic background**	2007 Jun/2007 Aug
Columbia U., Nevis Labs REU	**Electron bubble neutrino/dark matter detector**	2006 May/2006 Aug
LIGO Hanford Obs. SURF REU	**4K LIGO Hanford Observatory recycling cavity**	2005 Jun/2005 Aug
Reed Research Reactor	**Assistant & (Senior) Reactor Operator**	2004 Sep/2008 May

OTHER SCHOLARSHIPS & AWARDS

Reed College Fellowships & Awards	**Churchill, Marshall & Rhodes Nominee**	2007 Fall
Barry M. Goldwater Schol. Found.	**Goldwater Scholarship (& Hon. Mention)**	2007 (& 2006)
Reed College Math. & Nat. Sci. Div.	**Academic Commendation**	2006 May
Reed College Physics Department	**Qualifying Exam. Special Commendation**	2006 Feb
Reed College Office of the President	**Commendation for Excellence**	2006 & 2005
Independent Order of Foresters	**Foresters' Scholarship**	2005 & 2004
Portland Community College	**Juan Young Scholarship**	2004 & 2003
ΦΘK, AEI Chap., Int'l. Hon. Soc.	**Honors Scholar & Cert. of Excellence (& Officer)**	2004 (& 2003)

TEACHING EXPERIENCE

International Max Planck Research School	**(3 lectures)** Linearized gravity, action on detectors, sources of gravitational waves	2017 Jun

SELECTED PEER-REVIEWED PAPERS

(submitted)	E.O. Romero-Severson, N. Hengartner, **G.D. Meadors**, R. Ke
(medRxiv)	*Decline in global COVID-19 transmission*
Space Weather	**G.D. Meadors**, S. Jones, K. Hickmann, C. Arge, H. Godinez-Vasquez, C. Henney
18 (2020) 5	*Data assimilative optimization of WSA source surface and interface radii using particle filtering*
Astrophys J S	G. Ashton et al. (incl. **G.D. Meadors**)
241 (2019) 27	*Bilby: a user-friendly Bayesian inference library for gravitational-wave astronomy*
Phys Rev D	J. Westerweck et al. (incl. **G.D. Meadors**)
97 (2018) 124037	*Low significance of evidence for black holes echoes in gravitational wave data*
Phys Rev D	**G.D. Meadors**, B. Krishnan, M.A. Papa, J.T. Whelan, Y. Zhang
97 (2018) 044017	*Resampling to accelerate cross-correlation searches for continuous gravitational waves from binary systems*
Phys Rev D	**G.D. Meadors**, E. Goetz, K. Riles, T. Creighton, F. Robinet
95 (2017) 042005	*Searches for continuous gravitational waves from Scorpius X-1 and XTE J1751-305 in LIGO's sixth science run*
Class Quant Grav	**G.D. Meadors**, E. Goetz, K. Riles
33 (2016) 105017	*Tuning into Scorpius X-1: adapting a continuous gravitational-wave search for a known binary system*
Phys Rev D	C. Messenger et al. (incl. **G.D. Meadors**)
92 (2015) 023006	*Gravitational waves from Sco X-1: a comparison of search methods and prospects for detection with advanced detectors*

SELECTED PEER-REVIEWED PAPERS (CONTINUED)

Math Model Nat P	E.O. Romero-Severson, **G.D. Meadors**, E. Volz
9 (2014) 2	*A generating function approach to HIV transmission with dynamic contact rates*
Class Quant Grav	**G.D. Meadors**, K. Kawabe, K. Riles
31 (2014) 105014	*Increasing LIGO sensitivity by feedforward subtraction of auxiliary length control noise*
Class Quant Grav	S.S.Y. Chua et al. (incl. **G.D. Meadors**)
31 (2014) 035017	*Impact of backscattered light in a squeezing-enhanced interferometric gravitational-wave detector*
Nature Photonics	Aasi et al., L. Barsotti corresponding (LIGO Scientific Collab. incl. **G.D. Meadors**)
7 (2013) 613	*Enhancing the sensitivity of the LIGO gravitational wave detector by using squeezed states of light*
Optics Express	S. Dwyer et al. (incl. **G.D. Meadors**)
21 (2013) 16	*Squeezed quadrature fluctuations in a gravitational wave detector using squeezed light*

OTHER PEER-REVIEWED PAPERS

Phys Rev Lett	(LSC & Virgo) Abbott et al.
122 (2019) 061104	*Constraining the p-mode-g-mode tidal instability with GW170817*
Astrophys J	(Fermi, LSC & Virgo collaborations) Burns et al.
871 (2019) 90	*A Fermi gamma-ray burst monitor search for electromagnetic signals ...*
Astrophys J	(ANTARES, IceCube, LSC & Virgo collaborations) Albert et al.
870 (2019) 134	*Search for multimessenger sources of gravitational waves and ...*
Phys Rev X	(LSC & Virgo) Abbott et al.
9 (2019) 011001	*Properties of the binary neutron star merger GW170817*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
121 (2018) 231103	*Search for subsolar-mass ultracompact binaries in Advanced LIGO's ...*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
121 (2018) 161101	*GW170817: measurements of neutron star radii and the equation of state*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
120 (2018) 201102	*Search for tensor, vector, and scalar polarizations in the stochastic ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
97 (2018) 102003	*Full band all-sky search for periodic gravitational waves in the O1 LIGO data*
Phys Rev D	(LSC & Virgo) Abbott et al.
97 (2018) 102002	*Constraints on cosmic strings using data from the first Advanced LIGO ...*
Class Quant Grav	(LSC & Virgo) Abbott et al.
35 (2018) 065009	*All-sky search for long-duration gravitational wave transients in the first ...*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
120 (2018) 091101	*GW170817: implications for the stochastic gravitational-wave background ...*
Class Quant Grav	(LSC & Virgo) Abbott et al.
35 (2018) 065010	*Effects of data quality vetoes on a search for compact binary coalescences in ...*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
120 (2018) 031104	*First search for nontensorial gravitational waves from known pulsars*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Living Rev Rel	(LSC & Virgo) Abbott et al.
21 (2018) 3	*Prospects for observing and localizing gravitational-wave transients …*
Astrophys J Lett	(LSC & Virgo) Abbott et al.
851 (2017) L35	*GW170608: Observation of a 19 solar-mass binary black hole coalescence*
Astrophys J Lett	(LSC & Virgo) Abbott et al.
851 (2017) L16	*Search for post-merger gravitational waves from the remnant of the binary …*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
119 (2017) 161101	*GW170817: Observation of gravitational waves from a binary neutron star inspiral*
Astrophys J Lett	(LSC, Virgo, Fermi, and INTEGRAL collaborations) Abbott et al.
848 (2017) L13	*Gravitational waves and gamma-rays from a binary neutron star merger: GW170817 …*
Astrophys J Lett	(LSC, Virgo, Fermi GBM, INTEGRAL and 51 other collaborations) Abbott et al.
848 (2017) L12	*Multi-messenger observations of a binary neutron star merger*
Nature	(LSC, Virgo, 1M2H, & 6 other collaborations) Abbott et al.
551 (2017) 85	*A gravitational-wave standard siren measurement of the Hubble constant*
Astrophy J Lett	(LSC & Virgo) Abbott et al.
850 (2017) L40	*On the progenitor of binary neutron star merger GW170817*
Astrophys J Lett	(LSC & Virgo) Abbott et al.
850 (2017) L39	*Estimating the contribution of dynamical ejecta in the kilonova associated with …*
Astrophys J Lett	(LSC, Virgo, Antares, IceCube, & Pierre Auger) Albert et al.
850 (2017) L35	*Search for high-energy neutrinos from binary neutron star merger GW170817 with …*
Phys Rev D	(LSC & Virgo) Abbott et al.
96 (2017) 122006	*First narrow-band search for continuous gravitational waves from known pulsars …*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
119 (2017) 141101	*GW170814: a three-detector observation of gravitational waves from a binary …*
Phys Rev D	(LSC & Virgo) Abbott et al.
96 (2017) 062002	*All-sky search for periodic gravitational waves in O1 LIGO data*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Phys Rev D	(LSC & Virgo) Abbott et al.
96 (2017) 122004	*First low-frequency Einstein Home all-sky search for continuous gravitational-waves ...*
Astrophys J	(LSC & Virgo) Abbott et al.
847 (2017) 47	*Upper limits on gravitational waves from Scorpius X-1 from a model-based ...*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
118 (2017) 221101	*GW170104: observation of a 50-solar-mass binary black hole coalescence at redshift 0.2*
Phys Rev D	(LSC & Virgo) Abbott et al.
96 (2017) 022001	*Search for intermediate mass black hole binaries in the first observing run of ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
95 (2017) 122003	*Search for gravitational waves from Scorpius X-1 in the first Advanced LIGO ...*
Phys Rev D	(LSC, Virgo, ANTARES & IceCube) Albert et al.
96 (2017) 022005	*Search for high-energy neutrinos from gravitational wave event GW151226 and ...*
Astrophys J	(LSC & Virgo) Abbott et al.
839 (2017) 12	*First search for gravitational waves from known pulsars with Advanced LIGO*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
118 (2017) 121102	*Directional limits on persistent gravitational waves from Advanced LIGO's first ...*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
118 (2017) 121101	*Upper limits on the stochastic gravitational-wave background from Advanced LIGO's ...*
Astrophys J	(LSC & Virgo) Abbott et al.
841 (2017) 89	*Search for gravitational wave associated with gamma-ray bursts during the first ...*
Class Quant Grav	(LSC & Virgo) Abbott et al.
34 (2017) 10	*Effects of waveform model systematics on the interpreation of GW150914*
Phys Rev D	(LSC & Virgo) Abbott et al.
95 (2017) 042003	*All-sky search for short gravitational-wave bursts in the first Advanced LIGO run*
Class Quant Grav	(LSC, Harms) Abbott et al.
34 (2017) 4	*Exploring the sensitivity of next generation gravitational wave detectors*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Phys Rev D	(LSC & Virgo) Abbott et al.
95 (2017) 082005	*Search for continuous gravitational waves from neutron stars in globular cluster ...*
Annalen Phys	(LSC & Virgo) Abbott et al.
529 (2017) 1	*The basic physics of the binary black hole merger GW150914*
Astrophys J Lett	(LSC & Virgo) Abbott et al.
832 (2016) L21	*Upper limits on the rates of binary neutron star and neutron star-black hole ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
94 (2016) 102002	*Results of the deepest all-sky survey for continuous gravitational waves on ...*
Phys Rev X	(LSC & Virgo) Abbott et al.
6 (2016) 041015	*Binary black hole mergers in the first Advanced LIGO observing run*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
116 (2016) 241103	*GW151226: Observation of gravitational waves from a 22-solar-mass binary black ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
94 (2016) 064035	*Directly comparing GW150914 with numerical solutions of Einstein's equations ...*
Phys Rev X	(LSC & Virgo) Abbott et al.
6 (2016) 041014	*Improved analysis of GW150914 using a fully spin-precessing waveform model*
Phys Rev D	(LSC & Virgo) Abbott et al.
94 (2017) 102001	*First targeted search for gravitational-wave bursts from core-collapse ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
94 (2016) 042022	*Comprehensive all-sky search for periodic gravitational waves in the sixth ...*
Phys Rev D	(LSC & Virgo) Abbott et al.
93 (2016) 122008	*Search for transient gravitational waves in coincidence with short-duration radio ...*
Astrophys J Lett	(LSC, Virgo, and EM partners) Abbott et al.
826 (2016) L13	*Localization and broadband follow-up of the gravitational-wave transient GW150914*
Phys Rev D	(LSC, Virgo, ANTARES & IceCube) Adrián-Martínez et al.
93 (2016) 122010	*High-energy neutrino follow-up search of gravitational wave event GW150914 ...*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Phys Rev Lett	(LSC & Virgo) Abbott et al.
116 (2016) 131102	*GW150914: Implications for the stochastic gravitational-wave background from ...*
Astrophys J Lett	(LSC & Virgo) Abbott et al.
818 (2016) L22	*Astrophysical implications of the binary black hole merger GW150914*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
116 (2016) 131103	*GW150914: the Advanced LIGO detectors in the era of first discoveries*
Phys Rev Lett	(LSC & Virgo) Abbott et al.
116 (2016) 061102	*Observation of gravitational waves from a binary black hole merger*
Phys Rev D	(LSC & Virgo) Abbott et al.
93 (2016) 042005	*All-sky search for long-duration gravitational wave transients with initial LIGO*
Phys Rev D	(LSC & Virgo) Aasi et al.
93 (2016) 042007	*First low frequency all-sky search for continuous gravitational wave signals*
Phys Rev D	(LSC & Virgo) Aasi et al.
93 (2016) 042006	*Search of the Orion spur for continuous gravitational waves using a loosely ...*
Astrophys J	(LSC & Virgo) Aasi et al.
813 (2015) 39	*Searches for continuous gravitational waves from nine young supernova remnants*
Class Quant Grav	(LSC) Aasi et al.
32 (2015) 074001	*Advanced LIGO*
Phys Rev D	(LSC & Virgo) Aasi et al.
91 (2015) 062008	*Directed search for gravitational waves from Scorpius X-1 with initial LIGO data*
Phys Rev D	(LSC & Virgo) Aasi et al.
91 (2015) 022004	*Narrow-band search of continuous gravitational-wave signals from Crab and Vela ...*
Class Quant Grav	(LSC & Virgo) Aasi et al.
32 (2015) 115012	*Characterization of the LIGO detectors during their sixth science run*
Phys Rev D	(LSC & Virgo) Aasi et al.
91 (2015) 022003	*Searching for stochastic gravitational waves using data from the two colocated LIGO ...*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Phys Rev D	(LSC, Virgo & IceCube) Aartsen et al.
90 (2014) 102002	*Multimessenger search for sources of gravitational waves and high-energy neutrinos: ...*
Phys Rev Lett	(LSC & Virgo) Aasi et al.
113 (2014) 231101	*Improved upper limits on the stochastic gravitational-wave background from 2009-2010 ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
90 (2014) 062010	*First all-sky search for continuous gravitational waves from unknown sources in binary ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
89 (2014) 122004	*Methods and results of a search for gravitational waves associated with gamma-ray ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
89 (2014) 122003	*Search for gravitational radiation from intermediate mass black hole binaries in ...*
Phys Rev Lett	(LSC, Virgo & IPN) Aasi et al.
113 (2014) 011102	*Search for gravitational waves associated with γ-ray bursts detected by the ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
89 (2014) 102006	*Search for gravitational wave ringdowns from perturbed intermediate mass black holes ...*
Class Quant Grav	(LSC & Virgo) Aasi et al.
31 (2014) 165014	*Implementation of an $\mathcal{F}$-statistic all-sky search for continuous gravitational-waves ...*
Class Quant Grav	(LSC, Virgo & NINJA) Aasi et al.
31 (2014) 115004	*The NINJA-2 project: detecting and characterizing gravitational waveforms ...*
Class Quant Grav	(LSC & Virgo) Aasi et al.
31 (2014) 085014	*Application of a Hough search for continuous gravitational waves on data from ...*
Phys Rev Lett	(LSC & Virgo) Aasi et al.
112 (2014) 131101	*Constraints on cosmic strings from the LIGO-Virgo gravitational-wave detectors*
Astrophys J Supp	(LSC & Virgo) Aasi et al.
211 (2014) 7	*First searches for optical counterparts to gravitational-wave candidate events*
Astrophys J	(LSC & Virgo) Aasi et al.
785 (2014) 119	*Gravitational waves from known pulsars: results from the initial detector era*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Phys Rev D	(LSC & Virgo) Aasi et al.
88 (2013) 122004	*Search for long-lived gravitational wave transients coincident with long gamma-ray bursts*
Phys Rev D	(LSC & Virgo) Aasi et al.
88 (2013) 102002	*Directed search for continuous gravitational waves from the Galactic center*
Phys Rev D	(LSC & Virgo) Aasi et al.
88 (2013) 062001	*Parameter estimation for compact binary coalescence signals with the first generation ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
87 (2013) 022002	*Search for gravitational waves from binary black hole inspiral, merger, and ringdown in ...*
Phys Rev D	(LSC & Virgo) Aasi et al.
87 (2013) 042001	*Einstein@Home all-sky search for periodic gravitational waves in LIGO S5 data*
JCAP	(LSC, Virgo, & ANTARES) Adrián-Martínez et al.
1306 (2013) 008	*A first search for coincident gravitational waves and high energy neutrinos using LIGO, ...*
Astrophys J	(LSC, Virgo, & others) Abadie et al.
760 (2012) 12	*Search for gravitational waves associated with gamma-ray bursts during LIGO Science ...*
Astrophys J Supp	(LSC, Virgo, & SWIFT) Evans et al.
203 (2012) 28	*SWIFT follow-up observations of candidate gravitational-wave transient events*
Class Quant Grav	(LSC & Virgo) Aasi et al.
29 (2012) 155002	*The characterization of Virgo data and its impact on gravitational-wave searches*
Phys Rev D	(LSC & Virgo) Abadie et al.
85 (2012) 122007	*All-sky search for gravitational-wave bursts in the second joint LIGO-Virgo run*
Phys Rev D	(LSC & Virgo) Abadie et al.
85 (2012) 102004	*Search for gravitational waves from intermediate mass binary black holes*
Astrophys J	(LSC) Abadie et al.
755 (2012) 2	*Implications for the origin of GRB 051103 from LIGO observations*
Phys Rev D	(LSC & Virgo) Abadie et al.
85 (2012) 122001	*Upper limits on a stochastic gravitational-wave background using LIGO and Virgo at ...*

OTHER PEER-REVIEWED PAPERS (CONTINUED)

Astron Astrophys	(LSC & Virgo) Abadie et al.
541 (2012) A155	*First low-latency LIGO+Virgo search for binary inspirals and their electromagnetic ...*
Phys Rev D	(LSC & Virgo) Abadie et al.
85 (2012) 082002	*Search for gravitational waves from low mass compact binary coalescence in LIGO's ...*
Phys Rev D	(LSC & Virgo) Abadie et al.
85 (2012) 022001	*All-sky search for periodic gravitational waves in the full S5 LIGO data*
Astron Astrophys	(LSC & Virgo) Abadie et al.
539 (2012) A124	*Implementation and testing of the first prompt search for gravitational wave ...*
Phys Rev Lett	(LSC & Virgo) Abadie et al.
107 (2011) 271102	*Directional limits on persistent gravitational waves using LIGO S5 science data*
Nature Physics	(LSC) Abadie et al.
7 (2011) 962	*A gravitational wave observatory operating beyond the quantum shot-noise limit*
Astrophys J	(LSC & Virgo) Abadie et al.
737 (2011) 93	*Beating the spin-down limit on gravitational wave emission from the Vela pulsar*
Phys Rev D	(LSC & Virgo) Abadie et al.
83 (2011) 122005	*Search for gravitational waves from binary black hole inspiral, merger, and ringdown*
Astrophys J	(LSC, Virgo, & external) Abadie et al.
734 (2011) L35	*Search for gravitaitonal wave bursts from six magnetars*
Nucl Instrum Meth A	(LSC) Abadie et al.
624 (2010) 223	*Calibration of the LIGO gravitational wave detectors in the fifth science run*
Astrophys J	(LSC) Abadie et al.
722 (2010) 1504	*First search for gravitational waves from the youngest known neutron star*
Phys Rev D	(LSC & Virgo) Abadie et al.
82 (2010) 102001	*Search for gravitational waves from compact binary coalescence in LIGO and Virgo ...*
Class Quant Grav	(LSC & Virgo) Abadie et al.
27 (2010) 173001	*Predictions for the rates of compact binary coalescences observable by ground-based ...*

NON-PEER-REVIEWED PAPERS

arXiv:gr-qc/1612.05625	G. Ashton, O. Birnholtz, M. Cabero, C. Capano, T. Dent,
2016 December	B. Krishnan, **G.D. Meadors**, A.B. Nielsen, A. Nitz, J. Westerweck
	Comments on: "Echoes from the abyss: Evidence for Planck-scale structure at black hole horizons"
LIGO Technical Papers	**G.D. Meadors**
2016 July	*CrossCorr parameter space double-cone*
2016 July	*First approximation to the TwoSpect metric*
2015 December	*Eccentricity's effect on TwoSpect parameter estimation*
2015 September	*Technical appendix, TwoSpect: search for a simulated Scorpius X-1*
U of Michigan PhD Thesis	**G.D. Meadors** (advisor: K. Riles)
2014 November	*Directed searches for continuous gravitational waves from spinning neutron stars in binary system*
LIGO Technical Paper	I. Bartos, I. Belopolski, J. Berliner, J. Burguet-Castell,
2011 November	R. De Rosa, P. Daveloza, A. Effler, T. Fricke, G. Gonzalez, K. Kawabe, M. Landry, **G. Meadors**, G. Mendell, J. Rollins, R. Savage, X. Siemens, M. Sung, D. Yeaton-Massey
	Frequency Domain Calibration Error Budget for LIGO in S6
LIGO Technical Paper	I. Bartos, I. Belopolski, J. Berliner, J. Burguet-Castell,
2010 October	R. De Rosa, P. Daveloza, A. Effler, T. Fricke, G. Gonzalez, K. Kawabe, M. Landry, **G. Meadors**, G. Mendell, J. Rollins, R. Savage, X. Siemens, M. Sung, D. Yeaton-Massey
	Calibration for Big Dog [blind injection]

NON-PEER-REVIEWED PAPERS (CONTINUED)

Reed College Senior Thesis	**G.D. Meadors** (advisor: R. Reynolds)
2008 May	*Re-searching galactic structure with Reed's radio telescope*
LIGO SURF REU	**G.D. Meadors** (advisors: V. Mandic, S. Ballmer)
2007 October	*Searching for a gravitational wave stochastic background*
Columbia U., Nevis Labs REU	**G. Meadors** (advisors: J. Dodd, R. Galea)
2006 August	*E-Bubble: Seeing the Sun's Center*
LIGO SURF REU	**G.D. Meadors** (advisor: D. Gustafson)
2005 September	*Study of the LHO 4K Recycling Cavity Sideband and Carrier Response to Excitation and Perturbations*

INVITED PRESENTATIONS

LANL ISR & CNLS Seminars	2020 Mar	**(inv. talk)** Data assimilative optimization of WSA source surface and interface radii using particle filtering
LANL CNLS & XCP Seminars	2019 Sep & Oct	**(inv. talk)** Discovering hidden signals from gravitational waves and our universe
University of Melbourne	2018 Jun	**(inv. talk)** Precession measurability in black hole binary coalescences
Albert Einstein Inst, Hannover	2016 Sep	**(inv. poster)** Searches for signals from binaries and the interesting case of Sco X-1
U Texas, Brownsville – CWGA	2014 Jul	**(inv. talk)** Star-songs in spacetime: launching into gravitational wave astrophysics
Albert Einstein Inst, Hannover	2014 Mar	**(inv. talk)** Filters, Lasers, Pulsars: LIGO sensitivity improvements & binary neutron star searches

CONTRIBUTED PRESENTATIONS

ASME V&V Symposium	2020 May	**(talk)** Data assimilative optimization of WSA source surface and interface radii using particle filtering
American Geophys Union	2019 Dec	**(poster)** Data assimilative optimization of WSA source surface and interface radii using particle filtering
Australian Inst of Physics	2018 Dec	**(talk)** Precession measurability in black hole binary coalescences
OzGrav Annual Retreat	2018 Dec	**(talk)** Bystander anti-harassment training
Astro Soc of Australia	2018 Jun	**(talk)** Precession measurability in black hole binary coalescences
LIGO Cont Waves	2017 Nov	**(telecon)** Resampling to accelerate cross-correlation searches… from binary systems
Monash University	2017 Mar	**(talk)** Seeking continuous gravitational waves from Sco X-1
OzGrav	2017 Mar	**(talk)** CrossCorr, Resampled: algorithms for continuous gravitational waves from Sco X-1 & other low-mass X-ray binaries
LIGO-Virgo Meet, Pasadena	2017 Mar	**(talk)** Implementation and Measured Scalings of Resampled Cross-Corr
LIGO-Virgo Meet, Glasgow	2016 Aug	**(talk)** Progress on CrossCorr-Resampling
GWPAW, Hyannis	2016 Jun	**(poster)** Sco X-1 prospects with cross-correlation resampling
Los Alamos Natl Lab	2016 Mar	**(talk)** Highlights of the 1st Advanced LIGO Observations
LIGO-Virgo Meet, Pasadena	2016 Mar	**(talk)** Prospects for Resampling-CrossCorr
Amaldi 11, Gwangju	2015 Jun	**(talk)** Directed and all-sky continuous wave searches in advanced detectors: Scorpius X-1 and neutron stars in binary systems
GWPAW, Osaka	2015 Jun	**(talk)** Scorpius X-1 and other LMXBs: directed and all-sky searches for continuous gravitational waves
LIGO-Virgo Meet, Pasadena	2015 Mar	**(talk)** Directed TwoSpect: S6 results for Scorpius X-1 & XTE J1751-305
LIGO Hanford	2015 Jan	**(talk)** Directed TwoSpect: continuous gravitational waves from neutron stars in binary systems

CONTRIBUTED PRESENTATIONS (CONTINUED)

Midwest Rel Meet, Oakland U	2014 Nov	**(talk)** Sco X-1 in LIGO
LIGO-Virgo Meet, Stanford	2014 Aug	**(talk)** TwoSpect Directed: S6 search for Scorpius X-1 & J1751
APS April Meet, Savannah	2014 Apr	**(talk)** Sco X-1 in LIGO: directed searches for continuous gravitational waves from neutron stars in binary systems
LIGO Cont Waves & Det Char	2013 Jun	**(telecon)** Feedforward AMPS: Auxiliary MICH-PRC Subtraction
APS April Meet, Denver	2013 Apr	**(talk)** Increasing LIGO sensitivity by feedforward subtraction of auxiliary length control noise
LIGO-Virgo Meet, Bethesda	2013 Mar	**(talk & poster)** Free Inspiral Range – Auxiliary MICH-PRC Subtraction
LIGO-Virgo Meet, Arcadia	2011 Mar	**(talk)** Feedforward in S6

OUTREACH & COLLOQUIA

Marshall U – Physics	2011 Apr	**(colloq. w Marco Cavaglia)** LIGO: illuminating gravity
LIGO Hanford	2011 & 2010	**(outreach)** LIGO: illuminating gravity
LIGO Hanford	2010 Nov	**(video outreach)** LaserFest
World Science Festival	2010 Jun	**(co-hosting LIGO exhibition, New York City)**
Reed Coll & LIGO Livingston	2007 Sep & Aug	**(colloq. & REU talk)** Beyond Dawn: searching for a Big Bang stochastic background
Reed Coll & Nevis Labs	2006 Sep & Aug	**(colloq. & REU talk)** E-Bubble: Seeing the Sun's Center
Reed Coll	2005 Dec	**(inv. lecture to course)** The workings of an interferometric gravitational wave detector
Reed Coll & LIGO Hanford	2005 Sep & Aug	**(colloq. & REU talk)** Dynamics of the 4-kilometer Recycling Cavity

PROFESSIONAL ORGANIZATIONS

NOGLSTP	Member	joined 2019 December
National Postdoc Association	Member	joined 2019 October
American Geophysical Union	Member	joined 2019 July
LIGO Scientific Collaboration	Member	2008 Aug/2019 Feb
American Physical Society & Institute of Physics	Early Career & Associate Member	joined 2007 Aug

SKILLS

Electronics	Implemented feedforward digital servo control, LabView; made, ran analog, RF circuits
Laboratory	Clean rooms; machined aluminum, copper on mill; used compressed, cryogenic gas
Optics	Interferometry: built Michelson, Fabry-Perot w/ Nd-Yag, operated quantum squeezing
Radioisotopes	Neutron activation analysis w/ prompt, delayed gamma radiation; did lab teaching
Programming	MATLAB, Python, C on Linux; LaTeX& HTML; some C++, Mathematica, R
Software	Condor data grid; Geant MCMC sim→ROOT statistics; AutoCAD, SolidWorks design
Languages	Familiar w/ Russian, 2 years college courses; German working at AEI Hannover

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