Robert R. Coyne
Curriculum Vitae

University of Rhode Island
Department of Physics
East Hall, 2 Lippitt Road
Kingston, RI 02881

+1 (401) 874-4928 (office)
robcoyne@uri.edu

Education

2015 **The George Washington University** Ph.D.
Department of Physics

Thesis: LIGO gamma-ray burst searches in the aLIGO Era: An Optimized Burst Database and a New Method for Detecting Intermediate-Duration GWs
Advisor: Alessandra Corsi

2011 **University of Massachusetts Dartmouth** M.S.
Department of Physics

2007 **University of Massachusetts Dartmouth** B.S.
Department of Physics

Professional Appointments

2021 **University of Rhode Island** Senior Lecturer†
Department of Physics

2017 **University of Rhode Island** Lecturer
Department of Physics

2015 **Texas Tech University** Postdoctoral Research Associate
Department of Physics

†Graduate Faculty Status as of Spring 2022

Selected Publications

2021 R Abbott, TD Abbott, S Abraham, F Acernese, K Ackley, C Adams, and ... Search for gravitational waves associated with gamma-ray bursts detected by fermi and swift during the ligo–virgo run o3a. *The Astrophysical Journal*, 915(2):86–86, 2021r. 6 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=12441868784099235420

2019 E Sowell, A Corsi, and R Coyne. Multiwaveform cross-correlation search method for intermediate-duration gravitational waves from gamma-ray bursts. *Physical Review D*, 100(12):124041–124041, 2019. 5 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=12761213357606118 11

2019 BP Abbott, R Abbott, TD Abbott, S Abraham, F Acernese, K Ackley, and ... Search for gravitational-wave signals associated with gamma-ray bursts during the second observing run of advanced ligo

and advanced virgo. *The Astrophysical Journal*, 886(1):75–75, 2019p. 28 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=13418660646208394937

2017 BP Abbott, R Abbott, TD Abbott, MR Abernathy, F Acernese, K Ackley, and ... Search for gravitational waves associated with gamma-ray bursts during the first advanced ligo observing run and implications for the origin of grb 150906b. *The Astrophysical Journal*, 841(2):89–89, 2017f. 75 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=17515722276440475426

2017 BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, and ... Gw170817: observation of gravitational waves from a binary neutron star inspiral. *Physical review letters*, 119 (16):161101–161101, 2017l. 6262 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8911961040576610247

2017 BP Abbott, R Abbott, TD Abbott, F Acernese, K Ackley, C Adams, T Adams, and ... Gravitational waves and gamma-rays from a binary neutron star merger: Gw170817 and grb 170817a. *The Astrophysical Journal Letters 848 (2), L*, 13, 2017m. 2013 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=14630332123708971139

2016 R Coyne, A Corsi, and BJ Owen. Cross-correlation method for intermediate-duration gravitational wave searches associated with gamma-ray bursts. *Physical Review D*, 93(10):104059–104059, 2016a. 24 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=2878817952661242669

2016 BP Abbott, R Abbott, TD Abbott, MR Abernathy, F Acernese, K Ackley, and ... Observation of gravitational waves from a binary black hole merger. *Physical review letters*, 116(6):61102–61102, 2016a. 11038 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=9463658171864037215

2014 J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Methods and results of a search for gravitational waves associated with gamma-ray bursts using the geo 600, ligo, and virgo detectors. *Physical Review D*, 89(12):122004–122004, 2014h. 42 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=11519242687363301839

2014 J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Search for gravitational waves associated with -ray bursts detected by the interplanetary network. *Physical review letters*, 113(1):11102–11102, 2014f. 53 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6263831132555969597

2013 GA MacLachlan, A Shenoy, E Sonbas, R Coyne, KS Dhuga, and ... The hurst exponent of fermi gamma-ray bursts. *Monthly Notices of the Royal Astronomical Society*, 436(4):2907–2914, 2013. 14 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=855313862468924539

Awards and Honors

2017 Einstein Medal (as a member of the LSC)

2017 Princess of Asturias Award for Technical and Scientific Research (as a member of the LSC)

2017 Bruno Rossi Prize (as a member of the LSC)

2016 National Space Club Huntsville Distinguished Science Award (as a member of the LSC)

2016 The Gruber Cosmology Prize (as a member of the LSC)

2016 The Special Breakthrough Prize in Fundamental Physics (as a member of the LSC)

2013 LIGO Scientific Collaboration Best Analysis/Theory Poster

2012 AAPT Outstanding Teaching Assistant Award

Conferences, colloquia and seminars

Invited talks

2018 Gravitational Wave Astronomy with CoCoA: A data analysis technique for the post-detection era, APS New England Section 2018 November Meeting

2018 Gravitational Waves: The Frontier of Astronomy, SIMULIA — Dassault Systèmes, Johnston Rhode Island, July

2017 Making Gravitational Wave CoCoA: A cross-correlation search for gravitational waves from the universe's most relativistic explosions, University of Rhode Island Physics Colloquium 2016-2017 Series, March 31

2016 Gravitational Waves: "Soundtrack" to the Cosmic Cinema, keynote presentation at 2016 Computational Physics Symposium held at UMass Dartmouth, April

2015 A cross-correlation search for intermediate duration gravitational wave transients: Advanced techniques for the advanced detector era, colloquium given for University of Massachusetts, Dartmouth Department of Physics, April

Facilitated workshops

2022 How to give great presentations: a scientist's guide to effective communication, 240th Meeting of the American Astronomical Society, June 11

Contributed talks

2018 Search for Gravitational Waves Associated with Gamma-Ray Bursts During the Second Advanced LIGO Observing Run, on behalf of the LSC, 2018 APS April Meeting

2016 Multi-messenger observations of gamma-ray bursts in the magnetar scenario, 8th Huntsville GRB Symposium, October

2016 Multi-messenger observations of gamma-ray bursts in the magnetar scenario, accepted talk for the subsequently canceled COSPAR 41

2015 A cross-correlation search for intermediate duration gravitational waves from gamma-ray burst magnetars, 2015 APS April Meeting

2014 Gravitational wave emission from long GRB central engines, the Second Annual DC-MD-VA Summer Astrophysics meeting, July

Poster Presentations

2016 A cross-correlation approach for detecting intermediate duration gravitational waves, poster for GWPAW, June2016

2013 No "051103-like" gamma-ray burst left behind: towards a literature informed database for LIGO-Virgo gamma-ray burst searches, award winning poster at the 2013 March LVC meeting

Campus or departmental talks

2021 Gravitational waves: results and outlook from the first half-decade of discovery, University of Rhode Island Physics Colloquium Spring 2021 Series, March 26

2020 Nobel prize in Physics 2020, Part II: Penrose's Process, University of Rhode Island Physics Colloquium Fall 2020 Series, November 20

2017 From Nobel to Neutron Stars: how gravitational waves are shaping 21st century astronomy, University of Rhode Island Physics Colloquium 2017-2018 Series, November 10

2016 Making Gravitational Wave CoCoA: A cross-correlation approach for detecting intermediate duration gravitational waves, seminar for the Texas Tech University Department of Mathematics Seminar in Applied Mathematics series, April

Research

Faculty at University of Rhode Island

2021 CAREERS Cyberteam project approval (including student funding) for project entitled "An optimized search algorithm for gravitational waves from post-merger remnants"

2019-Present Continued development of Cross-Correlation Algorithm (COCOA) for use in intermediate-duration gravitational wave transient searches, see [Sowell et al., 2019].

2018-2020 Co-Investigator for Chandra proposal #20610056, entitled, "Geometric Distances to the Magellanic Clouds and GRB Prompt X-ray Emission study Via Dust Scattering"

2018-Present Development of novel high performance computing platforms for undergraduate-centric learning in the "HPC Age." Uses cluster of 88 Playstation 3 systems networked together for highly parallelized computing projects.

2018 Established informal "University of Rhode Island Gravitational Wave Research Group" (URI-GW) program to encourage undergraduate research involving gravitational waves. 8 founding members.

2017-Present Council member for URI membership in the LIGO Scientific Collaboration (LSC). Research interests include data analysis and database support for gravitational wave searches from gamma-ray bursts in association with the LSC, including the development of a literature-informed database of gamma-ray bursts from multiple EM observatories and long-duration GW transient searches.

Postdoctoral Research Associate (Texas Tech University)

2015-2017 Intermediate duration Gravitational Wave transient searches in association with the LSC, including development of a new data analysis pipeline

2015 Co-Investigator for VLA proposal VLA/15B-288: Probing the magnetar scenario for gamma-ray bursts with the VLA

2015-2017 Data analysis and database support for gravitational wave searches from gamma-ray bursts in association with the LSC, including the development of a literature-informed database of gamma-ray bursts from multiple EM observatories

Graduate Research Assistant (Ph.D. at The George Washington University)

2013-2015 LIGO gamma-ray burst searches in the aLIGO Era: An Optimized Burst Database and a New Method for Detecting Intermediate-Duration GWs in association with the LSC

2012-2013 Gamma-ray burst variability studies related to GRB prompt emission and classification

2012 Student performance in active learning environments using the "SCALE-UP" (Student-Centered Active Learning Environment Undergraduate Programs) format

2012-2013 Variability analysis of Cataclysmic Variable V1504 Cygni using Kepler data

Graduate Research Assistant (M.S. at the University of Massachusetts Dartmouth)

2009 Playstation 3 High Performance Computing cluster applications for gravitational wave emission from intermediate-mass black hole-inspirals

2007-2009 Benchmarking Playstation 3 High Performance Computing cluster for nuclear physics applications

Professional Memberships

International Astronomical Union member since 2021
American Astronomical Society member since 2020
LIGO Scientific Collaboration member since 2013
American Association of Physics Teachers member from 2012-2013 and since 2016
American Physical Society member since 2009

Teaching Experience

University of Rhode Island

Year	Fall	Spring	Summer
AY 2022-2023	Elem. Phys. II Lab and Rec Admin	Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys.	
AY 2021-2022	Elem. Phys. II Lab and Rec Admin.	Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys. General Relativity DSP Capstone	Elem. Phys. II Elem. Phys. III
AY 2020-2021	Gen. Phys. I Elem. Phys. II	Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys. Independent Study	Elem. Phys. II Elem. Phys. III Elem. Modern Phys.
AY 2019-2020	Gen. Phys. I Elem. Phys. II Lab and Rec Admin. Independent Study	Gen. Phys. II Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys. General Relativity	Elem. Phys. II Elem. Phys. III
AY 2018-2019	Gen. Phys. I Elem. Phys. II Lab and Rec Admin.	Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys.	Elem. Phys. II
AY 2017-2018	Gen. Phys. I Elem. Phys. II Lab and Rec Admin.	Elem. Phys. II Lab and Rec Admin. Elem. Modern Phys.	

General Relativity Upper division (advanced undergraduate or graduate) course covering special relativity, tensor calculus, derivation of the Einstein field equations, specific solutions thereof (i.e. Schwarzschild, Kerr), and gravitational waves. Small enrollment. First offering: Spring 2020.

DSP Capstone The purpose of the Interdisciplinary Data Enabled Research/Capstone Project is for the

students to apply theoretical knowledge acquired during the Data Science Certificate program to a project involving actual data in a realistic setting. A Team-based capstone data project will provide real-world experiences of data-driven research for students.

Elementary Modern Physics Survey of foundational modern physics concepts covering introductory special relativity, quantum mechanics, and an introduction to practical concepts in elementary field theory and the standard model. Small to moderate enrollment. Active Learning (Clickers). First offering: Spring 2018.

Elementary Physics II Calculus-based introductory course covering electricity and magnetism, leading to Maxwell's equations. Electric fields and Gauss' law; magnetic fields and Ampere's law. Capacitance and inductance, DC and AC circuits. Electromagnetic waves. Large enrollment. Active Learning (Clickers), Metacognition (Wrappers, Value Statements). First offering: Fall 2017.

Elementary Physics III Calculus-based introductory course covering thermodynamics, geometric optics, electromagnetic waves. Small enrollment. Metacognition (Wrappers, Value Statements). First offering: Summer 2020.

General Physics I Algebra-based introductory course covering mechanics, heat, and sound. Small to moderate enrollment. Active Learning (Clickers), Metacognition (Wrappers, Value Statements). First offering: Fall 2017.

General Physics II Algebra-based introductory course covering optics, electricity, magnetism, and modern physics. Small enrollment. Active Learning (Clickers), Metacognition (Wrappers, Value Statements). First offering: Spring 2020.

Independent Studies General relativity (Spring 2021, 1 student); Gamma-ray bursts (Fall 2019, 1 student); General relativity (Fall 2019, 1 student)

Texas Tech University

General Physics II Algebra-based introductory course for non-physics majors. Covers electric fields, magnetic fields, simple circuits, electromagnetic waves, geometric optics, and selected topics from modern physics. $\approx$ 30 students. Year offered: 2017.

The George Washington University

Introduction to Astronomy I and II Promoted to co-instructor of Astronomy introductory course for non-majors in the SCALE-UP format, took on expanded role beyond typical responsibilities of a GTA. Year offered: 2011.

Intermediate Undergraduate Lab Directed an upper-division laboratory course designed for junior- and senior-level undergraduates in physics. Involved maintaining the lab equipment, developing new laboratory exercises, and supervising classroom activities in the lab for experiments that covered a wide array of physics sub-fields. Years offered: 2010-2011.

The George Washington University (Teaching Assistant)

2012 General (algebra based) physics course in the SCALE-UP format, involved in physics education research on active learning environments and their effect on student performance. Active Learning (SCALE-UP). Years offered: 2012

2009-2012 Astronomy Introductory courses (covering both Stars/Planets/Life in the Universe as well as the Origins of the Cosmos) in both traditional lecture format as well as in the "SCALE-UP" format. Courses taught in the traditional format involved supervising laboratory activities, whereas SCALE-UP classes involved supervising students in an active learning environment, overseeing laboratory activities, and delivering lectures. Moderate enrollment. Active Learning (SCALE-UP). Years offered: 2009-2012.

University of Massachusetts, Dartmouth (Teaching Assistant)

2008 Served as a graduate teaching assistant for introductory physics courses for non-majors in a primarily standard lecture format.

2007-2009 Served as both an undergraduate and graduate teaching assistant as a senior undergraduate in the first two semesters of Physics for Applied Science and Engineering taught in the IMPULSE format. This involved working alongside both a graduate teaching assistant as well as a faculty instructor in an active role, overseeing lectures, assisting with in-class work, and occasionally delivering lectures.

Mentoring

Students marked with a † have received funding for their projects. Students marked with a ‡ are RI Space Grant Graduate Fellows.

ICERM Postdoctoral Mentor Caroline Mallary, Brown (2020–2021)
ICERM Graduate Mentor Rafia Sarwar, Institute of Space Technology (2020)
Graduate Research Advisor Aubrey Laity, URI (2022–Present)
Graduate Research Advisor Matt Maini, URI (2022–Present)‡
Graduate Research Advisor Christopher Nadeau, URI (2021–2022)
Graduate Research Advisor Michael St. Pierre, URI (2019–Present)‡
Graduate Research Co-Advisor Eric Sowell, TTU (2016–2017)
Undergraduate Research Advisor Ivan Abreu Paniagua, URI (2022–Present)†
Undergraduate Research Advisor Nathan Desplaines, URI (2021–Present)†
Undergraduate Research Advisor Steve Sullivan, URI (2021–Present)†
Undergraduate Research Advisor Matthew Brady, URI (2021–Present)†
Undergraduate Research Advisor Daniel Schwartz, URI (2021)
Undergraduate Research Advisor Matt Maini, URI (2021–2022)
Undergraduate Research Advisor Julianna Martinez, URI (2021)
Undergraduate Research Advisor Julia Karlberg, URI (2020–Present)†
Undergraduate Research Advisor Alexander Doyne-Ditmas, URI (2020–Present)†
Undergraduate Research Advisor Tyco Mera Evans, URI/Brown (2020)
Undergraduate Research Advisor Christopher Nadeau, URI (2019–2021)
Undergraduate Research Advisor Simon Trcka, URI (2019–2020)
Undergraduate Research Advisor Justin Allen, URI (2018–2019)
Undergraduate Research Advisor Daniel Bosquet, URI (2018–2018)
Undergraduate Research Advisor Michael St. Pierre, URI (2018–2019)
Undergraduate Research Advisor Samantha Carbone, URI (2017–2018)
Undergraduate Research Co-Advisor Chance Norris, URI (2015–2016)
Summer Research Co-Advisor Matteo Di Giovanni, TTU (2015)
Summer Research Co-Advisor Igor Andreoni, GWU (2013)
Clark Scholar (High School) Co-Advisor Nishit Mishra, TTU (2016)
High School Research Advisor Aiden Saulnier, URI (2019)
High School Research Advisor Paarth Tandon, URI (2019)
High School Research Advisor Alexander Pela, URI (2018)

Student Funding

2022 Rhode Island Space Grant Fellowship in the total of $26138, awarded to Matt Maini

2022 Rhode Island Space Grant Fellowship in the total of $10638, awarded to Michael St. Pierre

2022 Arts and Sciences Fellowship in the total of $2600, awarded to Ivan Abreu Paniagua, for the project entitled "No GRB Left Behind: Improving LIGO GRB Searches for O4 and Beyond."

2021 $(URI)^2$ Undergraduate Research Grant in the total of $1400, awarded to Matthew Brady, Nathan Desplaines, and Steve Sullivan, for the project entitled "The Enhanced Physics Education Project"

2021 $(URI)^2$ Undergraduate Research Grant in the total of $1200, awarded to Alexander Doyne-Ditmas and Julia Karlberg, for the project entitled "Gamma-Ray Burst Gravitational Wave Candidate Database"

2021 CAREERS Cyberteam Student Facilitator Trainee grant in the total of $4500, awarded to Christopher Nadeau, for the project entitled "An optimized search algorithm for gravitational waves from post-merger remnants"

Service to Profession

APS Executive Committee member for New England Section of APS (2022-Present)

U^2GRC Co-founder (with G. Khanna, S. Field) of the UMass-URI Gravity Research Consortium (2021)

CAREERS Cyberteam research mentor (2021-Present)

Workshop Chair The Institute for Computational and Experimental Research in Mathematics (ICERM), Advances in Computational Relativity Workshop (2020)

Referee Journal referee for APS Journals, Physical Review X (2017-Present)

Referee Journal referee for APS Journals, Physical Review D (2016-Present)

LVC Gamma-ray burst Archivist for the LIGO Scientific Collaboration (2015-Present)

LVC Data analysis advocate for gamma-ray bursts during LIGO's second observing run (2016-2017)

LVC Data analysis advocate for gamma-ray bursts during LIGO's first observing run (2015-2016)

Local Organizing Committee (member) The 2nd Annual DC-MD-VA Astrophysics Summer Meeting (2014)

Local Organizing Committee (member) LIGO-Virgo-Fermi collaborations international workshop on Gamma-ray Bursts and Gravitational Waves (2013)

Service to University

Referee $(URI)^2$ student grant applications (2022)

Thesis Committee Sean D. Scro, MS in Mechanical Engineering (2020)

Member Physics Advisory Board, University of Massachusetts Dartmouth

Participant University of Rhode Island Welcome Days representative from physics department (annual)

Participant University of Rhode Island Open House representative from physics department (annual)

Convener Astronomy group meetings at Texas Tech University (2016)

Convener Astronomy group meetings at George Washington University (2013-2016)

Outreach and Public Relations

2021 WPRI 12 interview for "Q&A: URI astronomer weighs in on recently-released UFO report," recorded June 28th and aired on June 29th (`https://youtu.be/AMb81_eWQok`).

2021 Astronomy Outreach solar observing event in support of the URI Natural Sciences Living Learning Community, April 26th.

2020 Astronomy Outreach event in support of the Science Olympiad, Mount Saint Charles Academy, Virtual, October 21st.

2020 John Marshall Memorial Lecture (Invited), Crescendo of the Cosmic Symphony: Gravitational Waves and the New Frontier of Astronomy, Amateur Astronomers Association of New York Lecture Series at the American Museum of Natural History in New York City, New York, March 13th.

2019 Outreach event, Campus Crusade, organized in collaboration with Dr. Douglas B. Gobeille and Dr. Michael Tammaro (both members of URI Physics department). Hosted approximately two dozen students from the Greene School on November 2nd for a series of physics activities including projectile motion contest, a planetarium show, and a superconducting demonstration with liquid nitrogen. Personalized 3D-printed daVinci-inspired telescopes were provided for each participating student.

2019 Outreach talk entitled "Gravitational Waves: The Frontier of Astronomy" at Bourne High School for approximately 60 high school science students on October 22nd.

2019 Appeared on official LEGO youtube channel as guest-host for the *LEGO WRECKING Ball Strength Challenge*[1] episode on the REBRICKULOUS channel.

2018 Gravitational Waves: The Frontier of Astronomy, public lecture given at the Contemporary Theater Company in Wakefield, RI in May.

2018 Appeared on official LEGO youtube channel as guest-judge and host for the *Egg Drop Challenge Part 2!*[2] episode on the REBRICKULOUS channel.

2018 Subject of a feature story in UMass Dartmouth Magazine titled, *Robert Coyne '07, MS '11 Appointed physics lecturer at University of Rhode Island*

2017 Subject of news story in Providence Business News titled, *Nobel prize-linked physicist joins University of Rhode Island faculty*

2017 Interview for URI Today describing the LVC detection of a binary neutron star merger titled *URI physics lecturer part of new era in astronomy*.

2017 Panelist on "Ask an Astrophysicist" panel at Lubbock-Con 2017

2016 Interview describing the first detection of gravitational waves by LIGO titled *Bourne Grad Part of Team that Made Cosmic Breakthrough* for The Bourne Enterprise

2016 Participated in outreach on social media via a reddit "Ask Me Anything" (AMA) titled *We are the LIGO Scientific Collaboration, and we have made the first direct detection of gravitational waves and the first observation of two black holes merging. Ask us anything!*

2014 Gravitational Waves: The Frontier of Astronomy, public lecture given at George Mason University in November.

2014 Volunteer participant (and assistant organizer for contributions from the George Washington University) in the "2014 Astronomy Festival on the National Mall" which included several demonstrations of physics and astronomy concepts associated with gravitational wave detection.

2013 Outreach talk on the origins of the cosmos to IB (International Baccalaureate) high school students at the Academy of the Holy Cross in Kensington, Maryland

[1] https://youtu.be/SoV743jSraA

[2] https://youtu.be/t1OKrj5Z-Ew

Metrics (as of June 2022)

Publications 276
Citations 64,042
H-index 78
G-index 253
i10-index 135

Weblinks

ORCID https://orcid.org/0000-0002-5243-5917
arXiv https://arxiv.org/a/0000-0002-5243-5917.html
Physics Tree https://academictree.org/physics/tree.php?pid=851290
INSPIRE-HEP https://inspirehep.net/authors/1862234
Google Scholar https://scholar.google.com/citations?user=GEn0OTgAAAAJ&hl=en
IAU https://www.iau.org/administration/membership/individual/19893/

Full Bibliography

MG Aartsen, M Ackermann, J Adams, JA Aguilar, M Ahlers, M Ahrens, and ... Multimessenger search for sources of gravitational waves and high-energy neutrinos: Initial results for ligo-virgo and icecube. *Physical Review D*, 90(10):102002–102002, 2014. 46 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=16118461804997767453.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, T Accadia, and ... Improved upper limits on the stochastic gravitational-wave background from 2009–2010 ligo and virgo data. *Physical Review Letters*, 113(23):231101–231101, 2014a. 139 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6974052862827252632.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, T Accadia, and ... First all-sky search for continuous gravitational waves from unknown sources in binary systems. *Physical Review D*, 90(6):62010–62010, 2014b. 83 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=14239659482738855146.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, T Accadia, and ... The ninja-2 project: detecting and characterizing gravitational waveforms modelled using numerical binary black hole simulations. *Classical and Quantum Gravity*, 31(11): 115004–115004, 2014c. 70 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=3475630452687547824.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, T Accadia, and ... Search for gravitational radiation from intermediate mass black hole binaries in data from the second ligo-virgo joint science run. *Physical Review D*, 89(12):122003–122003, 2014d. 61 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8439238745435118541.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, T Accadia, and ... Implementation of an-statistic all-sky search for continuous gravitational waves in virgo vsr1 data. *Classical and quantum gravity*, 31(16):165014–165014, 2014e. 52 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=12345497458105699170.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Search for gravitational waves associated with -ray bursts detected by the interplanetary network. *Physical review letters*, 113(1):11102–11102, 2014f. 53 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6263831132555969597.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Search for gravitational wave ringdowns from perturbed intermediate mass black holes in ligo-virgo data from 2005–2010. *Physical Review D*, 89(10):102006–102006, 2014g. 50 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6742687540809586189.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Methods and results of a search for gravitational waves associated with gamma-ray bursts using the geo 600, ligo, and virgo detectors. *Physical Review D*, 89(12):122004–122004, 2014h. 42 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=11519242687363301839.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Searches for continuous gravitational waves from nine young supernova remnants. *The Astrophysical Journal*, 813(1):39–39, 2015a. 79 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=15384716497273242940.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Directed search for gravitational waves from scorpius x-1 with initial ligo data. *Physical Review D*, 91(6):62008–62008, 2015b. 63 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=13511499948266765521.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Narrow-band search of continuous gravitational-wave signals from crab and vela pulsars in virgo vsr4 data. *Physical Review D*, 91(2):22004–22004, 2015c. 52 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=8539060562426030975.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, K Ackley, C Adams, and ... Advanced ligo. *Classical and quantum gravity*, 32(7):74001–74001, 2015d. 2618 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=1439985753632784956.

J Aasi, BP Abbott, R Abbott, TD Abbott, MR Abernathy, F Acernese, and ... First low frequency all-sky search for continuous gravitational wave signals. *Physical Review D*, 93(4):42007–42007, 2016a. 39 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=6013259258870919479.

J Aasi, BP Abbott, R Abbott, TD Abbott, MR Abernathy, F Acernese, and ... Search of the orion spur for continuous gravitational waves using a loosely coherent algorithm on data from ligo interferometers. *Physical Review D*, 93(4):42006–42006, 2016b. 20 cites: https://scholar.google.com/scholar?oi=bibs&hl=en&cites=17952490602030356534.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Erratum:"searches for continuous gravitational waves from nine young supernova remnants"(2015, apj, 813, 39). *The Astrophysical Journal*, 918(2):90–90, 2021a. Query date: 2022-02-05 13:57:12.

J Aasi, BP Abbott, R Abbott, T Abbott, MR Abernathy, F Acernese, and ... Searches for continuous gravitational waves from nine young supernova remnants [erratum: 2015, apj, 813, 39]. *Astrophysical Journal*, 918(2), 2021b. Query date: 2022-02-05 13:57:12.

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