

Curriculum Vitae

Vicky (Vassiliki) Kalogera

Northwestern University

Dept of Physics & Astronomy

CIERA - Center for Interdisciplinary
Exploration and Research in Astrophysics

E-mail : vicky@northwestern.edu

Phone : (847) 491-5669

Fax : (847) 467-0679

Address : 1800 Sherman Ave., 8th Floor
Evanston, IL 60201

EDUCATION

- 1992 – 1997 **Ph.D. in Astronomy**, University of Illinois
at Urbana-Champaign
Ph.D. Thesis: “Formation of Low-Mass X-Ray Binaries”
Advisor: Prof. Ronald F. Webbink (Univ. of Illinois)
- 1988 – 1992 **Ptithio (B.S.) in Physics**,
University of Thessaloniki, Greece
Diploma Thesis: “Investigations of the Intrinsic Properties of
Cataclysmic Binaries”
Advisors: Profs. Jan van Paradijs (Univ. of Amsterdam) and
John H. Seiradakis (Univ. of Thessaloniki)

RESEARCH INTERESTS

Astrophysics of Compact Objects (Black Holes, Neutron Stars, and White Dwarfs)
across the Electromagnetic and Gravitational Wave Spectrum
Formation and Evolution of Binary Systems with Compact Objects in varied galactic environments
Time-Domain Transient and Multi-Messenger Astrophysics
Machine Learning in Astrophysical Data Analysis and Modeling

EMPLOYMENT

- 2024 – Director, NSF-Simons AI Institute for the Sky
(NSF-Simons SkAI)
- 2017 – Daniel I. Linzer Distinguished University Professor
and Professor of Physics and Astronomy,
Northwestern Univ.
- 2012 – Director, Center for Interdisciplinary Exploration
and Research in Astrophysics (CIERA),
Northwestern Univ.
- 2009 – 2017 E. O. Haven Professor of Physics and Astronomy,
Northwestern Univ.
- 2009 – 2012 Co-Director, Center for Interdisciplinary Exploration
and Research in Astrophysics (CIERA),
Northwestern Univ.
- 2006 – 2009 Associate Professor, Dept. of Physics and Astronomy,
Northwestern Univ.
- 2001 – 2006 Assistant Professor, Dept. of Physics and Astronomy,
Northwestern Univ.
- 2000 – 2001 Clay Postdoctoral Fellow, Smithsonian Astrophysical Observatory
- 1997 – 2000 CfA Postdoctoral Fellow, Smithsonian Astrophysical Observatory

AWARDS and HONORS

| | |
|-------------|--|
| 2026 | Daniel I. Linzer Award for Faculty Excellence in Service |
| 2025 | International Society on General Relativity and Gravitation, Elected Fellow |
| 2021 | American Academy of Arts and Sciences, Elected Member |
| 2020 | Guggenheim Fellowship, John Guggenheim Memorial Foundation |
| 2020 | Notable Women in STEM (leaders and role models), Crain's Chicago Business |
| 2019 | Legacy Fellow of the American Astronomical Society |
| 2018 | American Association for the Advancement of Science, Elected Fellow |
| 2018 | National Academy of Sciences, Elected Member |
| 2018 | Dannie Heineman Prize for Astrophysics, American Institute of Physics (AIP) and the American Astronomical Society (AAS) |
| 2017 | Distinguished Alumni Award, Aristotle University of Thessaloniki |
| 2017 – 2024 | Senior Fellow, Gravity and Extreme Universe Program, Canadian Institute For Advanced Research (CIFAR) |
| 2017 | Martin E. and Gertrude G. Walder Award for Research Excellence, Northwestern University |
| 2016 | Hans A. Bethe Prize, American Physical Society |
| 2014 – 2020 | Elected Trustee, Aspen Center for Physics (two terms of three years each) |
| 2012 | Simons Foundation Fellow in Theoretical Physics |
| 2009 | Kavli Fellow, German-American Kavli Frontiers of Science Symposium (organized by the National Academy of Sciences) |
| 2009 | Fellow of the American Physical Society |
| 2008 | Selected as one of Astronomy Magazine's "Top 10 Rising Stars of Astronomy" |
| 2008 | Award for Excellence in Mentoring Undergraduate Research, Weinberg College of Arts and Sciences, Northwestern University |
| 2008 | Maria Goeppert-Mayer Award of the American Physical Society |
| 2005 | NSF CAREER Award in Astronomy |
| 2004 | Cottrell Scholar Award by the Research Corporation |
| 2002 | David and Lucile Packard Foundation Fellowship in Science and Engineering |
| 2002 | A. J. Cannon Award of the American Astronomical Society (AAS) and the American Association of University Women (AAUW) |

COLLABORATION AWARDS and HONORS for the LIGO Discovery of GW150914

- 2017 Princess of Asturias Award for Technical and Scientific Research
jointly to the LIGO Scientific Collaboration and to Weiss, Thorne, and Barish.
- 2017 Einstein Medal from the Einstein Society in Bern, Switzerland
to the LIGO Scientific Collaboration
- 2017 UK RAS Group Achievement Award in Astronomy
to the LIGO Team
- 2017 Bruno Rossi Prize (AAS HEAD)
to Gonzalez and the LIGO Scientific Collaboration
- 2016 CBC Science Story of the Year
- 2016 APS Physics Highlights of the Year, #1
- 2016 *Science's* Breakthrough of the Year
- 2016 Science News Magazine's Top Science Story of 2016
- 2016 IOP Physics World Breakthrough of the Year
to the LIGO Scientific Collaboration
- 2016 Foreign Policy Magazine, Top 100 Global Thinkers
to the LIGO Scientific Collaboration
- 2016 Distinguished Science Award, National Space Club - Huntsville Chapter
to the LIGO GW150914 Discovery Team
- 2016 Gruber Cosmology Prize
to Drever, Thorne, Weiss, and the LIGO Discovery Team
- 2016 Special Breakthrough Prize in Fundamental Physics
to Drever, Thorne, Weiss, and the LIGO Discovery Team

COLLABORATION AWARDS and HONORS for the LIGO Discovery of GW170817

| | |
|------|---|
| 2017 | <i>Science's</i> Breakthrough of the Year |
| 2017 | IOP Physics World Breakthrough of the Year to the multi-messenger astronomy authors of the publication “Multi-Messenger Observations of a Binary Neutron Star Merger”, <i>The Astrophysical Journal Letters</i> , 848, L12 |

DISTINGUISHED LECTURESHIPS

| | |
|------|--|
| 2026 | Third Weinberg Memorial Lecture, Physics Dept., University of Texas at Austin |
| 2026 | Bishop Lecture, Astronomy Dept., Columbia University |
| 2026 | Sturm Lecture, Astronomy Dept., Wesleyan University |
| 2026 | Simons Foundation Presidential Lecture, Simons Foundation, New York, NY |
| 2022 | Kavli Lectures, Kavli Institute for Cosmology, Cambridge University |
| 2022 | Edwin Salpeter Lectureship, Astronomy Dept., Cornell University |
| 2022 | The William J. Degutis Women in Science and Health Lecture Series, De Paul University |
| 2021 | Icko Iben Jr. Lectureship, Astronomy Dept., U. of Illinois at Urbana-Champaign |
| 2019 | College of Science Distinguished Speaker, Rochester Institute of Technology |
| 2019 | NSF Distinguished Lecture in Mathematical and Physical Sciences, National Science Foundation |
| 2019 | Michigan Astronomy Mohler Prize Lecture, University of Michigan |
| 2019 | Frank Edmondson Lectureship, Indiana University |
| 2019 | Whitford Lectures, University of Wisconsin at Madison |
| 2018 | COFI Distinguished Lecture, Colegio de Fisica Fundamental e Interdisciplinaria de las Americas |
| 2018 | Charles Lauritsen Lectureship, Caltech |
| 2018 | Robert Hofstadter Lectureship, Stanford University |
| 2017 | Raymond Sackler Lectureship, Canadian Institute for Theoretical Astrophysics (CITA) |
| 2017 | Frances Walker Lectureship, George Washington University |

SERVICE IN THE PHYSICS AND ASTRONOMY COMMUNITY

- Member, External Advisory Committee, Foundation for Research and Technology - Hellas (2026 –)
- Member, New Horizons in Gravitational Wave Astronomy Steering Committee, The Kavli Foundation (2026 –)
- Member, Prize Selection Committee, Margot and Tom Pritzker Prize for AI in Science Research Excellence (2026)
- Co-Chair, Sub Group 1: Scientific and Technical Requirements of the Detector, The Working Group on Site Selection Criteria for the Einstein Telescope (2026 –)
- Vice-Chair, GMT Development and New Partners Committee, Giant Magellan Telescope (GMT) Consortium Board of Directors (2025 –)
- Chair, GMT Board of Education and Public Outreach Working Group, Giant Magellan Telescope (GMT) Consortium Board of Directors (2025 –)
- Member, Selection Committee, Richard A. Isaacson Award in Gravitational-Wave Science of the American Physical Society (2025 –)
- Member, GMTO Presidential Search Committee, Giant Magellan Telescope (GMT) Consortium Board of Directors (2025)

- Member representing Northwestern, Giant Magellan Telescope (GMT) Consortium Board of Directors (2024 -)
- Member, Rector Election Committee, University of Crete, Greece (2024 -)
- Member, Leadership Board, CFMG - Center for Foundation Models and Generative AI, Northwestern University (2024 -)
- Member, Advisory Board, SCEECS - Simons Collaboration on Extreme Electrodynamics of Compact Sources, Simons Foundation (2023 - 2024)
- Member, Governance Advisory Committee, OzGrav - The ARC Centre of Excellence for Gravitational Wave Discovery, Australian Research Council (2023 -)
- Chair, Subcommittee on the Next Generation Gravitational Wave Detector Concept (NextGenGW SC), National Science Foundation (2022 - 2024)
- Member, Development Committee, Aspen Center for Physics (2023 - 2026)
- Elected Vice President, Aspen Center for Physics (2022 -)
- Member, External Advisory Board, Illinois Center for Advanced Studies of the Universe, University of Illinois in Urbana-Champaign (2020 -)
- Chair and Member, Multiple Prize and Election Committees of the National Academy of Sciences (2019 -)
- Founding Member and Advising Director, DSFP - Data Science Fellowship Program, LSST Discovery Alliance (2016 -)
- Elected Member, Aspen Center for Physics Board (2007 -)
- Member, LSSTC Catalyst Fellowship Steering Committee (2021 - 2023)
- Elected Member, Management Team of the LIGO Scientific Collaboration (2020 - 2022)
- Co-Chair, 3G Science Team, GWIC 3G Subcommittee on 3rd Generation Gravitational-Wave Detectors (2017 - 2021)
- Member, Advisory Board of the Institute of Cosmology and Physics of the Americas (COFI) (2014 - 2021)
- Co-Chair, National Research Council's Committee on Astronomy and Astrophysics (NRC CAA), Joint Committee of the Space Studies Board and the Board on Physics and Astronomy, National Academy of Sciences (2018 - 2021)
- Elected Trustee, Aspen Center for Physics (2014 - 2021)
- Member, OzGrav Scientific Advisory Committee, ARC Centre of Excellence for Gravitational Wave Discovery (2017 - 2019)
- Member, Advisory Board, McGill Space Institute (2016 -)
- Elected Member of the Executive Committee of the LIGO Scientific Collaboration (2017 - 2019)
- Member, NAS Consultation Group for the selection of the Astro2020 Decadal Chair
- Elected Member, Executive Board of Directors, LSST Corporation (2016 - 2018)
- Member, National Research Council's Committee on Astronomy and Astrophysics (NRC CAA), Joint Committee of the Space Studies Board and the Board on Physics and Astronomy, National Academy of Sciences (2015 - 2018)

- Member, Advisory Board of NANOGrav Pulsar Timing Array (2015 – 2016)
- Presenter and Member, Panel on Gravitational-Wave Astrophysics for the Board on Physics and Astronomy, National Academy of Sciences (2015, 2016)
- Member, Nominating Committee for the APS Division of Astrophysics (2014, 2001)
- Member, Scientific Advisory Board of the Albert Einstein Max Planck Institute for Gravitational Physics, Potsdam, Germany (2013 – 2018)
- Elected to the Chair line of the Executive Committee APS Division of Computational Physics (2010 – 2014; Vice-Chair, Chair Elect, Chair, Past Chair)
- Invited Scientific Editor for *Scientific Reports* (online journal in all areas of natural sciences by the Nature Publishing Group) (2011 – 2015)
- Member, Astrophysics Subcommittee of the NASA Advisory Council Science Committee (2010 – 2013)
- Chair, APS Division of Computational Physics Program Committee for both March and April 2012 meetings (2011-2012)
- Member, APS GGR Nominating Committee (2012)
- Reviewer of Astro2010 Science Frontier Panels' and Program Prioritization Panels' Reports, National Research Council and National Academy of Sciences (Fall 2009 and Winter 2010, respectively)
- Member of the Publications and Presentations committee of the LIGO Scientific Collaboration (2008 – 2012)
- Invited Panelist on the Discovery Panel at one (of five) of NASAs Future Forums (http://www.nasa.gov/50th/future_forums), Adler Planetarium & Astronomy Museum, Chicago (2008)
- Member of the APS Maria Goeppert Mayer Award Selection Committee (2008)
- Elected Member, Executive Committee of the APS Division of Astrophysics (2007 – 2009)
- Elected Member, Executive Committee of the AAS High Energy Astrophysics Division (2007 – 2009)
- Elected Member, Executive Committee of the APS Topical Group on Gravity and Relativity (2005 – 2008)
- Co-Editor of the Centennial Physics Reports volume in honor of Hans Bethe (with Gerry Brown and Ed van den Heuvel; 2006 – 2007)
- Member, *Chandra* Users Committee (CUC) (2004 – 2007)
- Member, LIGO Program Advisory Committee (PAC) (2004–2008)
- Member, Operating Council for the Virtual School of Computational Science and Engineering, Great Lakes Consortium for Petascale Computing
- MentorNet Participant with two female physics graduate students advisees (2006 – 2009)
- Member, Visiting Committee of the Gravitational Wave group at NASA-GSFC (2005)
- Member, American Astronomical Society (AAS), American Physical Society (APS), and LIGO Scientific Collaboration (LSC)

- Panel and Individual Reviewer for NSF (Astronomy & Physics), NASA, The Astrophysical Journal (Main Journal and Letters), Astronomy and Astrophysics, Nature, Classical and Quantum Gravity, Living Reviews in Relativity, Research Corporation, and Monthly Notices of the Royal Astronomical Society
- Organizer and Presenter of numerous public outreach events in astronomy
- Chair, Co-Chair, or Member of Scientific Organizing Committees for dozens of research conferences

SERVICE AT NORTHWESTERN UNIVERSITY

- Department of Physics and Astronomy
 - Search Committee for Faculty in Theoretical Condensed Matter, Member (2022 – 2023)
 - Search Committee for Faculty Hire in Astronomy, Chair (2015 – 2016 and 2020 – 2021) and Member (2016 – 2017)
 - Awards Committee, 2017 – 2020
 - Associate Chair, 2015 – 2017
 - Computer Committee, 2013 – 2015
 - Search Committee for Faculty Hire in Theoretical Astrophysics, Chair (2012 – 2013)
 - Director of Undergraduate Studies (2007 – 2012)
 - Undergraduate Curriculum, Member (2007 – 2008, & 2009 – 2010)
 - Undergraduate Curriculum, Chair (2008 – 2009, 2010 – 2011, 2011 – 2012)
 - Graduate Admissions, Chair (2003) and Member (2002, 2004, 2006)
 - Graduate Advising and Curriculum, Member (2006)
 - Departmental Colloquium, Member (2006 – 2007)
 - Long Range Vision, Member (2006 – 2007)
 - Grade Dispute Committee, Member (2002 – 2003)
- WCAS College of Arts and Sciences
 - Member of Faculty Ad Hoc Work Group, Dean Review Committee (2023–)
 - Member of Senior Hiring Search Committee in Math Dept (2015–2016)
 - Member of the Committee for WCAS Strategic Planning (2013 – 2015)
 - Member of Ad Hoc Tenure Committees (2010 – 2011, 2014 – 2015)
 - Elected Member of the Standing Committee on Tenure (2006 – 2008, & 2009 – 2010)
 - Guest speaker for WCAS Awards Ceremony (2008)
- McCormick School of Engineering
 - Presentation to the McCormick Advisory Council (MAC), "Pioneering the Future of Data Science and AI: Next Steps for Northwestern" (2024)
 - Member of the McCormick CS+X Advisory Committee (2016 - 2019)
 - Member of the Computer Science Barris Chair Search Committee (2016 - 2018)
- University Administration
 - Member of the Provost Search Committee (2025)
 - Presentation to the Board of Trustees Forum with VP for Research Eric Perreault, "Pioneering the Future of Data Science and AI: Next Steps for Northwestern" (2025)

- Presentation to the Board of Trustees, "Pioneering the Future of Data Science and AI: Next Steps for Northwestern" (2024)
- Chair of Northwestern's Data Science and Artificial Intelligence Steering Committee (2024)
- Member of Northwestern's President's Advisory Committee on Free Expression and Institutional Speech (2024)
- Ad Hoc Interviewer of candidates for the position of Vice President of Alumni Relations and Development (2024)
- Member of the Honorary Degrees Faculty Committee (2023 – 2026)
- Presentation to the Board of Trustees, "WCAS among the Stars: How Tying Astronomy to Transformative Education, Data Science, and Discovery Research Launched Northwestern to the Top" (2023)
- Member of the Provost Search Faculty Advisory Committee to the President (2016)
- Member of the Program Review Council (2015 – 2017)
- Member of the Executive Committee of the Northwestern Data Science Initiative (2015 – 2017)
- Member of the Program Review Committee, Dept. of Neurobiology, WCAS (2014-2015)
- Ad Hoc Member of the Limited Submissions Selection Committee (2015, 2016)
- Member of the Faculty Leadership Team on Big Data Science and Engineering (2012 – 2015)
- Limited Submissions Selection Committee (2011 – 2012)
- Smithsonian–CIC TGS Fellowship Committee (2011)
- Interviewer of VPIT/CIO candidates (2010) and of candidates for the NUIT position of Director of Research Computing (2010 – 2011)
- Physical Sciences & Engineering Advisory Board to the Vice President of Research, Member (2009 – 2011)
- Purple Sky Workgroup, NU Strategic Planning (2010)
- Research and Administrative Computing Committee, RACC (2007 – 2010)
- RACC Subcommittee on Research Computing, Co-Chair (2007 – 2010)
- WCAS Dean Search Committee (2007 – 2008)
- Goldwater Scholarship Selection Committee (2005 – 2009)
- Panelist for the Survival Skills Program for Junior Faculty and Graduate Students (2010)
- University Committee on Information Technology (2006 – 2008)

CONFERENCE ORGANIZATION

- The LIGO-Virgo-Kagra Collaboration Meeting on Gravitational-Wave Science, Center for Interdisciplinary Exploration and Research in Astrophysics (CIERA), Northwestern University, March 13th - 17th, 2023

RESEARCH ADVISING & MENTORING

• Postdoctoral Research Faculty, Fellows, and Associates

– Current:

Debatri Chattopadhyay (2024 –)
Seth Gossage (2021 –)
Anarya Ray, CIERA Postdoctoral Fellow (2024 –)
Zepei Xing (2025 –)

– Past:

Sylvia Biscoveanu (2023 – 2025, Faculty at Princeton U.)
Chase Kimball (2024 – 2025, Data Scientist)
Meng Sun (2021 – 2024, Faculty at NAOC, China)
Vishal Baibhav (2021 – 2024, NASA Einstein Fellow, Columbia U.)
Sharan Banagiri (2021 – 2024, Research Fellow, Monash U., Australia)
Zoheyr Doctor (CIERA BoV Research Faculty; 2021 – 2024)
Jeff Andrews (2019 – 2022; Faculty at U. of Florida)
Maya Fishbach (2020 – 2022; Faculty at CITA)
Christopher Berry (2018 – 2021; Faculty at U. of Glasgow, UK)
Ying Qin (2019 – 2021; Faculty at Anhui Normal U., China)
Mario Spera (2019 – 2020; Faculty at U. of Padova)
Pablo Marchant (2017 – 2019; Fellow at KU Leuven)
Chris Pankow (2015 – 2019; Data Scientist)
Laura Sampson (2015 – 2016; Data Scientist)
Tyson Littenberg (2012 – 2015; Research Scientist, NASA Marshall Space Center)
Francesca Valsecchi (2012 – 2013; Senior Data Scientist and Consultant)
Nate Bode (2011 – 2012; Consulting Industry)
Daryl Haggard (2010 – 2013; Faculty at McGill U., Canada)
Laura Trouille (2010 – 2014; Director of Citizen Science, Adler Planetarium)
Will Farr (2009 – 2013; faculty at Stony Brook University and Simons Foundation Center for Computational Astrophysics)
Diego Fazi (2009 – 2012; Staff, Argonne National Lab, USA)
Smadar Naoz (2009 – 2010; Faculty at UCLA)
Ilya Mandel (2007 – 2009; Faculty at Monash U., Australia)
Marc van der Sluys (2006 – 2009; Postdoc, Radboud U., The Netherlands)
Bart Willems (2003 – 2009; HPC Technology Director, Atipa Technologies, USA)
Richard O’Shaughnessy (2003 – 2007; Faculty at RIT)
Philippe Grandclement (2001-2003; CNRS Permanent Researcher, Paris, France)
Natasha Ivanova (2001-2005; Faculty at U. of Alberta, Canada)
Chris Belczynski (2001-2004; Faculty at Warsaw U., Poland)

• Ph.D. Thesis and Other Graduate Students

– Current¹:

Darsan Swaroop Bellie (2023 –)
Andrea Ceja (2025 –)
Ilia Kiato (2023 –)
Dean Kousiounelos (2025 –)
† Beryl Hovis-Afflerbach (2026)

¹Names marked with a † indicate students for whom I sit on their thesis committee.

– Past:

† Beverly Lowell (August 2025)
† Jillian Rastinejad (August 2025)
Omkar Sridhar (2024 – 2025)
Elizabeth Teng (2020 – 2025)
Kyle Rocha (2018 – 2025, Postdoctoral Fellow, UC San Diego)
Camille Liotine (2020 – 2025, Data Scientist)
Monica Gallegos-Garcia (2018 – 2024, ITC Fellow, Harvard U.)
Chase Kimball (2017 – 2024, Postdoctoral Associate, Northwestern U.)
Serena Moseley (2023 – 2024)
Jennifer Sanchez (2022 – 2024)
Eve Chase (2016 – 2021, Data Scientist, USGSA, Office of Inspector General)
Matt Carney (2018 – 2020)
Monica Rizzo (2018 – 2019)
Mike Zevin (2014 – 2020, NASA Hubble Fellow & Fermi Fellow, U. of Chicago, USA)
Scott Coughlin (2015 – 2019, Computational Specialist, Northwestern U., USA)
Kyle Kremer (2015 – 2019, Hubble Postdoctoral Fellow, Caltech, USA)
Fani Dosopoulou (2013 – 2018, PCTS Postdoctoral Fellow, Princeton U., USA)
Niharika Sravan (2011 – 2013, 2015 – 2018, faculty at Drexel U.)
Ben Farr (2009 – 2014, faculty at U. of Oregon)
Carl Rodriguez (2010 – 2013, faculty at U. of North Carolina)
Tsing-Wai Wong (2007 – 2013, Banking Sector, Hong-Kong)
Vivien Raymond (2008 – 2012, faculty at Cardiff U., UK)
Francesca Valsecchi (2006 – 2012, Senior Data Scientist and Consultant)
Tassos Fragos (2004-2010, SNSF Professor, Geneva Observatory, Switzerland)
Jeremy Sepinsky (2003-2008, Research Scientist, CNA Corporation)
Chunglee Kim (2001-2006, faculty at Ewha Womans U., South Korea)
Chris Belczynski (2000-2001, faculty at Warsaw U., Poland)

• **Undergraduate Research Students²**

– Current:

Hongbo (Kevin) Xia (2024 –)
Jingbo Liu (2025 –)

– Past:

Nico Bers (2023 – 2026)
Chloe Fisher (2021 – 2023)
Rachel Hur (2021 – 2023)
Ilia Kiato (2021 – 2023)
Darsan Swaroop Bellie (2021 – 2023)
Sam Imperato (2018 – 2022)
David Stephens (2021 – 2022)
Julianne Cronin (2020 – 2022)
Matthew Walsh (2017 – 2019)
Slobodan Mentovic (2015 – 2017)
• Chase Kimball (2015 – 2017; Award for the Best Thesis Award in Physics & Astronomy)
Jessie Duncan (2015 – 2016; U Minnesota Physics grad student)
Leah Perri (2014 – 2016; UCLA Astronomy grad student)
Anya Kogan (2015 – 2016)
Ben Sandeen (2013 – 2015)
Atul Adhikari (2014)
Claudeson Azuri (2014)

²Names marked with a • indicate students who completed an Honors Senior Thesis under my supervision.

Scott Coughlin (2011 – 2014; Cardiff U. Physics grad student)
 James Hu (2014)
 Andrew Jennings (2014)
 Aditya Manikantan (2014)
 Sarah Matthews (2013)
 Connor Skeehan (2012)

- Dan Stevens (2009 – 2012; Award for the Best Thesis Award in Physics & Astronomy, The Ohio State University astronomy grad student)
- Kyle Kremer (2009 – 2012)
- Asna Ansari (2009 – 2011)
- Andrew Loveridge (2009 – 2011; Award for the Best Thesis Award in Integrated Science Program; UWMadison astronomy grad student)
- Michael Tremmel (2007 – 2011; UWashington astronomy grad student)
- Jeff Andrews (2006 – 2009; Columbia U. astronomy grad student)
- Laura Blecha (2002-2005; Harvard U. astronomy grad student)

Michael Downey (2006)
 Matthew Goss (2009 – 2010)
 David Guarrera (2003; MIT Physics grad student)
 Cy Hendrickson (2002)

- Michael Henninger (2002-2004; Peace Corps; MIT Physics grad student)
- Mia Ihm (2002-2005; UC Berkeley Physics grad student; NSF Graduate Fellow)
- Jeff Kaplan (2003-2007; Goldwater Scholar; Award the Best Thesis Award in Physics and Astronomy; Caltech Physics grad student)

James Kath (2006; Goldwater Scholar; Harvard Physics grad student)
 Todd Levin (2003-2005)

- Tim Linden (2006 – 2008; Award the Best Thesis Award in Physics and Astronomy and in the Integrated Science Program; UCSC Physics grad student)
- Alex Muratov (2005-2007; Michigan Astronomy grad student)

Philip Nutzman (2002-2004; Harvard Astronomy grad student)
 Aisha Saleem (2005-2007)
 Tiffany White (SROP 2002)

TEACHING

- Exploring AI: Shaping the Future in Science, Society, and Critical Thinking (First Year Seminar)
2025, 2026
- Data Science Challenges in Earth and Astrophysical Sciences (Graduate)
2016-2017, 2017-2018, 2019
- Astrophysics for Integrated Science Program (Undergraduate)
2008, 2009, 2010, 2011, 2015, 2020, 2022
- Stellar Astrophysics (Undergraduate/Graduate)
2003, 2004, 2007, 2007, 2014, 2015, 2016
- Advanced Seminar on Compact Objects (Graduate)
2012
- Cosmic Extremes and Record Holders (Freshman Seminar)
2010, 2011
- Stellar Structure and Evolution (Graduate)
2003, 2009, 2021
- Introduction to Computational Physics (Undergraduate)
2002, 2003, 2004, 2006, 2007

FUNDING SOURCES³

- **Current⁴:**

- Theme 1: AI for the Sky: The SkAI Institute (PI: V. Kalogera)
NSF; 10/2024 – 9/2029; \$10,000,000
- Theme 1: AI for the Sky: The SkAI Institute (PI: V. Kalogera)
Simons Foundation; 10/2024 – 9/2029; \$10,000,000
- NU-UChicago Brinson Postdoctoral Fellowship (PI: V. Kalogera)
Brinson Foundation; 9/2024 – 9/2027; \$360,000
- Research Experiences in Astronomy at CIERA for High School Students (PI: V. Kalogera)
Brinson Foundation; 9/2024 – 8/2025; \$40,000
- MRI: Track 1 Acquisition of a Hybrid, High-Performance Computing Cluster for Gravitational-Wave Data Analysis and Source Interpretation (PI: V. Kalogera)
NSF; 8/2024 – 7/2026; \$491,136
- POSYDON: Transforming Binary-Star Simulations Across Astrophysics (PI: V. Kalogera)
Gordon E. and Betty I. Moore Foundation; 11/2023 – 10/2027; \$3,600,000
- The CSUF-led partnership for inclusion of underrepresented groups in gravitational-wave astronomy (PI: V. Kalogera)
NSF; 8/2022 – 7/2027; \$139,535
- Hubble Fellowship for Andrea Sylvia Biscoveanu (PI: V. Kalogera)
NASA; 9/2023 – 8/2026; \$147,967
- Gravitational-Wave Data Analysis and Population Inference (PI: V. Kalogera)
NSF – Support of LIGO Research; 9/2022 – 8/2025; \$628,695
- The LSST Data Science Fellowship Program (PI: V. Kalogera)
Gordon E. and Betty I. Moore Foundation; 8/2021 – 1/2025; \$497,038
- The LSST Data Science Fellowship Program (PI: V. Kalogera)
LSST Corporation; 8/2016 – 12/2025; \$500,000

- **Past⁵:**

- Professional Training for Inclusive Community (PI: V. Kalogera)
LSST, Inc.; 11/2023 – 12/2024; \$12,000
- Research Experiences in Astronomy at CIERA for High School Students (PI: V. Kalogera)
Brinson Foundation; 9/2023 – 8/2024; \$35,000
- Research Experiences in Astronomy at CIERA for High School Students (PI: V. Kalogera)
Brinson Foundation; 6/2022 – 8/2023; \$40,000
- Next-Generation Compact Object Population Models for Astrophysics (PI: V. Kalogera)
Gordon E. and Betty I. Moore Foundation; 5/2019 – 7/2023; \$1,650,000
- CIFAR Fellowship (PI: V. Kalogera)
Canadian Institute for Advanced Research; 7/2017 – 3/2023; \$144,000
- The LSST Data Science Fellowship Program (PI: V. Kalogera)
Brinson Foundation; 10/2018 – 9/2022; \$190,000
- The LSST Data Science Fellowship Program (PI: V. Kalogera)
LSST Corporation and Brinson Foundation; 10/2018 – 9/2022; \$388,000

³Total amount of funding as PI: \$44,945,541

⁴Total amount of current funding as PI: \$26,688,387

⁵Total amount of past funding as PI: \$18,257,154

- The LSST Data Science Fellowship Program (PI: V. Kalogera)
Gordon E. and Betty I. Moore Foundation; 11/2018 – 11/2022; \$200,000
- Gravitational-Wave Inference from Binary Compact Objects (PI: V. Kalogera)
NSF – Support of LIGO Research; 9/2019 – 8/2022; \$559,181
- NRT-DESE: Training in Data-Driven Discovery - From the Earth and the Universe to the Successful Careers of the Future (PI: V. Kalogera)
NSF – DGE; 04/2015 – 08/2021; \$3,277,669
- Connecting LSST Undergraduate Internships with the CIERA REU Program (PI: A. Geller; V. Kalogera one of co-Is)
LSST Corporation; 6/2018 – 5/2020; \$32,850
- MRI: Acquisition of a High-Performance Computing Cluster to Unveil the Sources of Gravitational Waves (PI: V. Kalogera)
NSF - MRI, Grav. Phys; 8/2017 – 7/2019; \$349,924
- Gravitational-Wave Inference from Binary Compact Objects (PI: V. Kalogera)
NSF – Support of LIGO Research; 9/2016 – 8/2019; \$479,998
- Supernova Progenitors, Stellar Remnants, and their Binary Companions (PI: V. Kalogera)
NSF – AST; 9/2015 – 8/2019; \$402,512
- INSPIRE: Glitch Zoo: Teaming Citizen Science with Machine Learning to Deepen LIGO's View of the Cosmos (PI: V. Kalogera)
NSF – INSPIRE; 9/2015 – 8/2019; \$1,015,754
- Variable Classes Revealed! A New Citizen Scientist, Astronomer, and Computer Scientist Project to Meet the Stellar Classification Challenge in the LSST Era (PI: A. Miller; V. Kalogera one of co-Is)
LSST Corporation; 7/2017 – 12/2018; \$40,000
- REU Site: Preparing a Diverse Workforce through Interdisciplinary Astrophysics Research (PI: V. Kalogera)
NSF – REU Sites, Astronomy Division; 9/2014 – 8/2018; \$287,784
- Engaging Introductory Astronomy Students in Authentic Research through Citizen Science (PI: D. Meyer; V. Kalogera one of co-Is)
NSF – EHR-IUSE; 9/2015 – 8/2018; \$302,242
- Dynamical Modeling of Dense Star Clusters with a Parallel Monte Carlo Code (PI: F. Rasio; V. Kalogera one of co-PIs)
NASA – ATP; 8/2014 – 7/2018; \$598,277
- Hubble Fellowship for Wen-fai Fong (PI: V. Kalogera)
NASA; 8/2017 – 7/2018; \$130,449
- A Novel Approach to the Common Envelope Evolution (PI: V. Kalogera)
NASA – SAO/Chandra; 1/2016 – 2/2018; \$75,000
- Modeling the Origins of Sub-subgiant Stars (PIs: V. Kalogera and Aaron Geller)
NASA - Hubble Space Telescope Science Institute - Theory Program; 01/2015 – 12/2017; \$69,237
- L'Oreal USA Fellowship For Women in Science: Laura Sampson (PI: V. Kalogera)
American Association for the Advancement of Science/L'Oreal USA, Inc.; 10/2013 – 3/2017; \$30,000
- CDS&E: Black Holes in Dense Star Clusters (PI: F. Rasio; V. Kalogera one of co-PIs)
NSF – Astronomy Division and CDS&E program; 9/2013 – 8/2016; \$448,377
- Gravitational-Wave Astrophysics: Getting Ready for the Advanced LIGO Era (PI: V. Kalogera)
NSF – Support of LIGO Research; 9/2013 – 8/2016; \$464,263

- New GK-12: Reach For the Stars: Computational Models for Teaching and Learning in Physics, Astronomy, and Computer Science (PI: V. Kalogera)
NSF – DGE; 06/2010 – 05/2016; \$2,722,370
- Accreting Binary Populations from Billions of Years Ago to the Year 2035 (PI: A. Hornschmeier-Cardiff (GSFC); sub-contract to NU)
NASA – ADP; 01/2012 – 12/2014; \$112,821
- Type 1: Casting a Wide Net: Applied Computational Thinking (PI: K. Jona; V. Kalogera one of four co-PIs)
NSF - Computing Education in the 21st Century (CE21); 11/2011 – 10/2014; \$990,167
- Simons Fellowship in Theoretical Physics: Decoding Gravitational-Wave Signals from Compact Object Mergers (PI: V. Kalogera)
Simons Foundation; 04/2013 – 03/2014; \$147,521
- Gravitational Wave Astrophysics of Binaries with Compact Objects (PI: V. Kalogera)
NSF – Support of LIGO Research; 11/2010 – 10/2013; \$546,153
- Teacher-Training Workshop: STEM in the 21st century (PI: V. Kalogera)
NASA Illinois Space Grant Consortium (ISGC); 06/2011 – 05/2013; \$8,000
- Understanding the Youngest X-ray Binary Populations in Low Metallicities (PI: V. Antoniou (SAO); sub-contract to NU)
NASA – ADP; 01/2011 – 12/2012; \$43,130
- Compact Object Forensics: The Question of Origin (PI: V. Kalogera)
NSF – AST; 11/2009 – 10/2012; \$450,846
- Flip For Physics: Student created Videos of Science Role Models and Careers (PI: V. Kalogera)
American Physical Society (APS); 05/2011 – 10/2012; \$8,000
- MRI: Acquisition of a Hybrid High Performance Computer Cluster for Gravitational-Wave Source Simulation and Data Analysis (PI: V. Kalogera)
NSF Major Research Instrumentation (MRI); 09/2011 – 08/2012; \$475,000 – Binary White Dwarfs: Gravitational Wave Astrophysics and Data Analysis (PI: V. Kalogera)
NASA – ATFP; 06/2009 – 05/2012; \$399,212
- ULX in the Most Metal Poor Galaxies (PI: A. Prestwich (SAO); sub-contract to NU)
NASA – SAO; 01/2010 – 12/2011; \$55,653
- A New Computational Tool for X-Ray Binary Modeling: Application to Elliptical Galaxies (PI: V. Kalogera; Science PI: T. Fragos)
NASA – SAO; 01/2010 – 12/2011; \$67,870
- CAREER: Theoretical Studies of Compact Objects in Binary Systems (PI: V. Kalogera)
NSF – CAREER Program; 11/2005 – 10/2010; \$546,153
- Massive Black Hole Binaries with Extreme Mass Ratios (PI: V. Kalogera)
NASA – ATP; 05/2007 – 04/2010; \$281,381
- Galaxies Across the Octaves: A Chandra Legacy Survey of Singalaxies (PI: A. Ann Hornschemeier; sub-contract to NU)
NASA – SAO; 01/2008 – 12/2009; \$27,448
- Packard Fellowship in Science and Engineering, David and Lucile Packard Foundation; 10/2002 – 09/2009; \$625,000
- Tidally Interacting Binaries and LISA Astronomy: Waveform and Data Analysis Studies (PI: V. Kalogera)
NASA – BEFS; 06/2006 – 05/2009; \$283,275

- Binary Compact Objects as Gravitational Wave Sources: Modeling and Data Analysis (PI: V. Kalogera)
NSF – Gravitational Physics Program; 11/2004 – 10/2008; \$303,511
- Acquisition of a Versatile High Performance Computing Facility for Gravitational Wave Source Modeling and Student Training (PI: V. Kalogera)
NSF – MRI; 10/2006 – 09/2008; \$416,189
- Adler Public Education Fellowships (PI: V. Kalogera)
Adler Planetarium & Astronomy Museum; 12/2007 - 08/2008; \$37,690
- A Deep X-Ray Survey of the Small Magellanic Cloud (PI: A. Zezas; sub-contract to NU)
NASA – *Chandra* GO Program; 04/2006 – 04/2008; \$14,976
- Discrete X-Ray Source Populations and Star-formation History in Nearby Galaxies (PI: A. Zezas; sub-contract to NU)
NASA – LTSA; 04/2003 – 03/2008; \$85,856
- Gravitational Wave Searches of Spinning Supermassive Black Holes with LISA (PI: M. Ulmer (NU); co-I: V. Kalogera (NU))
Illinois Space Grant Consortium Seed Grant; 03/2007 – 02/2008; \$9,000
- A Chandra Legacy Program: Deep Study of LMXB Populations (PI: V. Kalogera)
NASA – *Chandra* GO Program; 01/2006 – 01/2008; \$50,018
- Understanding the X-Ray Cluster Binary Populations of Nearby Galaxies Revealed by the Chandra Observatory (PI: V. Kalogera)
NASA – Graduate Student Researchers Program; 07/2004 – 06/2007; \$63,000
- Deep X-Ray Imaging of the Fornax Dwarf Galaxy (PI: A. Prestwich (SAO); sub-contract to NU)
NASA/ESA – XMM GO Program; 10/2005 – 09/2006; \$14,002
- Cottrell Scholar Award: Algorithms in Gravitational Wave Astrophysics (PI: V. Kalogera)
Research Corporation; 05/2004 – 05/2006; \$75,000 (overhead free)
- Stellar Sources of Low-Frequency Gravitational Waves (PI: V. Kalogera)
NASA – ATP; 04/2003 – 03/2006; \$253,762
- X-Ray Binary Formation in Elliptical Galaxies: The Role of Dynamical Processes (PI: V. Kalogera)
NASA – *Chandra* Theory Program; 01/2004 – 12/2004; \$75,000
- An Ultra-Deep Study of M101 (PI: K. Kuntz; sub-contract to NU)
NASA – *Chandra* GO Program; 01/2004 – 12/2004; \$27,331
- Binary Compact Objects as Astrophysical Sources of Gravitational Waves (PI: V. Kalogera)
NSF – Division of Physics – Gravitational Physics Program; 11/2001 – 10/2004; \$184,172
- Theoretical Studies of X-Ray Binary Populations in Nearby Galaxies (PI: V. Kalogera)
NASA – *Chandra* Observing Program; 01/2002 – 12/2002; \$54,861

PAST AND UPCOMING INVITED TALKS

In 2026:

- "TBD",
AI+Science Conference, University of Chicago and Caltech, Chicago, IL, October 19, 2026
- "How AI Will Change Research",
Panel at SkAI Fest, Northwestern University, Chicago, IL, May 29, 2026
- "TBD",
Plenary Talk Black Holes and Cosmology Conference, Grenada, Spain, June 15-19, 2026
- "TBD",
UCLA Astronomy Department Colloquium, University of California, Los Angeles, CA, May 6, 2026
- "Listening to Cosmic Collisions: Black Holes, Neutron Stars, and the Rise of Gravitational-Wave Astrophysics",
– **Third Weinberg Memorial Public Lecture**, University of Texas, Austin, TX, April 16, 2026
– **Sturm Memorial Public Lecture**, Wesleyan University, Middletown, CT, March 3, 2026
- "The Complexity of Black Hole Masses and Spins",
– **Bishop Lecture**, Columbia University, New York, NY, March 25, 2026
– **Wesleyan University Astronomy Colloquium**, Middletown, CT, March 2, 2026
- "Black Hole Mergers: What Gravitational Waves Reveal About Their Origins",
Simons Presidential Public Lecture, Simons Foundation, New York, NY, March 4, 2026
- "Big Questions in Astrophysics",
Rainer Weiss Memorial Symposium, MIT Department of Physics and Kavli Institute for Astrophysics and Space Research, Cambridge, MA, February 27-28, 2026

In 2025:

- "Listening to the Universe: Astrophysics in the Gravitational-Wave Era",
Plenary Talk for the 33rd Texas Symposium on Relativistic Astrophysics, Arizona State U., December 8-12, 2025
- "The Complexity of Black Hole Masses and Spins",
– **NOIRLab/Steward Observatory Colloquium**, U. of Arizona, December 4, 2025
– **The Lifecycle of Stellar Black Holes Conference**, Kavli Institute for Theoretical Physics, UC Santa Barbara, November 17-20, 2025
- "Convergence Time in Astronomy and AI",
– **NSF Astronomy and Astrophysics Advisory Committee Meeting**, Virtual Meeting, December 11, 2025
– **Panel on NSF-Simons AI Institutes for Astronomy**, Committee on Astronomy and Astrophysics Fall Meeting, Irvine, CA, October 6-7, 2025
- "Introduction to POSYDON and binary black hole populations",
Invited Talk, POSYDON School 2025, NSF-Simons SkAI Institute, Chicago, IL, September 23-26, 2025
- "Recent Results in the Application of AI to Astronomy Problems",
– **IAUS 397, UniversAI: Exploring the Universe with Artificial Intelligence Conference**, Harokopio U., Athens, Greece, June 2-6, 2025

- “From Black Holes to Giant Telescopes: How the Fusion of Astronomy, AI, and Engineering Powers CIERA’s Vision”,
Invited Talk for the Northwestern Women’s Board Annual Luncheon, Wilmette, IL, May 14, 2025
- “How is AI accelerating progress in fundamental physics?”
Panel Member at the Theory+AI Symposium, Perimeter Institute, Waterloo, ON, Canada, April 7, 2025
- “Pioneering the Future of Data Science and AI: Next Steps for Northwestern”
NU Board of Trustees Forum, Northwestern U., March 8, 2025

In 2024:

- “Pioneering the Future of Data Science and AI: Next Steps for Northwestern”
 - **McCormick Advisory Board**, Northwestern U., October 25, 2024
 - **NU Trustee Committee on Research, Innovation and Entrepreneurship**, Northwestern U., September 19, 2024
- “Low-Mass Black Holes: Out there or Not?”
Invited Talk at the Center for Computational Astrophysics Colloquium, Flatiron Institute, New York, NY, November 22, 2024
- “Exploring the Universe Together: How Astronomy, AI, and Engineering Shape Tomorrows Discoveries”
Invited Talk at the Northwestern Learning for Life Series, Northwestern U., October 23, 2024
- “The NSF-Simons SkAI Institute in the Era of LSST”
Plenary Talk at the 2024 Catalyst Symposium, LSST Discovery Alliance, Northwestern U., October 21, 2024
- “From X-Ray Binaries to Gravitational Wave Sources and Back”
Invited Talk, at The Event Horizon and Beyond - Celebrating 50 Years of Narayan, Center for Astrophysics, Harvard and Smithsonian, June 10, 2024
- “Next Generation Gravitational Wave Detector Concept: NSF MPSAC NextGenGW Report”
 - **Second Cosmic Explorer Symposium**, online, April 23-25, 2024
 - **APS April Meeting**, Sacramento, CA, April 3-6, 2024

In 2023:

- “A New Window onto the Universe: Einstein’s Waves, Black Holes, and Neutron Stars”,
Invited Talk at the 40th Anniversary Celebration, Foundation for Research and Technology Hellas, Heraklion, Crete, Greece, December 17, 2023
- “The Sky is for Everyone: How Northwestern Astronomy is Shaping Future Education, Research, and Data Science”,
Invited Talk for the Northwestern Alumni Association Council of One Hundred (C100) Meeting, Northwestern U., October 20, 2023
- “WCAS among the Stars: How Tying Astronomy to Transformative Education, Data Science, and Discovery Research Launched Northwestern to the Top”,
Spotlight Presentation for the Board of Trustees, Northwestern U. (September 22, 2023)

In 2020-2022:

- “From Stars to Einstein’s Waves: An Improbable Path to a Breakthrough Discovery”,
SHIELD Seminar, Boston U., November 18, 2022

- “Gravitational-Wave Astrophysics: Progress and Puzzles”:
 - **Kavli Lecture**, Kavli Institute for Cosmology, Cambridge U., May 26, 2022
 - **Edwin Salpeter Lecture, Astronomy Colloquium**, Cornell U., April 21, 2022
 - **Icko Iben Jr. Lecture, Astronomy Colloquium**, U. of Illinois at Urbana-Champaign, September 29, 2021
- “Einstein’s Waves: Cosmic Sounds from Black Holes and Neutron Stars”:
 - **Puzzles in Science Lecture Series**, The Alumnae of Northwestern, November 15, 2022
 - **Edwin Salpeter Public Lecture**, Cornell U., April 20, 2022
 - **The William J. Degutis Women in Science and Health Lecture**, De Paul U., April 14, 2022
 - **Icko Iben Jr. Public Lecture**, U. of Illinois at Urbana-Champaign, September 30, 2021
- “Gravitational-Wave Astronomy: Five Years since the First Discovery”:
 - **Astronomy Colloquium**, UC Berkeley, October 22, 2020
 - **Center for Astrophysical Sciences Seminar**, Johns Hopkins U., October 26, 2020

In 2019:

- **AIP/AAS Dannie Heineman Prize Lecture** “The Dawn of Gravitational-Wave Astrophysics”, AAS Annual Meeting, Seattle, WA, January 7, 2019
- “Probing Compact Objects with Gravitational Waves”:
 - **Whitford Lecture, Astronomy Colloquium**, U. of Wisconsin at Madison, January 24, 2019
 - **Astronomy Colloquium**, Indiana U., January 29, 2019
 - **Astronomy Colloquium**, U. of Michigan, March 14, 2019
- “Einstein’s Waves: Cosmic Sounds from Black Holes and Neutron Stars”:
 - **Whitford Public Lecture**, U. of Wisconsin at Madison, January 23, 2019
 - **Frank Edmondson Public Lecture**, Indiana U., January 30, 2019
 - **Mohler Prize Public Lecture**, U. of Michigan, March 13, 2019
 - **RIT Distinguished Lecture**, RIT, April 10, 2019
- “Cosmic Collisions, Gravitational Waves, and the Promise of Multi-Messenger Astrophysics”, **NSF Distinguished Lecture**, NSF Headquarters, March 25, 2019
- “Probing Compact Objects with Gravitational Waves”, **Invited Talk**, CIFAR-GEU Meeting, May 30 – June 2, 2019

In 2018:

- “Multi-Messenger Astronomy with Gravitational Waves”:
 - Joint **Astrophysics Colloquium**, Space Telescope Science Institute and Johns Hopkins University, February 21, 2018
 - Joint **Astronomy Colloquium**, U. of Virginia and National Radio Astronomy Observatory, May 24, 2018
- “The Dawn of Gravitational-Wave Astrophysics”:
 - **Robert Hofstadter Lecture, Physics and Applied Physics Colloquium**, Stanford University, April 3, 2018
 - Charles **Lauritsen Memorial Lecture, Physics Colloquium**, Caltech, April 5, 2018
 - **Physics Colloquium**, New York University, April 19, 2018
 - Joint **Astrophysics Colloquium**, Princeton and Institute for Advanced Study, May 1, 2018
- “Cosmic Collisions Reveal Einstein’s Gravitational-Wave Universe”, **Robert Hofstadter Public Lecture**, Stanford University, April 2, 2018
- “Einstein’s Waves: Cosmic Sounds from Black Holes and Neutron Stars”, **COFI Distinguished Lecture**, COFI and University of Puerto Rico, November 12 and 13, 2018

In 2017:

- “The Dawn of Gravitational-Wave Astrophysics”, **Physics Colloquium**, University of Illinois at Urbana-Champaign, December 6, 2017
- “Multi-Messenger Astronomy with Gravitational Waves”, **Astronomy Seminar**, McGill University, November 21, 2017
- “Multi-Messenger Astronomy with Gravitational Waves”, **Sackler Astrophysics Colloquium**, CITA (Canadian Institute for Theoretical Astrophysics), November 17, 2017
- “Einstein’s Waves: New Cosmic Sounds”, **Sackler Public Lecture**, CITA (Canadian Institute for Theoretical Astrophysics), November 16, 2017
- “Gravitational-Wave Astrophysics”, **Walker Lecture**, Physics Department, George Washington University, September 21, 2017
- “Gravitational-Wave Astrophysics for Massive Stars”, **Invited Talk**, KITP Conference on Phenomena, Physics, and Puzzles Of Massive Stars and their Explosive Outcomes, KITP, UCSB, March 20 – 24, 2017

In 2016:

- “The Promise and Challenges of Gravitational-Wave Astronomy”, **Invited Keynote Opening Lecture**, SCIALOG on Time Domain Astrophysics, Research Corporation, October 13 – 16, 2016
- “Einstein’s Waves: New Cosmic Sounds”, **Public Lecture**, McGill Space Institute, September 29, 2016
- “The First Direct Observation of Gravitational Waves Merging Binaries”, **Invited Talk**, Binary Stars in Cambridge, July 24 - 30, 2016
- “LIGO Discovery of a Binary Black Hole Merger” and “The Dawn of Gravitational-Wave Astrophysics”:
 - Physics Colloquium**, Stanford U., November 29, 2016
 - Physics Colloquium**, McGill U., September 30, 2016
 - ACP Colloquium**, Aspen Center for Physics, July 14, 2016

CITA Colloquium, Canadian Institute for Theoretical Astrophysics, May 26, 2016
Institute for Theory and Computation, Harvard U., May 20, 2016
Astronomy Colloquium, Yale U., May 5, 2016
Physics Colloquium, Argonne National Lab, April 29, 2016
Physics Colloquium, Fermi National Lab, March 23, 2016
Theoretical Astrophysics Center Seminar, U. of California, Berkeley, March 14, 2016
Physics Colloquium, Northwestern U., March 4, 2016

- “Implications of Joint EM/GW Detections”, **Invited Talk** at the 9th Sackler Conference in Theoretical Astrophysics – “The Transient Sky”, Harvard University, May 16 - 19, 2016
- “Gravitational-Wave Astrophysics”, **Invited Talk**, Black Holes 100, Inaugural Conference of the Black Hole Center at Harvard University, April 18-19, 2016
- “Implications of the LIGO Discovery of a Binary Black Hole”, **Invited Plenary Talk combined with Bethe Prize Talk**, Special LIGO Plenary Session, Annual April Meeting of the American Physical Society, April 16 - 19, 2016
- “Gravitational-Wave Transients”, **Invited Talk**, Annual Meeting of the High-Energy Astrophysics Division (HEAD) of the American Astronomical Society (AAS), April 3 - 7, 2016
- “The Era of Gravitational-Wave Astrophysics”, **Invited Talk** to the Committee on Astronomy and Astrophysics, National Academy of Sciences, March 30, 2016
- “The Quest for the Era of Gravitational-Wave Astrophysics”, **Gravity Seminar**, Physics Department, Princeton U., February 12, 2016

In 2015:

- “Astrophysics of Binary Black Holes”, **LIGO/Virgo-Collaborations-wide Colloquium**, November 12, 2015
- “Gravitational Wave Astrophysics: Detections, Electro-Magnetic Followups & Beyond”, **Invited Talk** at High-Energy Large- and Medium-class Space Missions in the 2020’s, June 29 - July 1, 2015
- “Data Analysis: How will plans change after the first detections? What would trigger new analyses or deeper studies?”, **Invited Talk** at What Comes Next for LIGO? Planning for the Post-Detection Era in Gravitational-Wave Detectors and Astrophysics, May 7 - 8, 2015
- “Status and Prospects for Gravitational-Wave Physics and Astronomy”, **Invited Talk** to the Board of Physics and Astronomy of the National Academy of Sciences (one of three co-presenters along with Rai Weiss and Tom Prince), April 25, 2015
- “Astronomy with LIGO”, **Astrophysics Colloquium**, UCLA, February 25, 2015

In 2014:

- “Binary Compact Mergers: Localization and Astrophysics with Gravitational-Wave Sources”, Talk at Swift: 10 Years of Discovery, Rome, Italy, Dec 2 - 5, 2014
- “Searching for Electromagnetic Counterparts of Gravitational-Wave Transients”, Talk at The Universe of Digital Sky Surveys, Naples, Italy, Nov 25 - 28, 2014
- “Localizing Gravitational-Wave Binaries: Challenges and Solutions”, Talk at Second Annual GMT Community Science Meeting, Washington DC, USA, Oct 6 - 8, 2014
- “Gravitational-Wave Astrophysics with LIGO/Virgo”, **Invited Review** at NEB16 - Recent Developments in Gravity, Mykonos, Greece, Sep 17 - 20, 2014
- “Astronomy with LIGO”, **Astronomy Colloquium**, Harvard University, March 13, 2014

- “Gravitational-Wave and Neutrino Messengers”, **Invited Review** at Gamma-Ray-Bursts/Supernovae/Magnetars Thinkshop, Bormio, Italy, Jan 20 - 24, 2014

In 2013:

- “Probing the Core Collapse Mechanism with Binaries”, Talk at Conference on Supernovae, Yukawa Institute for Theoretical Physics, Kyoto University, Japan, Oct 28 - Nov 1, 2013

In 2012:

- “Decoding Signals from Double Compact Objects”, **Astronomy Colloquium**, Yale University, March 1, 2012

In 2011:

- “The Quest for Understanding the Birth and Evolution of Compact Objects”, **Invited Talk**, Clay Fellows Symposium - Tenth Anniversary, Harvard-Smithsonian Center for Astrophysics, April 7, 2011

In 2010:

- “Population Modeling of X-Ray Binaries”
Invited Review Talk at International Conference *High Energy View of Accreting Objects: AGN and X-ray Binaries*, October 5-14, 2010; astro.physics.uoc.gr/Conferences/xworkshop/
- “Binary Compact Objects and their Powerful Astrophysics”
Astronomy Colloquium, Harvard University, Cambridge, MA, March 18, 2010

In 2009:

- “Extreme Objects in the Universe”
Invited Introductory Talk for session “Extreme Objects in the Universe” at the 15th Annual German-American Kavli Frontiers of Science symposium, June 4-7, 2009, Irvine, CA, sponsored by the National Academy of Science
- “Binary Compact Objects and their Powerful Astrophysics”
Astronomy Colloquium, The Ohio State University, April 23, 2009

In 2008:

- “Black Holes and Neutron Stars: From Explosive Birth to Powerful Mergers”
Scientific Colloquium, NASA Goddard SFC, October 17, 2008
- “Binary Compact Objects and Their Powerful Astrophysics”
Astronomy Colloquium, University of Chicago, April 30, 2008
- “Neutron Stars and Black Holes: Birth, Gamma-Ray Bursts, and Gravitational Waves”
APS Maria Goeppert-Mayer Award Talk, APS April Meeting, April 12-16, 2008
- “The Origin of Black Holes”
Undergraduate Seminar at Rutgers, The State University of New Jersey, April 1, 2008
- “Binary Compact Objects and Their Powerful Astrophysics”
Astronomy Colloquium at Rutgers, The State University of New Jersey, March 31, 2008
- “Neutron Stars and Black Holes: Their Birth and the Detection of Gravitational Waves”
General Colloquium at the Aristotle University of Thessaloniki, Greece, March 5, 2008

- “The Birth of Neutron Stars and Black Holes”
Invited Talk at the First Midwest Conference for Undergraduate Women in Physics held at the University of Michigan, Ann Arbor, Michigan, January 19-20, 2008

In 2007:

- “Low-Mass X-Ray Binary Models for Ellipticals NGC3379 and NGC4278”
Talk at “A Population Explosion: The Nature and Evolution of X-ray Binaries in Diverse Environments” in St. Petersburg Beach, Florida, November 2, 2007.
- “Black Holes and Neutron Stars: Paradigms Being Challenged”
Talk at the Packard Fellows Symposium in Monterey, California, September 2007
- “Neutron Stars: Formed, Spun and Kicked”
Invited Review at “40 Years of Pulsars: Millisecond Pulsars, Magnetars, and More” held at McGill University, Montreal, August 12-17, 2007
- “Understanding LMXBs in Elliptical Galaxies”
Talk at the AAS Meeting held Seattle January 5-10, 2007

In 2006:

- “Accreting Compact Objects in Nearby Galaxies”
Physics Colloquium at Michigan State University, East Lansing, November 9, 2006

In 2005:

- “Compact Objects in Binaries”
Invited Colloquium at the Institute of Theory and Computation, Harvard-Smithsonian Center for Astrophysics, Boston, December 2, 2005
- “Theoretical Models of X-Ray Sources in Clusters”
Invited Review at the Modest-6 Meeting, Northwestern University, August 29-31, 2005
- “X-Ray Binaries in Nearby Galaxies”
Invited Talk at Close Binaries in the 21st Century, Syros, Greece, June 27-30, 2005
- “Stellar Black Hole Mergers with Intermediate Mass Black Holes: Event Rate for LISA”
Talk at the Aspen Summer Workshop LISA Data: Analysis, Sources and Science, May 29 - June 19, 2005
- “Astrophysics of Gravitational Wave Sources”
Special Physics Colloquium, Northwestern University, May 25, 2005
- “LISA Sources and Astrophysics: Tides in White Dwarfs and Mass Segregation in Galactic Centers”
Talk at LISA Workshop, Penn State University, May 12-13, 2005

In 2004:

- “Expectations for Gravitational-Wave Detection from Binary Inspirals”
Invited Review at the 14th Workshop on General Relativity and Gravitation, Kyoto, Japan, November 29 - December 3, 2004.
- “The Formation of Relativistic Double Neutron Stars”
Special Astronomy Colloquium, McGill University, Montreal, Canada, August 24, 2004.
- “X-Ray Binaries and Young Stellar Clusters”
Invited Talk at Massive Stars in Interacting Binaries, Montreal, Canada, August 16-20, 2004.
- “Black Hole Formation in X-Ray Binaries”
Invited Talk at the International Astrophysics Conference on Interacting Binaries: Accretion, Evolution and Outcomes, Cefalu, Sicily, July 4-10, 2004.
- “Galactic Double Neutron Stars for LISA”
Invited Talk at the 5th International LISA Symposium, ESTEC, Noordwijk, The Netherlands, July 12-15, 2004
- “The Most Relativistic Double Pulsar: Implications for Gravitational-Wave Detection and Neutron-Star Formation ”
Joint Tufts/CfA/MIT Seminar, Harvard University, February 10, 2004
- “Eccentric PSR-WD Binaries”
Invited Talk, at the Winter Aspen Conference on Binary Pulsars, Aspen Center for Physics, January 11-17, 2004
- “Inspiral Compact Objects: Detection Expectations”
Invited Talk, at International Conference on Gravitation and Cosmology, Kochi, India, January 5-10, 2004

In 2003:

- “Accreting Black Holes in the Galaxy and Beyond...”
High-Energy Astrophysics Division Lunch Seminar, at Harvard-Smithsonian Center for Astrophysics, December 10, 2003

- “The Milky Way Reveals a New Relativistic Binary Pulsar: Implications for Gravitational Wave Detection”
Astronomy Colloquium, MIT, December 9, 2003
- “X-ray Binaries in Nearby Galaxies”
Invited Talk, at IAU Colloquium 194: Compact Binaries in the Galaxy and Beyond, LaPaz, Mexico, November 17-22, 2003
- “Stellar Populations and Gravitational Wave Observations”
Invited Talk, at the Second Gravitational Wave Phenomenology Workshop, Penn State University, November 6-8, 2003
- “Double Compact Objects: Detection Expectations”
Physics & Astronomy Colloquium, Louisiana State University, October 16, 2003
- “Binary Pulsars with Massive White-Dwarf Companions”
Invited Talk, at the Gravitational-Wave Advanced Detector Workshop, Aspen Center for Physics, February 2-8, 2003
- “Populations of X-Ray Binaries in Nearby Galaxies”
Invited Review, at Kavli ITP Conference on Globular Clusters: Formation, Evolution, and the Role of Compact Objects, Santa Barbara, January 27-31, 2003
- “X-Ray Binaries in Nearby Galaxies”:
Astronomy Colloquium, University of Michigan, December 4, 2003
Astronomy Colloquium, University of Illinois at Urbana, March 4, 2003
Astronomy Colloquium, University of Chicago, February 12, 2003
Astronomy Colloquium, LLNL, January 24, 2003
Astronomy Colloquium, University of California at Berkeley, January 23, 2003
Astronomy Colloquium, University of Wisconsin, January 21, 2003

In 2002:

- “What can Gravitational Waves tell us about Binary Compact Objects?”
Invited Talk, Focus Session “Stellar Populations and Gravitational-Wave Observations”, at the Center for Gravitational-Wave Physics, Penn State, December 2-5, 2002
- “Inspiral Signals from Double Neutron Stars”
Invited Talk, in Radio Pulsars, Greece, August 26-29, 2002
- “Binary Compact Object Inspiral”
Invited Talk, Astronomical Telescopes and Instrumentation, Astronomy Outside the EM Spectrum, Hawaii, August 22-28
- “Gamma-Ray Bursts and Gravitational Waves”
Invited Talk, Harvard Conference on Gamma-Ray Bursts: The Brightest Explosions in the Universe, Harvard University, May 20-23, 2002
- “Double Compact Objects as Gravitational-Wave Sources: What can we learn?”
Astronomy Colloquium, Indiana University, March 19, 2002
- “Formation and Evolution of Black-Hole X-Ray Binaries”
Invited Review at Black Holes: Theory Confronts Reality, Three Years Later, Institute for Theoretical Physics, Santa Barbara, February 25-28, 2002
- “NS-NS Inspiral: Implications for Gravitational Wave Detection and Connections to Gamma-Ray Bursts”
Invited Talk at a Special HEAD Session on Gravitational Wave and High Energy Astrophysics, 199th Meeting of the American Astronomical Society, Washington DC, January 6-10, 2002

In 2001:

- “Gravitational Waves and Stellar Populations”
Invited Talk, at the Gravitational Wave Phenomenology Workshop, Penn State, November 6-8, 2001
- “Double Compact Objects as Gravitational-Wave Sources”
Physics Colloquium, Univ. of Wisconsin at Milwaukee, October 26, 2001
- “Gravitational Waves from Compact Object Inspiral: Detection Prospects and Challenges”
Clay Fellowship Colloquium, Harvard-Smithsonian Center for Astrophysics, April 26, 2001
- “Predictions for GW Detection of Compact Object Inspiral Events”
Invited Review, at the Aspen Winter Conference on Gravitational Waves, Aspen, February 4 - 10, 2001