CURRICULUM VITAE: PATRICK BRADY

Mailing address:

Department of Physics,
University of Wisconsin - Milwaukee,
P.O. Box 413, Milwaukee WI 53201

Degrees:

Ph.D.	Theoretical Physics. (University of Alberta, Canada. 1994)
M.Sc.	Mathematical Physics. (University College Dublin. 1989)
B.Sc.	Mathematical Science. (University College Dublin. 1988)

Appointments:

2014-	Distinguished Visiting Research Chair, Perimeter Institute, Canada
2009-	Director, Center for Gravitation, Cosmology and Astrophysics
2007-	Professor of Physics, UWM
2004-2007	Associate Professor of Physics, UWM
1999-2004	Assistant Professor of Physics, UWM
1998-1999	Research Associate, Institute for Theoretical Physics, U. C. Santa Barbara
1995-1998	Prize Fellow, California Institute of Technology
1993-1995	Research Associate, University of Newcastle, England

Awards and Honors:

2016	Breakthrough Prize (awarded to the LIGO Scientific Collaboration)
2011	UWM Research Foundation Senior Faculty Award
2010	Elected Fellow of the American Physical Society
2006	Graduate School/UWM Foundation Research Award
2002-2007	Cottrell Scholar
2002-2006	Sloan Research Fellow
1993	Izaak Walton Killam Memorial Scholarship, University of Alberta
1993	Andrew Stewart Memorial Prize, University of Alberta
1990	Recruitment Scholarship, University of Alberta
1989	Eolas Basic Research Award for study in Ireland
1988	Scholarship in Mathematical Science, University College, Dublin.

Grants Awarded:

2022-(2025) *National Science Foundation, Gravity Program, PHY-2207728*
Title: *Gravitational-Wave Astronomy with the LIGO-Virgo-KAGRA Network*
Amount: $1,500,000
Investigators: P. R. Brady and J. Creighton

2021-(2025) *National Science Foundation, Gravity Program, PHY-2110594*
Title: *Data Handling and Analysis Infrastructure for Gravitational-wave Astronomy*
Amount: $7,509,554
Investigators: P. R. Brady, J. Smith, P. Couvares, C. Hanna, W. Anderson

2019-(2023) *National Science Foundation, OAC-1934752*
Title: *A Framework for Data Intensive Discovery in Multimessenger Astrophysic*
Amount: $2,800,000
Investigators: P. R. Brady, W. G. Anderson, P. Chang, D. L. A. Kaplan.

2019-2022 *National Science Foundation, Gravity Program, PHY-1912649*
Title: *Identification and Interpretation of Gravitational-Wave Signals in LIGO Data*
Amount: $1,350,000
Investigators: P. R. Brady and J. Creighton

2019-(2023) *National Science Foundation, Gravity Program, PHY-1912598*
Title: *Support for LIGO Scientific Collaboration Core Functions in the Era of Gravitational-Wave O*
Amount: $1,197,798
Investigators: J. O'Reilly, R. Savage, D. Shoemaker and P. R. Brady

2018-2021 *National Science Foundation, OAC-1841625*
Title: *Community Planning for Scalable Cyberinfrastructure to Support Multi-Messenger Astrophysi*
Amount: $262,279
Investigators: P. R. Brady, W. G. Anderson, P. Chang, D. L. A. Kaplan.

2017-(2023) *National Science Foundation, Gravity Program, PHY-1607585*
Title: *Data Handling and Analysis Infrastructure for Gravitational-wave Astronomy*
Amount: $7,200,000
Investigators: P. R. Brady, J. Smith, P. Couvares, C. Hanna, W. Anderson

2016-2019 *National Science Foundation, Gravity Program, PHY-1607585*
Amount: $1,349,989
Investigators: P. R. Brady, J. Creighton, X. Siemens, A. Wiseman

2016-2019 *National Science Foundation, Major Research Instrumentation, PHY-1626190*
Amount: $874,669
Investigators: P. Brady, J. Creighton, T. Downes, D. Kaplan and A. Wiseman

2013-2016 *National Science Foundation, Gravity Program, PHY-1307429*
Amount: $960,000
Investigators: P. R. Brady, J. Creighton, X. Siemens, A. Wiseman

2011-2017 *National Science Foundation, Gravity Program, PHY-1104371*
Amount: $9,000,000
Investigators: P. R. Brady, S. B. Anderson, S. Koranda, E. Katsavounidis, D. Brown

2010-2013 *National Science Foundation, Gravity Program, PHY-0970074*
Amount: $1,800,000
Investigators: P. Brady, J. Creighton, X. Siemens and A. Wiseman

2009-2012 *National Science Foundation, Major Research Instrumentation, PHY-0923409*
Amount: $1,188,018
Investigators: B. Allen, P. Brady, J. Creighton, X. Siemens and A. Wiseman

2007-2010 *National Science Foundation, Gravity Program, PHY-0701817*
Amount: $1,380,000
Investigators: B. Allen, P. Brady, J. Creighton, M. Papa and A. Wiseman

2006-2011 *National Science Foundation, Physics at the Information Frontier, PHY-0600953*
Amount: $7,750,000 (approx 50% will remain at UWM)

Investigators: P. R. Brady, J. D. Creighton, L. S. Finn, E. Katsavounidis, A. Lazzarini

2004-2008 *National Science Foundation, Major Research Instrumentation, PHY-0421416*
Amount: $1,444,972
Investigators: B. Allen, P. Brady, J. Creighton, S. Koranda and A. Wiseman

2003-2008 *National Science Foundation, Information Technology Research, PHY-0326281*
Via subcontract from MIT, Amount: $847,000
Investigators: B. Allen, P. Brady, J. Creighton, S. Koranda and A. Wiseman

2002-2007 *National Science Foundation, Gravity Program, PHY-0200852*
Amount: $2,300,000
Investigators: B. Allen, P. Brady, J. Creighton, S. Koranda and A. Wiseman

2001-2006 *National Science Foundation, Information Technology Research*
Via subcontract from U. Florida, Amount: $932,000
Investigators: B. Allen, P. Brady, J. Creighton, S. Koranda and A. Wiseman

2000-2003 *National Science Foundation, Major Research Instrumentation, PHY-0079638*
Amount: $415,326
Investigators: B. Allen, P. Brady and A. Wiseman

1999-2002 *National Science Foundation, Gravity Program, PHY-9970821*
Amount: $168,908
Investigators: P. Brady

1999 *Forbairt international collaboration grant, Republic of Ireland*
Investigators: P. Brady and A. Ottewill

1996 *Forbairt international collaboration grant, Republic of Ireland*
Investigators: P. Brady and A. Ottewill

Professional:

2022-(2027) Guest Investigator, Australian Centre of Excellence for Gravitational Wave Discovery (OzGrav)

2020-(2023) Advisory Board Member, Kavli Institute for Theoretical Physics

2019-(2023) Spokesperson of LIGO Scientific Collaboration (LSC)

2017- Member of Board, Zwicky Transient Facility

2016-2017 Member of LIGO Scientific Collaboration (LSC) Re-organization Committee

2010-2015 Member of NANOGrav PIRE Advisory Board

2010-2011 Member of LSC Committee on next LIGO Director

2009- Member, LSC Executive Committee

2009-2012 Vice-Chair/Chair-Elect/Chair APS Topical Group on Gravitation

2015- Chair, LSC Computing and Software Committee

2004-2015 Chair, LSC Data Analysis Software Working Group

1999- Reviewer for Austrian Science Fund, Israeli Science Foundation, NASA and National Science Foundation.

1993- Referee for Physical Review Letters, Physical Review D, Classical and Quantum Gravity, and Monthly Notices of the Royal Astronomical Society.

2005 External examiner on PhD by Jakob Hansen, University of Copenhagen

2005 Member of LIGO Scientific Collaboration (LSC) Committee on next LIGO Director

2004-2005	Member of LSC MOU review committee
2004-2006	Member, LSC Executive Committee
2002-2005	Secretary/Treasurer APS Topical Group on Gravitation
2002	*Task Group for an NSF/NASA Computational Effort in Gravitational Wave Science*. Committee member.
2000-2008	Co-chair of the LSC Inspiral Analysis Group `http://www.lsc-group.phys.uwm.edu/ligovirgo/cbc`

Graduate students:

2021-	Amanda Baylor, University of Wisconsin-Milwaukee. Project Title: *Early-warnings of binary mergers based on gravitational-wave data*
2020-	Vinaya Valsan, University of Wisconsin-Milwaukee. Project Title: *TBD* Co-advisor: Jolien Creighton
2017-	Ignacio Magana-Hernandez, University of Wisconsin-Milwaukee. Project Title: *Cosmology with gravitational-wave observations*
2016-2022	Brandon Joseph Piotrzkowski, University of Wisconsin-Milwaukee. Project Title: *Searching for gravitational-wave associations with high-energy astrophysical transients*
2016-2020	Deep Chatterjee, University of Wisconsin-Milwaukee. Project Title: *Harbingers of Exotic Transients: The Electromagnetic Follow-up of Gravitational-wave Transients & Transient Rates*
2018-	Caitlin Rose, University of Wisconsin-Milwaukee. Project Title: *Rapid parameter estimation for compact binary mergers in gravitational-wave data*
2016-	Chaoran Zhang, University of Wisconsin-Milwaukee. Project Title: *TBD* Co-advisor: David Kaplan
2013-2018	Debnandini Mukherjee, University of Wisconsin-Milwaukee. Project Title: *Search for compact object coalescences and understanding their significance using data from advanced ligo*
2013-2018	Hong Qi, University of Wisconsin-Milwaukee. Project Title: *Studies in gravitational-wave astronomy and tests of general relativity*
2011-2016	Alexander Urban, University of Wisconsin-Milwaukee. Project Title: *Electromagnetic counterparts to gravitational-wave transients*
2006-2010	Nick Fotopoulos (joint with J. Creighton), University of Wisconsin-Milwaukee. Project Title: *Search for compact binary coalescence in association with short GRBs with LIGO/Virgo S5/VSR1 data*
2005-2010	Rahul Biswas, University of Wisconsin-Milwaukee Project Title: *Search for Gravitational Waves in LIGO-Virgo Science Data*
2005-2007	Wei Yan, University of Wisconsin-Milwaukee (MS May 2007)
2002-2006	Saikat Ray-Majumder, University of Wisconsin-Milwaukee (PhD: May 2006) Project Title: *Searching for gravitational wave bursts*
1999-2004	Duncan Brown, University of Wisconsin-Milwaukee. (PhD: Sept 2004)

Project Title: *Search for gravitational waves from MACHO binaries*.

Undergraduate research projects:

2014-2015	Mark Poe, University of Wisconsin-Milwaukee *Monitoring GRBs for LIGO*
2006	Sean Sweetnam, Carleton College *Effects of spin on detection of coalescing compact binaries with LIGO*
2003	Denny Mackin, University of Wisconsin-Milwaukee *Verification of excess-power search code using hardware injections*
2002	Mark Williamsen, University of Wisconsin-Milwaukee. (with Jolien Creighton) *Median estimators for noise spectra in gravitational-wave detection*
2001	Jon D. Stone, University of Wisconsin-Milwaukee *Gravitational wave demonstrations*
1998-1999	David Farnham, California Institute of Technology *Evolving the Riemann tensor via first-order hyperbolic equations*
1996-1997	Mike J Cai, California Institute of Technology *Critical phenomena in the gravitational collapse of perfect fluids*

Postdocs advised:

2022-	Brandon Piotrzkowski, University of Wisconsin-Milwaukee
2022-	Siddharth Mohite, University of Wisconsin-Milwaukee
2021-2022	Surabhi Sachdev, University of Wisconsin-Milwaukee Now: Assistant Professor, Georgia Institute of Technology
2020-2022	Soichiro Morisaki, University of Wisconsin-Milwaukee Now: Assistant Professor, University of Tokyo
2020-	Daniel Wysocki, University of Wisconsin-Milwaukee
2018-2020	Duncan Meacher, University of Wisconsin-Milwaukee Now: Scientist II, University of Wisconsin-Milwaukee
2017-2019	Sinead Walsh, University of Wisconsin-Milwaukee Now: Data Scientist, Scanalytics Inc.
2016-2019	Shasvath Kapadia, University of Wisconsin-Milwaukee Now: Postdoc, International Center for Theoretical Physics
2016-2019	Shaon Ghosh, University of Wisconsin-Milwaukee Now: Assistant Professor, Montclair State University
2013-2016	Laleh Sadeghian, University of Wisconsin-Milwaukee Now: Data Scientist at Facebook
2012-2016	Sarah Caudill, University of Wisconsin-Milwaukee Now: Research Scientist at Nikhef, Netherlands
2011-2015	Chris Pankow, University of Wisconsin-Milwaukee Now: Data Scientist III, OpenX
2013-2015	Laura Nutall, University of Wisconsin-Milwaukee Now: Senior Lecturer, University of Portsmouth
2010-2014	Richard O'Shaugnessy, University of Wisconsin-Milwaukee Now: Assistant Professor, Rochester Institute of Technology

2007-2011	Jessica Clayton, University of Wisconsin-Milwaukee
2008-2010	Larry Price, University of Wisconsin-Milwaukee
	Now: Postdoc Caltech
2007-2010	Ruslan Vaulin, University of Wisconsin-Milwaukee
	Now: Data Scientist, sqrrl
2004-2007	Kipp Cannon, University of Wisconsin-Milwaukee
	Now: Associate Professor, University of Tokyo
2003-2006	Stephen Fairhurst, University of Wisconsin-Milwaukee
	Now: Lecturer and Royal Society Fellow, Cardiff University
2003-2006	Eirini Messaratiki, University of Wisconsin-Milwaukee
	Now: Editor at Institute of Physics Publishing
2000-2001	Zeferino Andrade, University of Wisconsin-Milwaukee
	Transfered into computer science
1999-2001	Teviet Creighton, University of Wisconsin-Milwaukee
	Now: Asst. Professor at University of Texas at Brownsville

Courses Taught:

2022	188-103-203: Astronomy 103
	188-103-203: Astronomy 103
2021	188-103-203: Astronomy 103
	188-103-203: Astronomy 103
2020	188-103-203: Astronomy 103
	188-103-203: Astronomy 103
2018	188-103-402: Astronomy 103
	188-400-001: Astronomy 400
	Sabbatical Spring 2018
2017	188-103-402: Astronomy 103
	Sabbatical Fall 2017
2016	188-103-402: Astronomy 103
	188-103-402: Astronomy 103
2015	188-103-402: Astronomy 103
	188-103-402: Astronomy 103
	745-717: General Relativity
2014	745-717: General Relativity
2013	188-103-401: Astronomy 103
	188-103-402: Astronomy 103
	745-411: Mechanics
2012	745-717: General Relativity
2011	188-103-401: Astronomy 103
2009	188-103-401: Astronomy 103
	745-817: Gravitation and Cosmology
2007	745-717: General Relativity
2006	745-711: Classical Dynamics
	188-103-402: Astronomy 103

2005	745-711: Classical Dynamics
	745-732: Quantum Field Theory II
2004	745-731: Quantum Field Theory I
2003	188-103-401: Astronomy 103
	188-103-402: Astronomy 103
2002	745-441: Quantum Physics
	188-103-401: Astronomy 103
	188-103-402: Astronomy 103
2001	745-441: Quantum Physics
	188-103-402: Astronomy 103
2000	745-717: General Relativity
	745-517: Special Relativity
1999	745-817: Advanced Topics in Gravitation

Reading courses and special instruction:

2002	Charles Vento. Advanced Reading in Modern Astronomy
2001	Duncan Brown. Reading course in Advanced General Relativity

Service:

1999-pres	Committee member for approximately 20 doctoral students in Physics.
2019-2020	Astronomy and Planetarium Committee, Faculty Fellowships and Prizes Committee, Workload Policy and Implementation Committee
2018-2019	Astronomy and Planetarium Committee, Workload Policy and Implementation Committee, Astrophysics Faculty Search Committee (chair), Graduate Academic Committee
2017-2018	Workload Policy and Implementation Committee
2016-2017	Astronomy and Planetarium Committee (chair), Graduate Academic Committee, Undergraduate Committee, Workload Policy Committee
2015-2016	Astronomy and Planetarium Committee (chair), Graduate Academic Committee, Undergraduate Committee
2014-2015	Astronomy and Planetarium Committee (chair) , Graduate Academic Committee, Undergraduate Committee
2012-2014	Astronomy and Planetarium Committee, Graduate Academic Committee, Graduate Recruitment Committee
2011-2012	Planetarium Committee, Graduate Recruitment Committee, Salary Committee
2009-2010	Astronomy Committee, Planetarium Committee, Long Range planning
2008-2009	Astronomy Committee, Planetarium Committee, Long Range planning, Webmaster
2007-2008	Astronomy Committee, Planetarium Committee, Webmaster
2006-2007	Astronomy Committee, Open House Committee, Webmaster
2004-2006	Academic Graduate Committee, Salary Committee, Webmaster
2003-2004	Academic Graduate Committee, Astronomy Committee, Webmaster
2002-2003	Academic Graduate Committee, Astronomy Committee, Webmaster
2001-2002	Academic Graduate Committee, Astronomy Committee, Graduate Financial Committee, Faculty Search Committee
2000-2001	Academic Graduate Committee (Chair), Astronomy Committee,

	Long Range Planning Committee
1999-2000	Academic Graduate Committee, Astronomy Committee

Talks and conferences

45. Invited talk. "LIGO and Future Gravitational-wave Detectors" at 4th Exploring the Dark Side of the Universe, La Reunion. November 2022.

44. Invited talk. "Ground-based Gravitational-wave Facilities" at International Astronomy Union General Assembly, Bhusan, Korea. August 2022.

43. Invited talk. "Gravitational-wave Astronomy in the 2020s" at High Precission Gravitational Waves, KITP, University of California at Santa Barbara. April 2022.

42. Invited talk. "Gravitational-wave Astronomy with LIGO-Virgo-KAGRA" at Yukawa International Seminar 2022a, (online). February 2022.

41. Invited talk. "Key Results from O3" at Annual Retreat of OzGrav, Lorne, Australia. November 2019.

40. Invited talk. "Gravitational-wave Observations of Binary Black Holes" at Gravitational Waves Outside the Box, Perimeter Institute for Theoretical Physics. October 2019.

39. Invited lecturer. "Cosmic Collisions: Learning about black holes and neutron stars using gravitational waves" at University of Tokyo RESCEU Summer School, Kakunodate Onsen Kayokan, Japan. August 2019.

38. Invited talk. "When neutron stars collide" at the 27th workshop on General Relativity and Gravitation, Hiroshima, Japan. November 2017.

37. Invited talk. "Gravitational-wave astronomy: the first two years" at Lights, Sound Action, Perimeter Institute for Theoretical Physics, Waterloo, ON. November 2017.

36. Invited talk. "Dawn of Gravitational-wave Astronomy" at PhysCon, San Francisco, CA. November 2016.

35. Invited talk. "Gravitational-wave Astronomy" at TEXAS Symposium, Sao Paulo Brazil. December 2012.

34. Invited talk. "Challenges in Gravitational-wave Astronomy" at Physics and Astrophysics at the Extreme, Nikhef, Amsterdam, Netherlands. August 2017.

33. Invited talk. "Internal Structure of Black Holes" at Numerical relativity beyond astrophysics, International Center for Mathematical Sciences. July 2011.

32. Invited talk. "LIGO Global Computing in the Next Decade" at 2nd ASPERA Workshop on Computing and Astroparticle Physics. May 2011.

31. Invited talk. "Gravitational-wave astronomy" at the 19th International Conference on General Relativity. July 2010

30. Invited talk. "Gravitational-wave astronomy" at 8th LISA International Symposium. June 2010.

29. Invited panelist. Capra Meeting on Radiation Reaction, Perimeter Institute, Ontario, Canada. June 2010

28. Invited lecturer. "Gravitational-wave astronomy and detection" at *International School on Numerical Relativity and Gravitation*, Seoul, Korea. December 2009.

27. Invited Chair/Speaker "Gravitational-wave astronomy" at *11th Japanese-American Frontiers of Science Meeting*, Shonan Village Center, Japan. December 2007.

26. Invited lecturer. "Gravitational-wave astronomy and detection" at *TIARA Winter School*, Taiwan. January 2007.

25. Invited talk. "Gravitational-wave astronomy" at *Black Holes VI*, White Point, Nova Scotia, Canada. May 2007.

24. Invited talk. "LIGO Observational Results" at *2nd Workshop On TeV Particle Astrophysics*, Madison, Wisconsin. August 2006.

23. Invited talk. "LIGO Observational Results I" at *April APS Meeting*, Dallas. April 2006.

22. Chair. Session on "Earth-based Gravitational-wave Detectors" at *April APS Meeting*, Tampa, Florida. April 2005

21. Invited talk. "How will theory, observation and instrument development interact within the field?" at Gravitational Wave Astronomy: Imagining the Future, Center for Gravitational-Wave Physics, Penn State University. October 2004

20. Invited talk. "LSC Data Analysis" at LISA Symposium, Noordwijk. July 2004

19. Invited talk. "The LSC Data Grid" at Condor Conference, Madison. April 2004.

18. Invited talk. "Searching for gravitational waves with LIGO" at workshop on *Gravitational Interaction of Compact Objects*, KITP, University of California-Santa Barbara. May 2003.

17. Invited talk. "Analysis of data from earth-based interferometric gravitational wave detectors" at *Workshop on Astrophysical Sources of Gravitational Waves*, University of Maryland. April 2003.

16. Contributed talk. "Upper Limits on binary inspiral signals using LIGO S1 Data" at *April APS Meeting*, Philadelphia. April 2003.

15. Invited talk. "Analysis of data from interferometric gravitational-wave detectors" at *SPIE conference on High Frequency Gravitational-wave Detection*, Hawaii. August 2002.

14. Invited lecturer. "Gravitational collapse and spacetime singularities" at *X Brazilian School on Cosmology and Gravitation*, Mangaratiba, Brazil. August 2002

13. Invited talk. "Detecting gravitational-waves from precessing neutron stars" *April APS Meeting*, Albuquerque. April 2002.

12. Chair. Parallel session on "Sources of Gravitational Waves." *GR16*, Durban, South Africa. July 2001.

11. Invited talk. "Gravitational-wave data analysis with LIGO" *American Physical Society Meeting*, Washington DC. April 2001.

10. Invited talk. "Gravitational-wave data analysis in the LIGO Scientific Collaboration" at *Workshop on Astrophysical Sources of Gravitational Waves*, Drexel University. October 2000.

9. Invited talk. "R-modes: prospects for detection" at *R-modes in Relativistic Stars*, ITP, University of California-Santa Barbara. August 2000.

8. Contributed talk. "Point splitting regularization of radiation reaction forces" at *Third Capra Meeting on Radiation Reaction*, California Institute of Technology. June 2000.

7. Invited talk. "The internal structure of black holes" at *Gravitational Waves and Black Holes*, Yukawa Institute, Kyoto Japan. July 1999.

6. Invited talk. "Sounds of the Universe: what might we hear via gravitational waves?" at *The Dark Ages:* $5 < z < 1000$, CIAR Cosmology Program, Newfoundland, Canada. May 1998.

5. Chair of parallel session on "Critical phenomena in gravitational collapse" at *Marcel Grossman 8*, Jerusalem, Israel. June 1997.

4. Contributed talk. "Detection of periodic sources of gravitational waves with LIGO" at *Gravitational Waves*, Aspen, Colorado. January 1997.

3. Contributed talk. "Algorithms for the detection of continuous wave sources with LIGO" at *Gravitational Waves*, Aspen, Colorado. January 1996.

2. Invited talk. "Singularities in self-similar scalar field collapse" at *Workshop on Gravitational Collapse*, IUCAA, June, India. December 1995.

1. Invited talk. "Singularities in self-similar scalar field collapse" at *Mathematical Relativity*, Schrodinger Institute, Vienna, Austria. June 1995.

Conference organization

12. Scientific Organizing Committee, *Gravitational-wave Physics and Astronomy Workshop*, Milwaukee. January 2011.

11. Scientific Organizing Committee. *Numerical relativity meets data analysis*, KITP, Santa Barbara. January 2008.

10. Scientific Organizing Committee. *12th Gravitational Wave Data Analysis Workshop*, Massachusetts Institute of Technology. December 2007.

9. Scientific Organizing Committee. *11th Gravitational Wave Data Analysis Workshop*, Potsdam, Germany. December 2006.

8. Scientific Organizing Committee. *Numerical Relativity meets Data Analysis*, Massachusetts Institute of Technology. November 2006.

7. Scientific Organizing Committee. *8th Gravitational Wave Data Analysis Workshop*, University of Wisconsin-Milwaukee. December 2003.

6. Scientific Organizing Committee. *Gravitational Wave Phenomenology Workshop*, Center for Gravitational Wave Phenomenology, Penn State University. November 2003.

5. Scientific Organizing Committee. *Workshop on Radiation Reaction*, Center for Gravitational Wave Phenomenology, Penn State University. November 2002.

4. Scientific Organizing Committee. *Gravitational Wave Phenomenology Workshop*, Center for Gravitational Wave Phenomenology, Penn State University. November 2001.

3. Scientific Organizing Committee. *Gravitational Wave Data Analysis Workshop*, Louisiana State University. December 2000.

2. Organizer. *Black Holes and Gravitational Waves*, Dublin, Ireland. Co-organizer with Adrian C Ottewill. August 1999.

1. Organizer. *Workshop on Binary Black Hole Coalescence*, Caltech. Co-organizer with Scott A Hughes. July 1996.

Seminars and Colloquia

31. Colloquium: *Gravitational-wave astronomy in the 2020s*. University of Antioquia, Medellin, Colombia (August 2022)

30. Colloquium: *Gravitational-wave astronomy in the 2020s*. European Gravitational Observatory, Cascina, Italy (May 2022).

29. Colloquium: *Cosmic Collisions*. Institute for Advanced Studies, Princeton, NJ (October 2019).

28. Colloquium: *Cosmic Collisions*. International Center for Theoretical Sciences, Bangalore, India (July 2019).

27. Colloquium: *Cosmic Collisions*. Department of Astronomy, University of California, Berkeley, CA (October 2019).

26. Colloquium: *Neutron star mergers - from nuclear physics to cosmology*. Tennessee Tech University, Cookeville, TN (October 2018).

25. Colloquium: *A spectacular collision: Observations of a binary neutron star merger*. IUCAA, Pune, India (February 2018).

24. Seminar: *Multimessenger observations of a binary neutron star merger*. Department of Physics and Astronomy, University of Waterloo, ON (November 2017).

23. Colloquium: *The Dawn of Gravitational-wave Astronomy*. Department of Physics, University of Alberta, Edmonton, AB (Decmber 2016).

22. Colloquium: *Observation of Black Holes from a Binary Black Hole Merger*. Department of Physics, Purdue University, IN (April 2016).

21. Seminar: *Learning about Neutron Stars and Black Holes via Gravitational-wave Observations*. Department of Physics, University of Illinois Urbana-Champaign, IL (April 2014).

20. Colloquium: *Gravitational-wave Astronomy on the cusp*. Department of Physics, University of Illinois Urbana-Champaign, IL (November 2014).

19. Colloquium: *Gravitational-wave Astronomy on the cusp*. Yukawa Institute of Theoretical Physics, Kyoto University, Japan (January 2014).

18. Colloquium: *Gravitational-wave Astronomy*. Perimeter Institute, Ontario, Canada (October 2009).

17. Colloquium: *Ripples in Spacetime: Searching for gravitational waves with LIGO*. Dept of Physics and Astronomy, Florida State University (March 2005).

16. Seminar: *Searching for gravitational waves with LIGO*. Dept of Physics and Astronomy, University of Florida - Gainesville (October 2004).

15. Colloquium: *Ripples in spacetime: searching for gravitational waves with LIGO*. Dept. of Physics and Astronomy, Ohio University (October 2003).

14. Seminar: *Searching for gravitational waves with LIGO*. Dept of Physics, University of Wisconsin - Madison (September 2003).

13. Seminar: *Searching for gravitational waves with LIGO*. Canadian Institute for Theoretical Astrophysics, University of Toronto (April 2003).

12. Seminar: *Black hole binaries in the co-rotating frame: techniques in a toy problem*. Theoretical Astrophysics, California Institute of Technology (July 2002).

11. Colloquium: *Ripples in spacetime: Gravitational-wave astronomy and what it might tell us*. Dept. of Physics and Astronomy, University of North Carolina (October 2001).

10. Colloquium: *Cosmic censorship: what's the problem?*. Physics Department, Drexel University (May 2000).

9. Seminar: *Gravitational-wave astronomy: a new challenge for theorists*. Dept. of Physics and Astronomy, University of Illinois (May 2000).

8. Seminar: *Gravitational-wave astronomy: a new challenge for theorists*. Dept of Physics, University of Chicago (April 2000).

7. Seminar: *Gravitational-wave astronomy: a new challenge for theorists*. Center for Gravitational Physics, Pennsylvania State University (April 2000).

6. Colloquium: *Ripples in spacetime: gravitational wave astronomy and what it might tell us*. Dept of Physics, University of Alberta (September 1998).

5. Seminar: *Cosmic censorship: what's the problem?*. Dept of Physics, University of Wisconsin-Milwaukee (April 1998).

4. Colloquium: *Cosmic Censorship: what's the problem?*. Dept of Physics, University of Montana at Bozeman (March 1998).

3. Seminar: *Numerical relativity in a co-rotating frame*. Dept of Applied Mathematics, Southampton University (December 1997).

2. Seminar: *Cosmic censorship and critical phenomena*. Dept of Physics, University of California-Santa Barbara (December 1997).

1. Seminar: *Gravitational waves from binary black holes*. Binary Black Hole Grand Challenge meeting, Los Alamos (October 1997).

Public Lectures, outreach, etc:

14. Public lecture. *Whispers from the Universe. Waves, Holes and Stars* at Parque Explora, Medellin, Colombia (Aug 2022).

13. Public lecture. *Cosmic Collisions* at Vigyam Samagan, Bangalore, India (July 2019).

12. Public lecture. *Whispers from the Universe. Waves, Holes and Stars* at Science Bag, University of Wisconsin, Milwaukee, WI (Apr 2019).

11. Osher Distinguished Speaker. *The discovery of gravitational waves* at University of Wisconsin, Milwaukee, WI (October 2018).

10. Public lecture. *When black holes collide. Gravitational waves and the discovery of the century* at Center for Gravitation, Cosmology and Astrophysics, Milwaukee, WI (October 2017).

9. Public lecture. *Measuring Gravity Waves with LIGO* at UW Space Place, Madison, WI (November 2016). https://to.pbs.org/2sJ6njK

8. Public lecture. *Whispers from the Universe* at TEDx UWMilwaukee, WI (September 2014). https://youtu.be/oxpJGyn_HJU

7. Public lecture. *History of black holes*, Astrobreak, UWM Planetarium (April 2013).

6. Public lecture. *Ripples in spacetime: Einstein's outstanding prediction*, Edgewood College, Madison, Wisconsin (Mar 2005).

5. Interview and quoted in *Dear Albert: You Were Right* by Steven Potter, Shepherd Express (2 January 2003).

4. Interview and quoted in *Tuning in to Einstein* by Charles W. Petit, US News and World Report (14 January 2002).

3. Public lecture. *Ripples in spacetime: Gravitational-wave astronomy and what it might tell us*, to Milwaukee Astronomical Society (October 2000).

2. Public lecture. *Ripples in spacetime: Gravitational-wave astronomy and what it might tell us*, to Physics Club of Milwaukee (May 2000).

1. Educational posters. Development of educational poster set describing gravitational waves. These posters were displayed at the *American Physical Society* centennial meeting. They are also displayed in the Physics Dept. at UWM, at the LIGO laboratories, and at a number of other universities around the country (1999).

Publications:

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