

Appointments:

- ▷ **Current Position:** Professor of Physics and Astronomy, Louisiana State University, from August 2009.
- ▷ **Current Position:** Observatory Head, LIGO Livingston, California Institute of Technology, from November 2006.

- ▷ Associate Professor, Department of Physics and Astronomy, Louisiana State University, 2005–2009
- ▷ Chief Scientist at LIGO Livingston, 2004–2006.
- ▷ Visiting Scholar, Ginzton Laboratory, Stanford University, 2003–2008.
- ▷ Assistant Professor, Department of Physics and Astronomy, Louisiana State University, 1999–2005.
- ▷ Research Scientist, MIT Center for Space Research, 1998–1999.
- ▷ Senior Research Associate, JILA (University of Colorado), 1997–1998.
- ▷ Research Associate, JILA. 1995–1997.
- ▷ Graduate Research Assistant, MIT Physics Department, 1987–1995.
- ▷ Technical Instructor, MIT Physics Department, 1986–1987.

Education:

Massachusetts Institute of Technology
Cambridge, MA

S.B. in Physics, June 1986
Ph.D. in Physics, June 1995

JILA/University of Colorado
Boulder, CO

Postdoctoral work in Physics, 1995–1997

Scientific societies and awards:

- ▷ *Fellow*, American Physical Society (APS), elected 2009.
- ▷ *Member*, The American Association for the Advancement of Science (AAAS), the American Astronomical Society (AAS), the International Society on General Relativity & Gravitation (ISGRG), and the International Astronomical Union (IAU).
- ▷ Special Breakthrough Prize in Fundamental Physics, awarded in 2016 to Ronald W. P. Drever, Kip S. Thorne and Rainer Weiss and 1012 contributors to the discovery.
- ▷ Gruber Foundation 2016 Cosmology Prize, awarded to Ronald Drever, Kip Thorne, and Rainer Weiss, along with the entire Laser Interferometer Gravitational-Wave Observatory (LIGO) discovery team for the first detection of gravitational waves.
- ▷ 2017 UK Royal Astronomical Society (RAS) Group Achievement Award in Astronomy to the Laser Interferometer Gravitational Wave Observatory (LIGO) team.
- ▷ 2017 Albert Einstein Medal, from the Albert Einstein Society (Bern), to the LIGO Scientific Collaboration and the Virgo Collaboration.
- ▷ 2017 Princess of Asturias Award in Technical and Scientific Research to Rainer Weiss, Kip S. Thorne, Barry C. Barish and the LIGO Scientific Collaboration.
- ▷ 2017 Bruno Rossi Prize awarded by the American Astronomy Society's High Energy Astrophysics Division to Gabriela González and the LIGO Scientific Collaboration.
- ▷ 2019 Current Achievement Trophy awarded by the Smithsonian National Air and Space Museum to the LIGO Scientific Collaboration.

Activities:

- ▷ Research related to the observation of gravitational waves from astrophysical sources at the Laser Interferometer Gravitational-wave Observatory (LIGO); Observatory head of LIGO Livingston.
- ▷ Chair of LIGO Science Education Center (LIGO SEC) Partnership, which consists of collaborators at LIGO, Southern University, the Baton Rouge Area Foundation, and the San Francisco Exploratorium. The partnership carries out education and outreach activities in Louisiana relevant to LIGO science. P.I. of a continuing National Science Foundation award to the Baton Rouge Area Foundation in support of the LIGO SEC Partnership.
- ▷ Member of the LIGO Scientific Collaboration (LSC) Management Team; Past chair of the LSC's Suspension, Seismic Isolation and Thermal Noise Working Group.
- ▷ Member of the LIGO Laboratory's Operations Management Team (OMT) and Executive Committee.

Publications:

- [1] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration, The Virgo Collaboration, ASAS-SN Collaboration, DLT40 Collaboration and F. Salemi). Optically targeted search for gravitational waves emitted by core-collapse supernovae during the first and second observing runs of advanced LIGO and advanced Virgo. *Physical Review D*, 101(8), Apr 2 2020. ISSN 2470-0010. doi:10.1103/PhysRevD.101.084002.
- [2] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). A guide to LIGO-Virgo detector noise and extraction of transient gravitational-wave signals. *Classical and Quantum Gravity*, 37(5), Mar 5 2020. ISSN 0264-9381. doi:10.1088/1361-6382/ab685e.
- [3] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Model comparison from LIGO-Virgo data on GW170817's binary components and consequences for the merger remnant. *Classical and Quantum Gravity*, 37(4), Feb 20 2020. ISSN 0264-9381. doi:10.1088/1361-6382/ab5f7c.
- [4] M. Tse, Haocun Yu, N. Kijbunchoo, A. Fernandez-Galiana, P. Dupej, L. Barsotti, C. D. Blair, D. D. Brown, S. E. Dwyer, A. Effler, M. Evans, P. Fritschel, V. V. Frolov, A. C. Green, G. L. Mansell, F. Matichard, N. Mavalvala, D. E. McClelland, L. McCuller, T. McRae, J. Miller, A. Mullavey, E. Oelker, I. Y. Phinney, D. Sigg, B. J. J. Slagmolen, T. Vo, R. L. Ward, C. Whittle, R. Abbott, C. Adams, R. X. Adhikari, A. Ananyeva, S. Appert, K. Arai, J. S. Areeda, Y. Asali, S. M. Aston, C. Austin, A. M. Baer, M. Ball, S. W. Ballmer, S. Banagiri, D. Barker, J. Bartlett, B. K. Berger, J. Betzwieser, D. Bhattacharjee, G. Billingsley, S. Biscans, R. M. Blair, N. Bode, P. Booker, R. Bork, A. Bramley, A. F. Brooks, A. Buikema, C. Cahillane, K. C. Cannon, X. Chen, A. A. Ciobanu, F. Clara, S. J. Cooper, K. R. Corley, S. T. Countryman, P. B. Covas, D. C. Coyne, L. E. H. Datrier, D. Davis, C. Di Fronzo, J. C. Driggers, T. Etzel, T. M. Evans, J. Feicht, P. Fulda, M. Fyffe, J. A. Giaime, K. D. Giardino, P. Godwin, E. Goetz, S. Gras, C. Gray, R. Gray, Anchal Gupta, E. K. Gustafson, R. Gustafson, J. Hanks, J. Hanson, T. Hardwick, R. K. Hasskew, M. C. Heintze, A. F. Helmling-Cornell, N. A. Holland, J. D. Jones, S. Kandhasamy, S. Karki, M. Kasprzack, K. Kawabe, P. J. King, J. S. Kissel, Rahul Kumar, M. Landry, B. B. Lane, B. Lantz, M. Laxen, Y. K. Lecoeuche, J. Leviton, J. Liu, M. Lormand, A. P. Lundgren, R. Macas, M. MacInnis, D. M. Macleod, S. Marka, Z. Marka, D. Martynov, V. K. Mason, T. J. Massinger, R. McCarthy, S. McCormick, J. McIver, G. Mendell, K. Merfeld, E. L. Merilh, F. Meylahn, T. Mistry, R. Mittleman, G. Moreno, C. M. Mow-Lowry, S. Mozzon, T. J. N. Nelson, P. Nguyen, L. K. Nuttall, J. Oberling, R. J. Oram, B. O'Reilly, C. Osthelder, D. J. Ottaway, H. Overmier, J. R. Palamos, W. Parker, E. Payne, A. Pele, C. J. Perez, M. Pirello, H. Radkins, K. E. Ramirez, J. W. Richardson, K. Riles, N. A. Robertson, J. G. Rollins, C. L. Romel, J. H. Romie, M. P. Ross, K. Ryan, T. Sadecki, E. J. Sanchez, L. E. Sanchez, T. R. Saravanan, R. L. Savage, D. Schaetzel, R. Schnabel, R. M. S. Schofield, E. Schwartz, D. Sellers, T. J. Shaffer, J. R. Smith, S. Soni, B. Sorazu, A. P. Spencer, K. A. Strain, L. Sun, M. J. Szczepanczyk, M. Thomas, P. Thomas, K. A. Thorne, K. Toland, C. Torrie, I. G. Traylor, A. L. Urban, G. Vajente, G. Valdes, D. C. Vander-Hyde, P. J. Veitch, K. Venkateswara, G. Venugopalan,

- A. D. Viets, C. Vorvick, M. Wade, J. Warner, B. Weaver, R. Weiss, B. Willke, C. C. Wipf, L. Xiao, H. Yamamoto, M. J. Yap, Hang Yu, L. Zhang, M. E. Zucker, and J. Zweizig. Quantum-Enhanced Advanced LIGO Detectors in the Era of Gravitational-Wave Astronomy. *Physical Review Letters*, 123(23), Dec 5 2019. ISSN 0031-9007. doi:10.1103/PhysRevLett.123.231107.
- [5] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for gravitational waves from Scorpius X-1 in the second Advanced LIGO observing run with an improved hidden Markov model. *Physical Review D*, 100(12), Dec 4 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.122002.
- [6] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Tests of general relativity with the binary black hole signals from the LIGO-Virgo catalog GWTC-1. *Physical Review D*, 100(10), Nov 20 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.104036.
- [7] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for Eccentric Binary Black Hole Mergers with Advanced LIGO and Advanced Virgo during Their First and Second Observing Runs. *Astrophysical Journal*, 883(2), Oct 1 2019. ISSN 0004-637X. doi:10.3847/1538-4357/ab3c2d.
- [8] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for Subsolar Mass Ultracompact Binaries in Advanced LIGO's Second Observing Run. *Physical Review Letters*, 123(16), Oct 18 2019. ISSN 0031-9007. doi:10.1103/PhysRevLett.123.161102.
- [9] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for intermediate mass black hole binaries in the first and second observing runs of the Advanced LIGO and Virgo network. *Physical Review D*, 100(6), Sep 30 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.064064.
- [10] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for the isotropic stochastic background using data from Advanced LIGO's second observing run. *Physical Review D*, 100(6), Sep 4 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.061101.
- [11] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Binary Black Hole Population Properties Inferred from the First and Second Observing Runs of Advanced LIGO and Advanced Virgo. *Astrophysical Journal Letters*, 882(2), Sep 10 2019. ISSN 2041-8205. doi:10.3847/2041-8213/ab3800.
- [12] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Directional limits on persistent gravitational waves using data from Advanced LIGO's first two observing runs. *Physical Review D*, 100(6), Sep 4 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.062001.
- [13] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). GWTC-1: A Gravitational-Wave Transient Catalog of Compact Binary Mergers Observed by LIGO and Virgo during the First and Second Observing Runs. *Physical Review X*, 9(3), Sep 4 2019. ISSN 2160-3308. doi:10.1103/PhysRevX.9.031040.
- [14] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). All-sky search for short gravitational-wave bursts in the second Advanced LIGO and Advanced Virgo run. *Physical Review D*, 100(2), Jul 11 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.024017.
- [15] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). All-sky search for continuous gravitational waves from isolated neutron stars using Advanced LIGO O2 data. *Physical Review D*, 100(2), Jul 8 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.100.024004.
- [16] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Tests of General Relativity with GW170817. *Physical Review Letters*, 123(1), Jul 1 2019. ISSN 0031-9007. doi:10.1103/PhysRevLett.123.011102.

- [17] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Searches for Gravitational Waves from Known Pulsars at Two Harmonics in 2015-2017 LIGO Data. *Astrophysical Journal*, 879(1), Jul 1 2019. ISSN 0004-637X. doi:10.3847/1538-4357/ab20cb.
- [18] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Narrow-band search for gravitational waves from known pulsars using the second LIGO observing run. *Physical Review D*, 99(12), Jun 27 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.99.122002.
- [19] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). All-sky search for long-duration gravitational-wave transients in the second Advanced LIGO observing run. *Physical Review D*, 99(10), May 14 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.99.104033.
- [20] Soares-Santos, M. *et al.* (The DES Collaboration, The LIGO Scientific Collaboration and The Virgo Collaboration). First Measurement of the Hubble Constant from a Dark Standard Siren using the Dark Energy Survey Galaxies and the LIGO/Virgo Binary-Black-hole Merger GW170814. *Astrophysical Journal Letters*, 876(1), May 1 2019. ISSN 2041-8205. doi:10.3847/2041-8213/ab14f1.
- [21] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Low-latency Gravitational-wave Alerts for Multimessenger Astronomy during the Second Advanced LIGO and Virgo Observing Run. *Astrophysical Journal*, 875(2), Apr 20 2019. ISSN 0004-637X. doi:10.3847/1538-4357/ab0e8f.
- [22] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Searches for Continuous Gravitational Waves from 15 Supernova Remnants and Fomalhaut b with Advanced LIGO. *Astrophysical Journal*, 875(2), Apr 20 2019. ISSN 0004-637X. doi:10.3847/1538-4357/ab113b.
- [23] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for Transient Gravitational-wave Signals Associated with Magnetar Bursts during Advanced LIGO's Second Observing Run. *Astrophysical Journal*, 874(2), Apr 1 2019. ISSN 0004-637X. doi:10.3847/1538-4357/ab0e15.
- [24] J. C. Driggers, S. Vitale, A. P. Lundgren, M. Evans, K. Kawabe, S. E. Dwyer, K. Izumi, R. M. S. Schofield, A. Effler, D. Sigg, P. Fritschel, M. Drago, A. Nitz, B. P. Abbott, R. Abbott, T. D. Abbott, C. Adams, R. X. Adhikari, V. B. Adya, A. Ananyeva, S. Appert, K. Arai, S. M. Aston, C. Austin, S. W. Ballmer, D. Barker, B. Barr, L. Barsotti, J. Bartlett, I. Bartos, J. C. Batch, A. S. Bell, J. Betzwieser, G. Billingsley, J. Birch, S. Biscans, C. D. Blair, R. M. Blair, R. Bork, A. F. Brooks, H. Cao, G. Ciani, F. Clara, S. J. Cooper, P. Corban, S. T. Countryman, P. B. Covas, M. J. Cowart, D. C. Coyne, A. Cumming, L. Cunningham, K. Danzmann, C. F. Da Silva Costa, E. J. Daw, D. DeBra, R. DeSalvo, K. L. Dooley, S. Doravari, T. B. Edo, T. Etzel, T. M. Evans, H. Fair, A. Fernandez-Galiana, E. C. Ferreira, R. P. Fisher, H. Fong, R. Frey, V. V. Frolov, P. Fulda, M. Fyffe, B. Gateley, J. A. Giaime, K. D. Giardina, E. Goetz, R. Goetz, S. Gras, C. Gray, H. Grote, K. E. Gushwa, E. K. Gustafson, R. Gustafson, E. D. Hall, G. Hammond, J. Hanks, J. Hanson, T. Hardwick, G. M. Harry, M. C. Heintze, A. W. Heptonstall, J. Hough, R. Jones, S. Kandhasamy, S. Karki, M. Kasprzack, S. Kaufer, R. Kennedy, N. Kijbunchoo, W. Kim, E. J. King, P. J. King, J. S. Kissel, W. Z. Korth, G. Kuehn, M. Landry, B. Lantz, M. Laxen, J. Liu, N. A. Lockerbie, M. Lormand, M. MacInnis, D. M. Macleod, S. Marka, Z. Marka, A. S. Markosyan, E. Maros, P. Marsh, I. W. Martin, D. Martynov, V. K. Mason, T. J. Massinger, F. Matichard, N. Mavalvala, R. McCarthy, D. E. McClelland, S. McCormick, L. McCuller, J. McIver, D. J. McManus, T. McRae, G. Mendell, E. L. Merilh, P. M. Meyers, R. Mittleman, K. Mogushi, D. Moraru, G. Moreno, C. M. Mow-Lowry, G. Mueller, N. Mukund, A. Mullavey, J. Munch, T. J. N. Nelson, P. Nguyen, L. K. Nuttall, J. Oberling, M. Oliver, P. Oppermann, Richard J. Oram, B. O'Reilly, D. J. Ottaway, H. Overmier, J. R. Palamos, W. Parker, A. Pele, S. Penn, C. J. Perez, M. Phelps, V. Pierro, I. M. Pinto, M. Pirello, M. Principe, L. G. Prokhorov, O. Puncken, V. Quetschke, E. A. Quintero, H. Radkins, P. Raffai, K. E. Ramirez, S. Reid, D. H. Reitze, N. A. Robertson, J. G. Rollins, V. J. Roma, C. L. Romel, J. H. Romie, M. P. Ross, S. Rowan, K. Ryan, T. Sadecki, E. J. Sanchez, L. E. Sanchez, V. Sandberg, R. L. Savage, D. Sellers, D. A. Shaddock, T. J. Shaffer, B. Shapiro, D. H. Shoemaker, B. J. J. Slagmolen, B. Smith, J. R. Smith, B. Sorazu, A. P. Spencer, K. A. Strain, D. B. Tanner, R. Taylor, M. Thomas, P. Thomas, K. A. Thorne, E. Thrane, K. Toland, C. Torrie, I. G. Traylor,

- M. Tse, D. Tuyenbayev, G. Vajente, G. Valdes, A. A. van Veggel, S. Vass, A. Vecchio, P. J. Veitch, K. Venkateswara, G. Venugopalan, T. Vo, C. Vorvick, M. Walker, R. L. Ward, J. Warner, B. Weaver, R. Weiss, P. Wessels, B. Willke, C. C. Wipf, J. Worden, H. Yamamoto, C. C. Yancey, Hang Yu, Haocun Yu, L. Zhang, M. E. Zucker, and J. Zweizig. Improving astrophysical parameter estimation via offline noise subtraction for Advanced LIGO. *Physical Review D*, 99(4), Feb 20 2019. ISSN 2470-0010. doi:10.1103/PhysRevD.99.042001.
- [25] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Constraining the p-Mode-g-Mode Tidal Instability with GW170817. *Physical Review Letters*, 122(6), Feb 13 2019. ISSN 0031-9007. doi:10.1103/PhysRevLett.122.061104.
- [26] Burns, E. *et al.* (*Fermi* Gamma-Ray Burst Monitor, The LIGO Scientific Collaboration and The Virgo Collaboration). A *Fermi* Gamma-Ray Burst Monitor Search for Electromagnetic Signals Coincident with Gravitational-wave Candidates in Advanced LIGO's First Observing Run. *Astrophysical Journal*, 871(1), Jan 20 2019. ISSN 0004-637X. doi:10.3847/1538-4357/aaf726.
- [27] Albert, A. *et al.* (ANTARES collaboration, IceCube Collaboration, The LIGO Scientific Collaboration and The Virgo Collaboration). Search for Multimessenger Sources of Gravitational Waves and High-energy Neutrinos with Advanced LIGO during Its First Observing Run, ANTARES, and IceCube. *Astrophysical Journal*, 870(2), Jan 10 2019. ISSN 0004-637X. doi:10.3847/1538-4357/aaf21d.
- [28] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Properties of the Binary Neutron Star Merger GW170817. *Physical Review X*, 9(1), Jan 2 2019. ISSN 2160-3308. doi:10.1103/PhysRevX.9.011001.
- [29] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration) and Shandara, S. Search for Subsolar-Mass Ultracompact Binaries in Advanced LIGO's First Observing Run. *Physical Review Letters*, 121(23), Dec 7 2018. ISSN 0031-9007. doi:10.1103/PhysRevLett.121.231103.
- [30] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). GW170817: Measurements of Neutron Star Radii and Equation of State. *Physical Review Letters*, 121(16), Oct 15 2018. ISSN 0031-9007. doi:10.1103/PhysRevLett.121.161101.
- [31] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Constraints on cosmic strings using data from the first Advanced LIGO observing run. *Physical Review D*, 97(10), May 8 2018. ISSN 2470-0010. doi:10.1103/PhysRevD.97.102002.
- [32] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Full band all-sky search for periodic gravitational waves in the O1 LIGO data. *Physical Review D*, 97(10), May 11 2018. ISSN 2470-0010. doi:10.1103/PhysRevD.97.102003.
- [33] Abbott, B. P. *et al.* (The LIGO Scientific Collaboration and The Virgo Collaboration). Search for Tensor, Vector, and Scalar Polarizations in the Stochastic Gravitational-Wave Background. *Physical Review Letters*, 120(20), May 16 2018. ISSN 0031-9007. doi:10.1103/PhysRevLett.120.201102.
- [34] P. B. Covas, A. Effler, E. Goetz, P. M. Meyers, A. Neunzert, M. Oliver, B. L. Pearlstone, V. J. Roma, R. M. S. Schofield, V. B. Adya, P. Astone, S. Biscoveanu, T. A. Callister, N. Christensen, A. Colla, E. Coughlin, M. W. Coughlin, S. G. Crowder, S. E. Dwyer, H. B. Eggenstein, S. Hourihane, S. Kandhasamy, W. Liu, A. P. Lundgren, A. Matas, R. McCarthy, J. McIver, G. Mendell, R. Ormiston, C. Palomba, M. A. Papa, O. J. Piccinni, K. Rao, K. Riles, L. Sammut, S. Schlassa, D. Sigg, N. Strauss, D. Tao, K. A. Thorne, E. Thrane, S. Trembath-Reichert, B. P. Abbott, R. Abbott, T. D. Abbott, C. Adams, R. X. Adhikari, A. Ananyeva, S. Appert, K. Arai, S. M. Aston, C. Austin, S. W. Ballmer, D. Barker, B. Barr, L. Barsotti, J. Bartlett, I. Bartos, J. C. Batch, M. Bejger, A. S. Bell, J. Betzwieser, G. Billingsley, J. Birch, S. Biscans, C. Biwer, C. D. Blair, R. M. Blair, R. Bork, A. F. Brooks, H. Cao, G. Ciani, F. Clara, P. Clearwater, S. J. Cooper, P. Corban, S. T. Countryman, M. J. Cowart, D. C. Coyne, A. Cumming, L. Cunningham, K. Danzmann, C. F. Da Silva Costa, E. J. Daw, D. DeBra, R. T. DeRosa, R. DeSalvo, K. L. Dooley, S. Doravari, J. C. Driggers, T. B. Edo, T. Etzel, M. Evans, T. M. Evans, M. Factourovich, H. Fair, A. Fernandez Galiana, E. C. Ferreira, R. P. Fisher, H. Fong, R. Frey,

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Technical talks and professional meetings:

- [1] “Patience and Stewardship over Generations: LIGOs Detector Facilities and Recent Discoveries,” plenary talk at International Workshop to Develop Research Campaigns, Interdisciplinary Teams and Disruptive Technologies for the NHERI 5-Year Science Plan for Natural Hazards, Alexandria, VA, March 18, 2019
- [2] “Wonderful collisions: gravitational wave detections meet astrophysics,” Fred Combley Lecture in Gravitational Wave Astronomy, University of Sheffield (U.K.), March 6, 2019.
- [3] “Wonderful collisions: gravitational wave detections meets astrophysics,” invited banquet talk at the Conference on Application of Accelerators in Research and Industry (CAARI), in Grapevine, TX, August 15, 2018.
- [4] “Observations of a neutron star merger,” introductory talk to the National Science Board, during their visit to LIGO Livingston, LA, October 27, 2017.
- [5] “Observations of a neutron star merger,” general seminar, Department of Physics and Astronomy, Louisiana State University, Baton Rouge LA, October 26, 2017.

- [6] "Gravitational-wave observation at LIGO," talk for SURA board meeting, LIGO Livingston, LA, April 18, 2017.
- [7] "Gravitational-wave observation at LIGO," talk at CALET collaboration meeting, LIGO Livingston, March 24, 2017.
- [8] "Ground-based gravitational-wave observatories," invited talk at the American Physical Society 2017 'April' meeting, Washington DC, January 30, 2017.
- [9] "Gravitational waves in the southeast," invited banquet lecture, 83rd Annual Meeting of the APS Southeastern Section, Charlottesville, VA, November 10, 2016.
- [10] "Observation of gravitational waves from binary black holes using ultra-high precision laser interferometers," invited plenary lecture at the V Congreso Nacional de Ingeniería Física CNIF in Medellín, Colombia, September 27, 2016.
- [11] "Hearing Black Holes Collide, with LIGO," invited lecture at the 2016 British Science Festival in Swansea, Wales, U.K., September 7, 2016.
- [12] "Observation of Gravitational Waves from a Binary Black Hole Merger," Physics and Astronomy seminar at the University of California Davis, May 2, 2016.
- [13] "Observation of Gravitational Waves," Louisiana State University College of Science seminar, March 11, 2016. (with G. González)
- [14] "LIGO: science, technology and expectations in the Advanced LIGO era," seminar at the University of Louisiana, Lafayette, February 26, 2014.
- [15] Host and Chair of local committee, Southeastern Section of American Physical Society, annual meeting, Baton Rouge, LA, October 20-23, 2010.
- [16] "The LIGO detector, past present and future," invited talk at Multi-Messenger Relativistic Astrophysics; inaugural conference of the Center for Relativistic Astrophysics at Georgia Tech, May 20, 2009.
- [17] "Operational Challenges at LIGO," National Science Foundation (NSF) Large Facilities Workshop, Tucson, AZ, April 17, 2009.
- [18] "The Laser Interferometer Gravitational-wave Observatory: present performance and improvements underway," all-hands meeting of Open Science Grid (OSG) Council, Livingston, LA, March 4, 2009.
- [19] "The Science Education Center at the LIGO Livingston Observatory," invited talk at the annual conference of the Association of Science and Technology Centers (ASTC), Los Angeles, October 16, 2007.
- [20] "The Laser Interferometer Gravitational-wave Observatory: present performance and improvements underway," seminar at Tulane University, September 11, 2007.
- [21] "Searching for Gravitational Waves," Chair and organizer of invited session at the November 9-11, 2006, meeting of the Southeast Section of the American Physical Society, held in Williamsburg, Virginia.
- [22] "Improving the LIGO detector," general seminar, Department of Physics, University of Louisiana Lafayette, October 11, 2006.
- [23] "The Advanced LIGO detector," invited talk, 6th Edoardo Amaldi Conference on Gravitational Waves, Okinawa, Japan, June 24, 2005.
- [24] "Improving the LIGO detector," invited talk, Research Progress Meeting (RPM), Lawrence Berkeley National Laboratory, April 7, 2005.

- [25] "Critical mechanical technologies for future gravitational-wave astronomy," invited talk at *Imagining the Future: Gravitational Wave Astronomy*, Pennsylvania State University, State College PA, October 29, 2004.
- [26] "Improving the LIGO Detector," general seminar, Department of Physics and Astronomy, Louisiana State University, Baton Rouge LA, October 21, 2004.
- [27] "The X-arm interferometer test of HEPI at LIGO Livingston," (LSC Meeting, August 16–19, 2004, Hanford WA.)
- [28] "The Laser Interferometer Gravitational-wave Observatory, early results and technical progress." Physics colloquium at the University of Alabama, Tuscaloosa, October 15, 2003.
- [29] "Seismic Isolation Enhancements for Initial and Advanced LIGO," presented at the 5th Amaldi meeting, Tirrenia, Italy, July 10, 2003.
- [30] "Active seismic isolation for an advanced LIGO gravitational-wave detector," invited talk at the March 2003 APS meeting, Austin, TX.
- [31] "Gravitational-wave Data Analysis Workshop," (Co-host/organizer), Louisiana State University, December, 2000.
- [32] "Advanced seismic isolation for LIGO-II," seminar at the Center for Gravitational Physics and Geometry, Penn State, April 10, 2000.
- [33] "Software Tools for Advanced Interferometer Configurations," (Conference co-host/organizer), Louisiana State University, March, 2000.
- [34] "The JILA low-frequency seismic isolation platform," with R. Stebbins, P. Bender and J. Faller, at the VIRGO International Workshop on Thermal Noise and Low-Frequency Noise Sources in Gravitational-Wave Detectors, 4-6 June, 1998, Perugia, Italy.
- [35] "Low noise interferometric seismometer readouts in an active vibration isolation system for gravitational wave detectors," with S. Richman, R. Stebbins, P. Bender, and J. Faller, presented at the 1997 Joint April meeting of the APS and the AAPT. *Bull. APS*, **42:2**, 1106.
- [36] "An analysis of interferometric gravitational wave detector design using MAPLE," presented at the 1996 East Coast Computer Algebra Day, April 13, 1996, Yorktown Heights, NY.
- [37] "Test of a candidate interferometer configuration for LIGO," (with D. Shoemaker), presented at the 1994 Joint April meeting of the APS and the AAPT. *Bull. APS*, **39:2**, session J11 PMTG.

Public lectures and exhibitions:

- [1] Invited demonstrations and outreach activities at the Arc of Science event on Capitol Hill, as part of the LIGO Science Education Center Partnership with Southern University, February 15, 2017, Washington, DC.
- [2] "Hearing Black Holes Collide, with LIGO," Rotary Club of Baton Rouge, October 19, 2016.
- [3] "Hearing Black Holes Collide in Louisiana," Baton Rouge Press Club, September 12, 2016.
- [4] "Hearing Black Holes Collide, with LIGO," David Elder Lecture, Glasgow Science Centre, Glasgow, Scotland, U.K., August 29, 2016.
- [5] "Hearing Black Holes Collide," Sunrise Rotary, Baton Rouge, LA, May 19, 2016.

- [6] "Hearing Black Holes Collide," lecture for the general public at University of California, Davis, CA, May 3, 2016.
- [7] "Hearing Black Holes Collide in Louisiana," *Einstein Week* public lecture, University of New Orleans, LA, April 21, 2016.
- [8] "Hearing Black Holes Collide in Louisiana," lecture to Baton Rouge Astronomical Society, April 11, 2016.
- [9] "The Science Education Center and the LIGO Livingston Observatory," Denham Springs Kiwanis, July 24, 2008.
- [10] "The Laser Interferometer Gravitational-wave Observatory, and the new Science Education Center," seminar at the Baton Rouge Area Foundation, August 27, 2007.
- [11] "Searching for Gravitational Waves with LIGO," invited talk to the Baton Rouge Rotary, May 9, 2007.
- [12] "The LIGO Detector," Baton Rouge Amateur Radio Club, April 25, 2006.
- [13] "LIGO and the Search for Gravitational Waves," LSU Saturday Science, February 2003.