

Duncan Alexander Brown

DATE OF BIRTH 25 JANUARY 1976
CITIZENSHIP UNITED STATES

DEPARTMENT OF PHYSICS
SYRACUSE UNIVERSITY
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APPOINTMENTS

2022– Vice President for Research
Syracuse University

2015– Charles Brightman Endowed Professor of Physics
Department of Physics,
Syracuse University

2012 Visiting Associate in Physics,
California Institute of Technology

2011–2015 Associate Professor
Department of Physics,
Syracuse University

2007–2011 Assistant Professor
Department of Physics,
Syracuse University

2004–2007 Postdoctoral Scholar in Physics
LIGO Laboratory and Theoretical Astrophysics Including Relativity (TAPIR),
California Institute of Technology

2002 Visitor in Physics
California Institute of Technology

2000 Visitor in Physics
California Institute of Technology

2000–2004 Research Assistant
University of Wisconsin–Milwaukee

EDUCATION

1999–2004 Doctor of Philosophy in Physics
University of Wisconsin–Milwaukee

1994–1999 Master of Mathematics with First Class Honors
University of Newcastle Upon Tyne

HONORS AND AWARDS

2022	Syracuse University Physics Department Teaching Award
2017	PEARC17 Best Software and Data Paper
2016	Syracuse University Physics Department Teaching Award
2016	Gruber Cosmology Prize (shared with the LIGO Scientific Collaboration)
2016	Breakthrough Prize in Fundamental Physics (shared with the LIGO Scientific Collaboration)
2015	Research Corporation for Science Advancement Sialog Fellow
2014	Fellow of the American Physical Society
2013	Syracuse University Physics Department Teaching Award
2011	Syracuse University Physics Department Teaching Award
2010	Research Corporation Cottrell Scholar
2010	Syracuse University Meredith Teaching Recognition Award
2010	Syracuse University Physics Department Teaching Award
2009	Kavli Frontiers Fellow
2008	National Science Foundation CAREER Award
2003	UWM Dissertator Fellowship
2002	UWM Physics Graduate Student Trust Fund Award
2002–2003	UWM Chancellor’s Graduate Student Fellowship
2002	UWM Graduate School Fellowship
2001	UWM Papastamatiou Scholarship
1999	Institute of Mathematics and Its Applications Prize
1997	University of Newcastle Stroud Book Prize

CONFERENCE AND WORKSHOP ORGANIZATION

2021	Gravitational Wave Physics and Astronomy Workshop, Scientific Organizing Committee
2019	Kavli Institute for Theoretical Physics Program: The New Era of Gravitational-Wave Physics and Astrophysics (Co-organizer)

2018	Gravitational Wave Physics and Astronomy Workshop, Co-Chair of Scientific Organizing Committee
2017	Kavli Institute for Theoretical Physics Rapid Response Program: Astrophysics from a Neutron Star Merger (Co-organizer)
2017	Kavli Institute for Theoretical Physics High-School Teacher’s Conference: How to catch a gravitational wave: Exploring the universe with LIGO (Organizer)
2016	Kavli Institute for Theoretical Physics Rapid Response Program: Astrophysics from LIGOs First Black Holes (Co-organizer)
2016	Chair of 2016 Gordon Research Conference: Physics Research and Education (Relativity and Gravitation: Contemporary Research and Teaching of Einstein’s Physics).
2014	Vice-chair of 2014 Gordon Research Conference: Physics Research and Education (The Complex Intersection of Biology and Physics).
2012	Kavli Institute for Theoretical Physics Three Month Program: Chirps, Mergers and Explosions (Co-organizer)
2012	Gravitational Wave Physics and Astronomy Workshop, Scientific Organizing Committee
2011	Amaldi 9 and NRDA: Scientific Organizing Committee
2008	Numerical Relativity and Data Analysis 2008: Chair, Scientific Organizing Committee

RESEARCH GRANTS

Principal Investigator	Collaborative Research: A Data Challenge for the Next Generation of Ground-Based Gravitational Wave Detectors National Science Foundation Award PHY-2207264 September 1, 2022–August 31, 2026: \$210,000
Senior Investigator	The CSUF-led Partnership for Inclusion of Underrepresented Groups in Gravitational-wave Astronomy National Science Foundation Award AST-2219109 August 1, 2022–July 31, 2027: \$1,180,214
Co-Principal Investigator	Nuclear Physics from Multi-Messenger Mergers (NP3M) National Science Foundation Award PHY-2116686 August 1, 2021–July 31, 2026: \$3,250,000

Principal Investigator	Collaborative Research: EAGER: Advancing Reproducibility in Multi-Messenger Astrophysics National Science Foundation Award PHY-2041878 September 1, 2020–August 31, 2021: \$99,999
Co-Principal Investigator	CC* Compute: A High Performance GPU Cluster at Syracuse University National Science Foundation Award OAC-2018822 September 1, 2020–August 31, 2022: \$393,128
Principal Investigator	WoU-MMA: Exploring the Universe with Gravitational Waves National Science Foundation Award PHY-2011655 July 1, 2020–June 30, 2023: \$360,000
Principal Investigator	Collaborative Research: EAGER: Exploring and Advancing the State of the Art in Robust Science in Gravitational Wave Physics National Science Foundation Award OAC-1823378 May 1, 2018–April 30, 2020: \$75,000
Co-Principal Investigator	Collaborative Research: The Next Generation of Gravitational-Wave Detectors National Science Foundation Award PHY-1836702 August 15, 2018–July 31, 2021: \$240,006
Principal Investigator	Gravitational Wave Physics and Astronomy with Advanced LIGO National Science Foundation Award PHY-1707954 July 1, 2017–June 30, 2020: \$360,000
Co-Principal Investigator	CICI: CE: SciTokens: Capability-Based Secure Access to Remote Scientific Data National Science Foundation Award OAC-1738962 July 1, 2017–June 30, 2019: \$1,000,000
Co-Principal Investigator	The CSUF-Syracuse partnership for inclusion of underrepresented groups in gravitational-wave astronomy National Science Foundation Award AST-1559694 August 1, 2016–July 31, 2021: \$937,368
Co-Principal Investigator	CC*DNI Engineer: Leading the way for research computing at Syracuse University and beyond National Science Foundation Award ACI-1541396 September 1, 2015–August 31, 2017: \$396,098
Principal Investigator	CIF21 DIBBs: Domain-aware management of heterogeneous workflows: Active data management for gravitational-wave science workflows National Science Foundation Award ACI-1443047 October 1, 2014–September 30, 2019: \$1,078,712

Principal Investigator	Computational Optimization for High-Latency Compact Binary Searches in Advanced LIGO Sub-contract from California Institute of Technology August 1, 2014–July 31, 2015: \$335,264
Principal Investigator	Gravitational Wave Astrophysics With Advanced LIGO National Science Foundation Award PHY-1404395 July 1, 2014–June 30, 2017: \$360,000
Principal Investigator	Collaborative Research: Theoretical-Computational Network for Extracting Astrophysics and Fundamental Physics from Multi-Messenger Observations of Compact Objects National Science Foundation Award AST-1333142 September 1, 2013–August 31, 2016: \$385,442
Co-Principal Investigator	CC-NIE Networking Infrastructure: Enhancing the OrangeGrid: Upgrading the Syracuse Campus Network to Enable High Throughput Research Computing National Science Foundation Award PHY-1341006 September 1, 2013–August 31, 2015: \$498,452
Co-Principal Investigator	Data Handling and Analysis Infrastructure for Advanced LIGO and Beyond National Science Foundation Award PHY-1104371 December 15, 2011–December 15, 2016: \$9,000,000 Sub-contract to Syracuse University: \$2,250,000
Principal Investigator	Exploring the universe with gravitational waves: a new frontier in 21st-century astronomy and astrophysics Research Corporation for Science Advancement Cottrell Scholar Award November 15, 2010–November 14, 2013: \$75,000
Principal Investigator	Major Research Instrumentation: Development of a High-Throughput Computing Cluster for Gravitational-Wave Data Analysis and High-Energy Physics National Science Foundation Award PHY-1040231 September 1, 2010–August 31, 2013: \$807,619
Principal Investigator	CAREER: An Integrated Research and Education Proposal in Gravitational Wave Astronomy and Astrophysics National Science Foundation Award PHY-0847611 April 1, 2009–March 31, 2014: \$550,000
Co-Principal Investigator	Enabling Gravitational-Wave Astronomy on the LIGO Data Grid National Science Foundation Sub-award K087577 (Prime award PHY-0600953) January 28, 2008–October 31, 2011: \$819,814
Principal Investigator	Student Travel for Numerical Relativity and Data Analysis 2008 Conference National Science Foundation Award PHY-0838740 August 30, 2008–July 31, 2009: \$5,000

Principal Investigator Syracuse University Gravitational-Wave Group Computing Cluster
Sun Microsystems Academic Excellence Grant EDUD-7824-080104-US
August 31, 2007: \$20,574

INVITED TALKS AND PRESENTATIONS

October 2021 Data Analysis and Access: Discussion Lead
Dawn VI Meeting on Next Generation Observatories

June 2021 Cosmic Explorer
Physics Department Seminar, Texas Tech University

April 2021 Data Analysis with Cosmic Explorer
Data Analysis in Astrophysics, American Physical Society Meeting

March 2021 Nuclear Physics from Neutron Star Mergers
Physics Colloquium, University of Houston, Houston, TX

December 2020 What Have we Learned about Binary Neutron Stars Since the Discovery of GW170817?
Theoretical Physics Colloquium, Arizona State University, Tempe, AZ

March 2020 What Have we Learned about Binary Neutron Stars Since the Discovery of GW170817?
Department of Astronomy Colloquium, University of Arizona, Tucson, AZ

December 2019 Gravitational Waves and Neutron Stars?
Institute for Nuclear Theory, University of Washington, Seattle, WA

September 2019 What have we learned about binary neutron stars since the discovery of GW170817?
Astronomy Colloquium, Cornell University, Ithaca, NY

August 2019 What have we learned about binary neutron stars since the discovery of GW170817?
Niels Bohr Institute, Copenhagen, Denmark

June 2019 Towards Third-Generation Gravitational-Wave Detectors,
Kavli Institute for Theoretical Physics, Goleta, CA

June 2019 The Cyberinfrastructure of Gravitational-Wave Astronomy and the March Towards Open Data,
University of Southern California Information Sciences Institute, Marina Del Ray, CA

June 2019 Open Gravitational Wave Data,
Open Digital Infrastructure in Astrophysics, UC Santa Barbara, Goleta, CA

June 2019 What's New With Gravitational Waves?
Astronomy On Tap, Santa Barbara, CA

- May 2019 What have we learned about binary neutron stars since the discovery of GW170817?
Physics Research Conference, California Institute of Technology, Pasadena, CA
- May 2019 A Merger in Space: Black Holes and Neutron Stars,
Goleta Public Library, Goleta, CA
- April 2019 Probing Neutron Stars using Gravitational Waves,
American Physical Society Meeting, Denver, CO
- March 2019 Gravitational-wave astronomy on the Open Science Grid,
Open Science Grid All-Hands Meeting, Jefferson National Laboratory, Newport News, VA
- March 2019 A Researcher Perspective on Federated Identity Management and Wait—
Also the Network (OSG and My Use of It),
Internet2 Global Summit, Washington DC.
- December 2018 Lessons Learned from Analysis of Open LIGO/Virgo Data,
Gravitational Wave Physics and Astronomy Workshop, University of Maryland,
College Park, MD
- October 2018 GW170817: A neutron star merger observed in gravitational and electro-
magnetic waves,
Astronomy Colloquium, UC Berkeley, CA.
- October 2018 Supernovae in Third-Generation Gravitational-wave Detectors,
GWIC Conference, Potsdam, Germany
- July 2018 Discovery of the binary neutron star merger GW170817 in gravitational and
electromagnetic waves,
30th IUPAP Conference on Computational Physics, Davis, CA
- May 2018 Discovery of the binary neutron star merger GW170817 in gravitational and
electromagnetic waves,
Columbia University, New York, NY
- May 2018 A Merger In Space: Black Holes and Neutron Stars,
2018 World Science Fair, New York, NY
- May 2018 GW170817: Discovery of a Binary Neutron Star Merger,
Sackler Conference, Harvard University, Harvard, MA
- April 2018 Gravitational Wave Astrophysics During the Next LIGO Observing Run,
Princeton University, Princeton, NJ
- December 2017 JINA Panel Discussion: The impact of the LIGO/VIRGO Neutron Star Merger
Discovery on Research in Nuclear Science and Nuclear Astrophysics,
Joint Institute for Nuclear Astrophysics
- October 2017 GW170817: The Detection of a Binary Neutron Star Merger in Gravitational
and Electromagnetic waves,
Columbia University Physics Colloquium, New York, NY

October 2017 GW170817: The Detection of a Binary Neutron Star Merger in Gravitational and Electromagnetic waves,
Ohio University Physics Colloquium, Athens, OH

June 2017 Calibration, Data Quality and Vetos: Now and the upcoming challenges,
Gravitational Wave Physics and Astronomy workshop, Annecy, France

August 2016 Syracuse University Undergraduate Student Convocation,
Syracuse, NY

May 2017 The Observation of Gravitational Waves from a Binary Black Hole Mergers
by LIGO,
Waves 2017, University of Minnesota, Minneapolis, MN

April 2017 The Observation of Gravitational Waves from a Binary Black Hole Mergers
by LIGO,
Society of Quantitative Analysis, New York, NY

March 2017 International Gravitational-Wave Projects
Phenomena, Physics, and Puzzles Of Massive Stars and their Explosive Outcomes,
Kavli Institute for Theoretical Physics, Santa Barbara, CA

June 2016 The Observation of Gravitational Waves from Binary Black Hole Mergers
by LIGO,
Kavli Institute for Theoretical Physics, Santa Barbara, CA

June 2016 The Observation of Gravitational Waves from a Binary Black Hole Merger
by LIGO,
Princeton Plasma Physics Laboratory, Princeton, NJ

June 2016 Gravitational-Wave Astronomy,
ICNT and JINA-CEE program "The r-process nucleosynthesis: connecting FRIB
with the cosmos," East Lansing, MI

May 2016 Exploring the Physics of Neutron Stars with Gravitational-Wave Astron-
omy,
Neutron Stars in the Multi-Messenger Era: Prospects and Challenges, Ohio Uni-
versity, Athens, OH

May 2016 The Observation of Gravitational Waves from a Binary Black Hole Merger
by LIGO,
The first observation of a binary black hole merger: Status and future prospects,
Albert Einstein Institute, Hannover, Germany

April 2016 Exploring the Physics of Compact Objects with Gravitational-Wave Astron-
omy,
Division of Nuclear Physics and Astrophysics, American Physical Society April
Meeting, Salt Lake City, UT

April 2016 Beyond LIGO's first detection of gravitational waves,
GR100++ at Princeton Center for Theoretical Science, Princeton University, Prince-
ton, NJ

March 2016 The Observation of Gravitational Waves from a Binary Black Hole Merger, Physics and Astronomy Colloquium, Johns Hopkins University, Baltimore, MD

March 2016 The Observation of Gravitational Waves from a Binary Black Hole Merger, Kavli Foundation Special Symposium on Physics Frontiers, APS March Meeting, Baltimore, MD

July 2015 Lectures on Detecting Coalescing Binaries, Caltech Gravitational Wave Astrophysics School, Pasadena, CA

February 2015 Gravitational Waves: A New Frontier in 21st Century Astrophysics, Physics Department Colloquium, Carnegie Mellon University, Pittsburgh, MA

November 2014 Gravitational Waves: A New Frontier in 21st Century Astrophysics, Physics Department Colloquium, Cornell University, NY

October 2014 Gravitational Waves: A New Frontier in 21st Century Astrophysics, Giant Magellan Telescope Community Science Meeting, Smithsonian Intitution, Washington DC

September 2014 Gravitational Waves: A New Frontier in 21st Century Astrophysics, Physics Department Colloquium, Massachusetts Institute of Technology, MA

June 2014 Gravitational-Wave Astronomy with Advanced LIGO, Royal Society Gamma Ray Burst Workshop, Chichley Hall, UK

November 2013 Measuring the parameters of compact binary coalescence with aLIGO, TCAN Workshop, California Institute of Technology, CA

April 2013 The New Astronomy of LIGO: Exploring the Gravitational-wave Sky, Physics Department Colloquium, University of Florida, FL

February 2013 Challenges in searching for compact binary coalescence with aLIGO, Seminar, Caltech-JPL Association for Gravitational-wave Research, California Institute of Technology, CA

December 2012 Gravitational Waves: A New Frontier in 21st Century Astrophysics, Enrio Fermi Institute Colloquium, University of Chicago, IL

November 2012 The New Astronomy of LIGO, Physics Department Colloquium, University of Washington, WA

November 2012 Challenges in Advanced LIGO's Binary Black Hole Search, Numerical Relativity Seminar, California Institute of Technology, CA

October 2012 Chirps, Mergers and Explosions, LIGO Seminar, California Institute of Technology, CA

August 2012 The New Astronomy of LIGO: Exploring the Gravitational Wave Sky, Director's Blackboard Talk, Kavli Institute for Theoretical Physics, CA

July 2012 The New Astronomy of LIGO, NASA Education Ambassador Training, Sonoma State University, CA

June 2012 The New Astronomy of LIGO,
2012 Physics Research and Education Gordon Research Conference, Colby College,
ME

May 2012 Commissioning and Observing Scenarios for LIGO and Virgo,
LIGO Astronomy and Astrophysics Advisory Panel, Caltech, Pasadena, CA

May 2012 Connecting the Electromagnetic and Gravitational Wave Skies in the Era of
Advanced LIGO
Princeton Center for Theoretical Science, Princeton, NJ

March 2012 The New Astronomy of LIGO,
Liverpool Public Library, Liverpool, NY

August 2011 Invited Lecturer,
2011 International School on Numerical Relativity and Gravitational Waves, SPCTP,
Pohang, Korea

July 2011 The New Astronomy of LIGO,
University of Nebraska–Lincoln, Lincoln, NE

July 2011 Improving the Laboratory Experience for Non-Science Majors,
Cottrell Scholar’s Conference, Research Corporation for Science Advancement, Tuc-
son, AZ

May 2011 Gravitational Wave Astronomy with LIGO and Virgo,
Advances and Challenges in Computational Relativity, Brown University, RI

April 2011 LIGO’s Interactions with the Numerical Relativity Community,
LIGO Astronomy and Astrophysics Advisory Panel, Caltech, CA

November 2010 Gravitational Wave Astronomy with LIGO and Virgo,
Physics Colloquium, Cal State Fullerton, CA

October 2010 Searching for Coalescing Compact Binaries using LIGO and Virgo,
Gravitational Waves 2010, University of Minnesota, MN

September 2010 Gravitational Wave Astronomy with LIGO and Virgo,
Physics Colloquium, Syracuse University, NY

July 2010 Searching for Compact Binaries using LIGO and Virgo,
19th International Conference on General Relativity and Gravitation, Mexico City,
Mexico

March 2010 Gravitational Wave Astronomy with LIGO and Virgo,
Department of Astronomy and Astrophysics Colloquium, University of Toronto

January 2010 LIGO’s Need for Cyberinfrastructure,
National Science Foundation Office of Cyberinfrastructure, Washington D.C.

October 2009 Gravitational Wave Astronomy with LIGO,
Challenges in Computational Astrophysics, Princeton Center for Theoretical Sci-
ence

July 2009 The LIGO Scientific Collaboration's Interaction with the Numerical Relativity Community,
LIGO Program Advisory Committee, Massachusetts Institute of Technology

April 2009 Towards Gravitational Wave Astronomy with LIGO,
California Institute of Technology

April 2009 Towards Gravitational Wave Astronomy with LIGO,
Rochester Institute of Technology

February 2009 Searches for Gravitational Waves from Compact Binary Coalescence,
Center for Gravitational Wave Physics, The Pennsylvania State University

January 2009 Results of the Numerical INjection Analysis (NINJA) Project,
13th Gravitational Wave Data Analysis Workshop, San Juan, Puerto Rico

April 2008 Searches for Gravitational Waves from the Inspiral of Binary
Neutron Stars and Black Holes,
American Physical Society Meeting, St. Louis, MO

January 2008 Director's Blackboard Seminar,
Kavli Institute For Theoretical Physics, Santa Barbara, CA

November 2007 Physics Colloquium,
Rochester Institute of Technology

November 2007 LIGO Inspiral Analysis and Computing: Where are we now and where do
we want to be in 6 months?,
Workshop on Computing Workflows, University of Wisconsin-Milwaukee

March 2007 Physics Colloquium,
University of Wisconsin-Milwaukee

March 2007 Physics Colloquium,
Syracuse University

November 2006 Searching for Gravitational Waves From Compact Binaries,
Numerical Relativity and Data Analysis Conference 2006, Massachusetts Institute
of Technology

October 2006 LIGO/LSC Analysis Software:Case Study of Inspiral Analysis,
National Science Foundation LIGO Annual Review, LIGO Hanford Observatory

July 2006 LIGO's Search for Inspiralling Binaries,
LIGO Program Advisory Committee, California Institute of Technology

May 2006 LIGO, Gravitational Waves and Einstein at Home,
Public Lecture at Riverside Community College, CA

Aug 2006 The Search for Gravitational Waves with LIGO,
6th Rencontres du Vietnam

Apr 2006 Searching for Gravitational Waves with LIGO,
Physics Colloquium, Whittier College, CA

November 2005	Running the Inspiral Analysis on non-LSC Grid Computing Resources, National Science Foundation LIGO Annual Review, California Institute of Technology
September 2004	Searching for Gravitational Radiation from Binary Inspirals with LIGO, Physics Colloquium, University of Wisconsin–Milwaukee
Feb 2004	Searching for Primordial Black Hole Binaries with LIGO, California Institute of Technology
Jan 2004	Searching for Gravitational Waves from Binary Inspiral with LIGO: Current Status and Future Plans, Louisiana State University

STUDENTS AND POSTDOCS SUPERVISED

Postdoctoral Researchers	Ryan Fisher (Faculty, Christopher Newport University), Ian Harry (Faculty, University of Portsmouth), Eliu Huerta (Research Professor, UIUC), Benjamin Lackey (Data Scientist in Industry), Andrew Lundgren (Faculty, University of Portsmouth), Ping Wei (Engineer, Nokia-Siemens), Laura Nuttall (Faculty, University of Portsmouth); Jedidah Isler (Faculty, Dartmouth University).
Graduate Students	Collin Capano (Ph.D. 2012), Larne Pekowsky (Ph.D. 2012), Kayleigh Ayn Bohémier (MLIS 2012, co-supervised with Jian Qin), Prayush Kumar (Ph.D. 2014), Alex Nitz (Ph.D. 2015), Christopher Biber (Ph.D. 2017), Swetha Bhagwat (Ph.D. 2019), Steven Reyes (Ph.D. 2019), Soumi De (Ph.D. 2020), Daniel Finstad (Ph.D. 2022), Amber Lenon (Ph.D. 2021), Erick Leon (M.S. 2022), Chaitanya Afle (expected 2023), Ananya Bandopadhyay (expected 2027).
Undergraduate Students	Almir Alemic (BS 2014), Erika Cowan (BS 2015), Carter Gustin (Current), Amber Lenon (BS 2016), Jaysin Lord (BS 2016), Danielle Meisner (BS 2019), Patrick Miles (BS 2018), Seth Rothschild (BS 2012), Simonisa Selmon (BS 2018), Matthew Turner (BS 2008), Samantha Usman (BS 2016), Laurel White (BS 2021), Peter Zimmerman (BS 2009)

SERVICE

2021-2022	Co-Chair, Laboratory Safety Committee, Syracuse University
2022	Chair, Vice President for Research Search Committee, Syracuse University
2021–2022	Chair, Senate Research Committee, Syracuse University
2021	Syracuse University Working Group to Review Cluster Hire Initiative

2020–2021	Syracuse University Physics Graduate Program Director
2021	Chair, Syracuse University Physics Faculty Search in Gravitational Wave Astronomy
2021	Syracuse University Provost Search Committee
2017–	Member of the Board of Trustees of Internet2
2019–	Grant Reviewer for United Kingdom STFC
2018–	Grant Reviewer for Belgian Government
2018–	Grant Reviewer for Netherlands Organisation for Scientific Research
2016–	Grant Reviewer for Welsh Government, United Kingdom
2016–	Syracuse University Research Computing Advisory Committee
2017–2019	Faculty Representative to the Syracuse University Board of Trustees
2015–2017	Member at Large, Executive Committee of the Topical Group in Gravity, American Physical Society
2015–2017	Member at Large, Executive Committee of the Division of Computational Physics, American Physical Society
2014–2019	NYSENET Scientific Advisory Board
2013–2017	Syracuse University Physics Graduate Program Director
2012–2015	Chair, LIGO Scientific Collaboration and Virgo Collaboration Compact Binary Coalescence Search Group
2010–	Grant Reviewer for National Science Foundation
2009–2011	Chair, Physics Department Web Committee, Syracuse University
2009	Undergraduate Research Day Committee, Syracuse University
2008–2011	LIGO Scientific Collaboration Conference Committee
2008	Chair, Undergraduate Research Day Committee, Syracuse University
2007–	NASA Grant Reviewer
2007–2008	Syracuse University Freshman Adviser
2007–2018	LIGO Scientific Collaboration Computing Committee
2007–	Referee for Physical Review D, Physical Review Letters, Classical and Quantum Gravity, JCAP, Astrophysical Journal Letters, Astrophysical Journal
2004–2007	Compact Binary Search Review Committee, LIGO Scientific Collaboration

COURSES TAUGHT

PHY524	Electrodynamics I, Fall 2021, Fall 2022
PHY424	Electromagnetics I, Fall 2016, Fall 2017, Fall 2018
PHY216	General Physics II for Honors and Majors Students, Spring 2017, Spring 2018
PHY317	Stellar and Interstellar Astrophysics, Fall 2016, Spring 2021
PHY607	Computational Physics, Spring 2012
AST101	Introduction to Astronomy, Fall 2008, Fall 2009, Fall 2010, Fall 2011, Fall 2013, Fall 2014
PHY308	Science and Computers II, Spring 2009
PHY221	General Physics I, Fall 2007

PROFESSIONAL DEVELOPMENT

April 2010	NASA Center for Astronomy Education: Improving the Introductory Astronomy Survey Course for Non-Science Majors through Active Learning. 16 hour workshop
October 2008	NASA Center for Astronomy Education: Improving the Introductory Astronomy Survey Course for Non-Science Majors through Active Learning. 16 hour workshop

PUBLICATIONS

Publications (including LIGO Scientific Collaboration papers to which Brown has made a significant contribution)

Patel Ria, Roachell Brandan, Caino Lores Silvina, Ketrion Ross, Leonard Jacob, Tan Nigel, Brown Duncan, Deelman Ewa, and Taufer Michela, *Reproducibility of the First Image of a Black Hole in the Galaxy M87 from the Event Horizon Telescope (EHT) Collaboration*, arXiv 2205.10267 (2022), Submitted to Computing in Science and Engineering

- Ballmer Stefan W et al., *Snowmass2021 Cosmic Frontier White Paper: Future Gravitational-Wave Detector Facilities*, arXiv 2203.08228 (2022)
- Engel Kristi et al., *Advancing the Landscape of Multimessenger Science in the Next Decade*, arXiv 2203.10074 (2022)
- Chakrabarti Sukanya et al., *Snowmass2021 Cosmic Frontier White Paper: Observational Facilities to Study Dark Matter*, arXiv 2203.06200 (2022)
- Shoemaker D H, Ballmer Stefan, Barsuglia Matteo, Berger E, Berti Emanuele, Brown Duncan A, et al., *Next Generation Observatories – Report from the Dawn VI Workshop; October 5-7 2021*, arXiv 2112.12718 (2021)
- Evans Matthew et al., *A Horizon Study for Cosmic Explorer: Science, Observatories, and Community*, arXiv 2109.09882 (2021)
- Lenon Amber K, Brown Duncan A, and Nitz Alexander H, *Eccentric binary neutron star search prospects for Cosmic Explorer*, Phys Rev D **104** 063011 (2021)
- Brown Duncan A, Vahi Karan, Taufer Michela, Welch Von, and Deelman Ewa, *Reproducing GW150914: The First Observation of Gravitational Waves From a Binary Black Hole Merger*, Computing in Science Engineering **23** 73–82 (2021)
- Ryan P Fisher, Gary Hemming, Marie Anne Bizouard, Duncan A Brown, Peter F Couvares, Florent Robinet, and Didier Verkindt, *DQSEGDB: A time-interval database for storing gravitational wave observatory metadata*, SoftwareX **14** 100677 (2021)
- Afle Chaitanya and Brown Duncan A, *Inferring physical properties of stellar collapse by third-generation gravitational-wave detectors*, Phys Rev D **103** 023005 (2021)
- Finstad Daniel and Brown Duncan A, *Fast Parameter Estimation of Binary Mergers for Multimessenger Followup*, Astrophys J Lett **905** L9 (2020)
- Lenon Amber K, Nitz Alexander H, and Brown Duncan A, *Measuring the eccentricity of GW170817 and GW190425*, Mon Not Roy Astron Soc **497** 1966–1971 (2020)
- Bhagwat Swetha, Cabero Miriam, Capano Collin D, Krishnan Badri, and Brown Duncan A, *Detectability of the subdominant mode in a binary black hole ringdown*, Phys Rev D **102** 024023 (2020)
- Reyes Steven and Brown Duncan A, *Constraints on Nonlinear Tides due to pg Mode Coupling from the Neutron Star Merger GW170817*, Astrophys J **894** 41 (2020)
- Belczynski K, Klencki J, Meynet G, Fryer C L, Brown D A, et al., *The evolutionary roads leading to low effective spins, high black hole masses, and O1/O2 rates of LIGO/Virgo binary black holes*, Astron Astrophys **636** A104 (2020)
- Capano Collin D, Tews Ingo, Brown Stephanie M, Margalit Ben, De Soumi, Kumar Sumit, Brown Duncan A, Krishnan Badri, and Reddy Sanjay, *GW170817: Stringent constraints on neutron-star radii from multimessenger observations and nuclear theory*, Nature Astronomy (2020), 10.1038/s41550-020-1014-6

Nitz Alexander H, Lenon Amber, and Brown Duncan A, *Search for Eccentric Binary Neutron Star Mergers in the first and second observing runs of Advanced LIGO*, *The Astrophysical Journal* **890** 1 (2019)

Reitze David, Adhikari Rana X, Ballmer Stefan, Barish Barry, Barsotti Lisa, Billingsley GarriLynn, Brown Duncan A, Chen Yanbei, Coyne Dennis, Eisenstein Robert, Evans Matthew, Fritschel Peter, Hall Evan D, Lazzarini Albert, Lovelace Geoffrey, Read Jocelyn, Sathyaprakash B S, Shoemaker David, Smith Joshua, Torrie Calum, Vitale Salvatore, Weiss Rainer, Wipf Christopher, and Zucker Michael, *Cosmic Explorer: The U.S. Contribution to Gravitational-Wave Astronomy beyond LIGO*, *Bulletin of the American Astronomical Society* **51** 35 (2019)

Srivastava Varun, Ballmer Stefan, Brown Duncan A, Afle Chaitanya, Burrows Adam, Radice David, and Vartanyan David, *Detection Prospects of Core-Collapse Supernovae with Supernova-Optimized Third-Generation Gravitational-wave Detectors*, *Phys Rev* **D100** 043026 (2019)

Vahi Karan, Rynge Mats, Papadimitriou George, Brown Duncan A, Mayani Rajiv, da Silva Rafael Ferreira, Deelman Ewa, Mandal Anirban, Lyons Eric, and Zink Michael, *Custom Execution Environments with Containers in Pegasus-enabled Scientific Workflows*, in 2019 15th International Conference on eScience (eScience), pages 281–290 (2019)

Chapp Dylan, Rorabaugh Danny, Brown Duncan A, Deelman Ewa, Vahi Karan, Welch Von, and Taufer Michela, *Applicability study of the PRIMAD model to LIGO gravitational wave search workflows*, in P-RECS '19: Proceedings of the 2nd International Workshop on Practical Reproducible Evaluation of Computer Systems, New York, NY, USA (2019), ACM

De Soumi, Biwer Christopher M, Capano Collin D, Nitz Alexander H, and Brown Duncan A, *Posterior samples of the parameters of binary black holes from Advanced LIGO, Virgo's second observing run*, *Nature Scientific Data* **6** 81 (2019)

Nitz Alexander H, Capano Collin, Nielsen Alex B, Reyes Steven, White Rebecca, Brown Duncan A, and Krishnan Badri, *1-OGC: The first open gravitational-wave catalog of binary mergers from analysis of public Advanced LIGO data*, *Astrophys J* **872** 195 (2019)

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