

Curriculum Vitae

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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 (White Dwarfs, Neutron Stars, and Black Holes)
Populations of Compact Objects in Binaries and Massive Stars, as Gravitational-Wave Sources, X-ray
Binaries, Binary Pulsars, Gamma-Ray Bursts, Supernovae and Supernova Progenitors
Formation and Evolution of Binary Systems with Compact Objects in the Milky Way and other
galaxies, in Fields and Dense Stellar Environments
Time-Domain, Gravitational-Wave, and Transient Astrophysics
Advanced Data Analysis and Inference Methods

EMPLOYMENT

- 2017 – Daniel I. Linzer Distinguished University Professor
and Professor of Physics and Astronomy
- 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

2018	Dannie Heineman Prize for Astrophysics of the American Institute of Physics (AIP) and the American Astronomical Society (AAS)
2017	Aristotle University of Thessaloniki Distinguished Alumni Award
2017 – 2022	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 of the 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)

SELECTED COLLABORATION AWARDS for the LIGO Discovery of GW150914

2017	<i>Science</i> ’s Breakthrough of the Year Princess of Asturias Award for Technical and Scientific Research
2017	jointly to the LIGO Scientific Collaboration and to Weiss, Thorne, and Barish. Einstein Medal from the Einstein Society in Bern, Switzerland
2017	to the LIGO Scientific Collaboration UK RAS Group Achievement Award in Astronomy
2017	to the LIGO Team Bruno Rossi Prize (AAS HEAD)
2016	to Gonzalez and the LIGO Scientific Collaboration
2016	APS Physics Highlights of the Year, #1
2016	<i>Science</i> ’s Breakthrough of the Year IOP Physics World Breakthrough of the Year
2016	to the LIGO Scientific Collaboration Gruber Cosmology Prize
2016	to Drever, Thorne, Weiss, and the LIGO Discovery Team Special Breakthrough Prize in Fundamental Physics to Drever, Thorne, Weiss, and the LIGO Discovery Team

SELECTED COLLABORATION AWARDS for the LIGO Discovery of GW170817

2017	<i>Science</i> ’s 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

2018	Frank Edmondson Lectureship, Indiana University
2018	Robert Hofstadter Lectureship, Stanford University
2018	Charles Lauritsen Lectureship, Caltech
2017	Raymond Sackler Lectureship, Canadian Institute for Theoretical Astrophysics (CITA)
2017	Frances Walker Lectureship, George Washington University

SELECTED SERVICE IN THE PHYSICS AND ASTRONOMY COMMUNITY

- Co-Chair, 3G Science Team, GWIC 3G Subcommittee on 3rd Generation Gravitational-Wave Detectors (2017 –)
- Elected Member of the Executive Committee of the LIGO Scientific Collaboration (2017 – 2019)
- 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 –)
- Elected Trustee, Aspen Center for Physics (2014 –)
- Presenter and Member, Panel on Gravitational-Wave Astrophysics for the Board on Physics and Astronomy, National Academy of Sciences (2015, 2016)
- 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)
- Member, Astrophysics Subcommittee of the NASA Advisory Council Science Committee (2010 – 2013)
- 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)
- 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)

RESEARCH ADVISING & MENTORING

- 18 Postdoctoral Research Fellows and Associates
- 15 Ph.D. Thesis Students

- More than 40 undergraduate research students; 13 completed Senior Theses projects.

FUNDING

- Sources: NSF, NASA, Simons Foundation, Packard Foundation, Research Corporation for Science Advancement, CIERA Board of Advisors, & Northwestern University
- Total amount of current funding as PI: \$6,256,032
- Total amount of past funding as PI: \$8,994,464

RECENT AND UPCOMING INVITED TALKS

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**, UVa/NRAO, May 24, 2018
 - **Astronomy Colloquium**, Indiana University, September, 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, April 24, 2018
- “Einstein’s Waves”:
 - **Robert Hofstadter Public Lecture**, Stanford University, April 2, 2018
 - **Frank Edmondson Public Lecture**, Indiana University, September, 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

PUBLICATIONS

- More than 200 since 1998 with major contributions; almost 350 including all publications with the LIGO Scientific Collaboration.

- h-indices from NASA ADS system:
56 (12,000+ citations) without and 80 (23,000+ citations) with the “Other LIGO Scientific Collaboration publications”, respectively