

# Stephen R. Taylor, Ph.D.

ASSOCIATE PROFESSOR OF PHYSICS & ASTRONOMY  
[stephen.r.taylor@vanderbilt.edu](mailto:stephen.r.taylor@vanderbilt.edu)

Department of Physics & Astronomy,  
Vanderbilt University | Nashville, TN 37235

<https://my.vanderbilt.edu/stephentaylor>  
Stephen R. Taylor on <https://scholar.google.com>

## EDUCATION

UNIVERSITY OF CAMBRIDGE	CAMBRIDGE, UK	PH.D.	2014
	<i>Thesis: Exploring The Cosmos With Gravitational Waves</i>		Advisor: Dr. Jonathan R. Gair
UNIVERSITY OF OXFORD	OXFORD, UK	MPHYS (1ST CLASS)	2010
	<i>Thesis: The Cosmic Evolution Of Black-hole Accretion</i>		Advisor: Prof. Steven Rawlings

## PROFESSIONAL APPOINTMENTS & EMPLOYMENT HISTORY

Associate Professor of Physics & Astronomy, Vanderbilt University	2025-present
Assistant Professor of Physics & Astronomy, Vanderbilt University	2019-2024
NANOGrav Senior Postdoctoral Fellow, California Institute of Technology	2017-2019
Caltech Postdoctoral Scholar, NASA Jet Propulsion Laboratory	2016-2017
NASA Postdoctoral Fellow, NASA Jet Propulsion Laboratory	2014-2016

### Professional affiliations

- North American Nanohertz Observatory for Gravitational waves (NANOGrav), Chair
- Gravitational Wave International Committee (GWIC), NANOGrav Representative
- LISA Science Team (LST), Member (*1/6 US contingent on 18 person team*)
- International Pulsar Timing Array (IPTA), Member
- LISA Consortium, Member
- International Society of General Relativity & Gravitation (ISGRG), Lifetime Member
- American Physical Society (DGRAV, DAP), Lifetime Member
- Royal Astronomical Society, Fellow
- American Astronomical Society, Member

## HONORS & AWARDS

Chancellor's Award For Research, Vanderbilt University	2025
Chancellor's Faculty Fellowship, Vanderbilt University	2025-2027
Bruno Rossi Prize, American Astronomical Society	Jan 2025
Top 1% Cited Paper Award (North America) – IOP Publishing	Nov 2024
NASA appointee to ESA-NASA LISA Science Team; 1of 6 US scientists	Jul 2024
Frontiers of Science Award in Theoretical Physics, International Congress of Basic Science	Mar 2024
Eddington Lecturer, University of Cambridge & Royal Astronomical Society	Mar 2024
Fred Kavli Plenary Lectureship, American Astronomical Society	Jan 2024
National Science Foundation CAREER Award	Dec 2021
Visiting Astronomer, l'Observatoire de Paris	Dec 2019
Dean's Faculty Fellowship, Vanderbilt University College of Arts & Science	2019-2021
Marie Skłodowska-Curie Incoming Fellowship, University of Birmingham [ <i>declined</i> ]	2017
OzGrav ARC Centre of Excellence Fellowship, Swinburne & Monash Universities [ <i>declined</i> ]	2017
International Pulsar Timing Array Steering Committee Prize – Honorable Mention	2016
Gravitational Wave International Committee Thesis Prize – Honorable Mention	2016

NASA Postdoctoral Fellowship, Jet Propulsion Laboratory	2014
UK Science and Technology Facilities Council (STFC) – Full Ph.D. studentship award	2010
Scholarship, Jesus College, Oxford, UK	2007-2010

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## RESEARCH FUNDING

External Research Grants Received | *Total as PI = \$2.25M; as PI / Co-PI / Institutional-PI = \$6M*

1. "Towards embedding population inference within the LISA global fit"; NASA LISA Preparatory Science, Award #80NSSC26K0342.  
Principal Investigator: **Stephen R. Taylor**  
Science PI: Alexander Criswell [postdoctoral fellow]  
Total award: \$501,021; Period of award: 01/01/2026–12/31/2028
2. "Mapping the host galaxies of low-frequency gravitational-wave sources"; National Science Foundation AST, Award #2307719; Windows on the Universe program.  
Principal Investigator: **Stephen R. Taylor**  
Co-PI: Chung-Pei Ma  
Total award: \$625,613; Period of award: 09/01/2023–08/31/2026
3. "Optimization of Multi-Messenger Searches for Supermassive Black Hole Binaries"; NASA FINESST, Award #80NSSC23K1442.  
Principal Investigator: **Stephen R. Taylor**  
Future Investigator: Polina Petrov [PhD student]  
Total award: \$150,000; Period of award: 09/01/2023–08/31/2026
4. "CAREER: Unveiling the Nanohertz GW Discovery Landscape by Broadening Participation In Multi-messenger Astrophysics"; National Science Foundation CAREER, PHY; Award #2146016.  
Principal Investigator: **Stephen R. Taylor**  
Total award: \$450,000; Period of award: 12/15/2021 - 11/30/2026
5. "Establishing Multimessenger Astronomy Inclusive Training"; National Science Foundation DGE; Award #2125764.  
Principal Investigator: Kelly Holley-Bockelmann  
Co-PIs: Arnold Burger, Jessie Runnoe, **Stephen R. Taylor**  
Total award: \$3,000,000; Period of award: 09/01/2021–08/31/2026
6. "The NANOGrav Physics Frontier Center"; National Science Foundation PHY & AST; PFC & MSIP programs. Award #2020265.  
Principal Investigator: Xavier Siemens  
Co-PIs: Scott Ransom, James Cordes, Maura McLaughlin, Sarah Burke-Spolaor  
Institutional PI: **Stephen R. Taylor**  
Total award: \$17,000,000 (\$758,139 for Vanderbilt); Period of award: 04/01/2021–03/31/2026
7. "Multi-messenger Titans: Probing The Dynamics & Environments Of Supermassive Binary Black Holes"; National Science Foundation AST, Award #2007993; Windows on the Universe program.  
Principal Investigator: **Stephen R. Taylor**  
Co-PI: Jessie Runnoe  
Total award: \$523,920; Period of award: 09/01/2020–08/31/2024

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## Observing Proposals

1. Co-Investigator: "The North American Nanohertz Observatory for Gravitational Waves"; Green Bank Telescope. Proposal GBT24B-427. Status: awarded 1723.5 hours. May 2024

2. Co-Investigator: "The North American Nanohertz Observatory for Gravitational Waves"; Very Large Array. Proposal VLA/24B-429. Status: awarded 243.0 hours. May 2024
  3. Co-Investigator: "High impact MSPs for the International Pulsar Timing Array"; Green Bank Telescope. Proposal GBT17A-353. Status: awarded 21.0 hours. Nov 2016.
  4. Co-Investigator: "High impact MSPs for the International Pulsar Timing Array"; Arecibo Radio Telescope. Proposal P3133. Status: awarded 32.5 hours. Sep 2016.
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### Internal Institutional Grants

1. "Bridging the Gulf between Solar-system-sized and Galaxy-sized Gravitational Wave Detectors"; Scaling Success Award; Vanderbilt University Office of the Vice Provost for Research & Innovation Principal Investigator: Stephen R. Taylor  
Total award: \$60,000; Period of award: 11/2024–11/2025
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### SELECTED PUBLICATIONS

*h-index = 60*

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*Full list of publications given on Page 8*

*Note: the policy of NANOGrav and some other collaborations is for authorship on all large analysis papers to be alphabetical. These are labeled by a star. For all others, author ordering indicates the level of participation.*

#### *Top 5 Cited (overall)*

1. [1580 citations; Co-lead Author] \*G. Agazie, A. Anumarpudi, A. M. Archibald, Z. Arzoumanian, P. T. Baker, B. Bécsy, L. Blecha, A. Brazier, P. R. Brook, S. Burke-Spoloar, and 105 colleagues (2023), "The NANOGrav 15 yr Data Set: Evidence for a Gravitational-wave Background", *The Astrophysical Journal*, 951, L8 (24 pp), <https://doi.org/10.3847/2041-8213/acdac6>, arXiv:2306.16213.
  2. [853 citations; Chair of Working Group, Core Analysis Team] \*Z. Arzoumanian, P. T. Baker, H. Blumer, et al. (2020), "The NANOGrav 12.5 yr Data Set: Search for an Isotropic Stochastic Gravitational-wave Background", *The Astrophysical Journal*, 905, L34 (18 pp), <https://doi.org/10.3847/2041-8213/abd401>, arXiv:2009.04496.
  3. [847 citations] \*A. Afzal, G. Agazie, A. Anumarpudi, A. M. Archibald, Z. Arzoumanian, P. T. Baker, B. Bécsy, J. J. Blanco-Pillado, L. Blecha, K. K. Boddy, and 114 colleagues (2023), "The NANOGrav 15 yr Data Set: Search for Signals from New Physics", *The Astrophysical Journal*, 951, L11 (56 pp), <https://doi.org/10.3847/2041-8213/acdc91>, arXiv:2306.16219.
  4. [629 citations] \*Z. Arzoumanian, A. Brazier, S. Burke-Spoloar, et al. (2018), "The NANOGrav 11-year Data Set: High-precision Timing of 45 Millisecond Pulsars", *The Astrophysical Journal Supplement Series*, 235, 37 (41 pp), <https://doi.org/10.3847/1538-4365/aab5b0>, arXiv:1801.01837.
  5. [497 citations; Core Analysis Team] L. Lentati, **S. R. Taylor**, C. M. F. Mingarelli, et al. (2015), "European Pulsar Timing Array limits on an isotropic stochastic gravitational-wave background", *Monthly Notices of the Royal Astronomical Society*, 453, 2576-2598 (23 pp), <https://doi.org/10.1093/mnras/stv1538>, arXiv:1504.03692.
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#### *Top 5 Cited (non-collaboration)*

1. [310 citations; Co-lead Author] S. Burke-Spoloar, **S. R. Taylor**, M. Charisi, T. Dolch, J. S. Hazboun, A. M. Holgado, L. Z. Kelley, T. J. W. Lazio, D. R. Madison, N. McMann, C. M. F. Mingarelli, A. Rasskazov, X. Siemens, J. J. Simon, and T. L. Smith (2019), "The astrophysics of nanohertz gravitational waves", *Astronomy and Astrophysics Review*, 27, 5 (78 pp), <https://doi.org/10.1007/s00159-019-0115-7>, arXiv:1811.08826.

2. [201 citations] **S. R. Taylor**, J. R. Gair, and I. Mandel (2012), "Cosmology using advanced gravitational-wave detectors alone", Physical Review D, 85, 023535, (22 pp), <https://doi.org/10.1103/PhysRevD.85.023535>, arXiv:1108.5161.
  3. [173 citations] **S. R. Taylor** and J. R. Gair (2012), "Cosmology with the lights off: Standard sirens in the Einstein Telescope era", Physical Review D, 86, 023502, (23 pp), <https://doi.org/10.1103/PhysRevD.86.023502>, arXiv:1204.6739.
  4. [126 citations] N. S. Pol, **S. R. Taylor**, L. Z. Kelley, S. J. Vigeland, J. Simon, S. Chen, Z. Arzoumanian, P. T. Baker, B. Bécsy, A. Brazier, and 43 colleagues (2021), "Astrophysics Milestones for Pulsar Timing Array Gravitational-wave Detection", The Astrophysical Journal, 911, L34 (10 pp), <https://doi.org/10.3847/2041-8213/abf2c9>, arXiv:2010.11950.
  5. [173 citations] C. M. F. Mingarelli, T. J. W. Lazio, A. Sesana, J. E. Greene, J. A. Ellis, C.-P. Ma, S. Croft, S. Burke-Spoliar, and **S. R. Taylor** (2017), "The local nanohertz gravitational-wave landscape from supermassive black hole binaries", Nature Astronomy, 1, 886-892 (7 pp), <https://doi.org/10.1038/s41550-017-0299-6>, arXiv:1708.03491.
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## Reviews

1. **S. R. Taylor** (2025), "The dawn of gravitational wave astronomy at light-year wavelengths: insights from pulsar timing arrays", Springer Nature: Astrophysics and Space Science, 370, 124, <https://doi.org/10.1007/s10509-025-04513-9>, arXiv:2511.08966.
  2. S. Burke-Spoliar, **S. R. Taylor**, M. Charisi, T. Dolch, J. S. Hazboun, A. M. Holgado, L. Z. Kelley, T. J. W. Lazio, D. R. Madison, N. McMann, C. M. F. Mingarelli, A. Rasskazov, X. Siemens, J. J. Simon, and T. L. Smith (2019), "The astrophysics of nanohertz gravitational waves", Astronomy and Astrophysics Review, 27, 5 (78 pp), <https://doi.org/10.1007/s00159-019-0115-7>, arXiv:1811.08826.
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## Books

1. **S. R. Taylor**, "Nanohertz Gravitational Wave Astronomy". Published November 24, 2021 by CRC Press (172 pp), [ISBN 9780367768621](#)
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## Book Chapters

1. **S. R. Taylor** and J. Simon (2018), "From Megaparsecs To Milliparsecs: Galaxy Evolution and Supermassive Black Holes with NANOGrav and the ngVLA", Science with a Next Generation Very Large Array, ASP Conference Series, Vol. 517. ASP Monograph 7, 611-618 (8 pp), [ISBN: 9781583819197](#), arXiv:1808.06020.
  2. S. Vitale, D. Gerosa, W. M. Farr, and **S. R. Taylor** (2021), "Inferring the properties of a population of compact binaries in presence of selection effects", Handbook of Gravitational Wave Astronomy Editors C. Bambi, S. Katsanevas and K. Kokkotas, Springer Singapore, (57 pp), <https://doi.org/10.1007/978-981-15-4702-7>, arXiv:2007.05579.
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## Editorials

1. S. Vigeland and **S. Taylor** (2023), "The fingerprint of a cosmos swirling with gravitational waves", Physics Today, 2023, 1128a, <https://doi.org/10.1063/PT.6.1.20231128a>.
  2. **S. Taylor** (2020), "A Lopsided Merger", Physics Online Journal, 13, 114, <https://doi.org/10.1103/Physics.13.114>.
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## RECENT MAJOR INVITED PRESENTATIONS & PLENARIES

*Full list of presentations given on Page 16*

1. **[Invited Talk]** "LISA Data Analysis: Challenges & Opportunities", American Physical Society Global Summit, Anaheim, CA, Mar 2025
2. **[Invited Review Talk]** "Hunting Supermassive Black-hole Binaries: The Next Frontier In Multi-messenger Astrophysics", IoA@50 Conference, Institute of Astronomy, Cambridge, UK, Jul 2024
3. **[Award Lecture]** Eddington Lecture: "The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths", Royal Astronomical Society Meeting, London, UK, Mar 2024
4. **[Award Lecture]** Eddington Lecture: "The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths", Institute of Astronomy, Cambridge, UK, Mar 2024
5. **[Award Plenary]** Fred Kavli Lecture: "NANOGrav – The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths", American Astronomical Society Meeting, New Orleans LA, Jan 2024.
6. **[Plenary]** The First Evidence for Nanohertz-frequency Gravitational Waves. Texas Symposium for Relativistic Astrophysics, Shanghai, China, Dec 2023.
7. **[\*NSF Discovery Announcement; Main Speaker]** Announced NANOGrav's evidence for gravitational waves, National Science Foundation Headquarters, Washington DC, June 29 2023
8. **[Plenary]** Pulsar Timing Arrays: The Next Frontier Of Gravitational Wave Astronomy 22nd International Conference on General Relativity and Gravitation (GR22) & 13th Edoardo Amaldi Conference on Gravitational Waves (Amaldi13), Valencia, Spain, Jul 2019.

## TEACHING

### Courses Taught

*Vanderbilt University*

ASTR 3900 / 8090	GENERAL RELATIVITY & COSMOLOGY	S2020, F2020-2025
– Cross-listed introductory GR course, with extended sequences on black holes and gravitational waves.		
ASTR 3970 / 8070	ASTROSTATISTICS	S2021-2025
– Cross-listed course on probability, statistical inference, data analysis, and machine learning. Course is highly interactive and centered around Jupyter notebooks. Developed by Taylor.		
ASTR 8001	ORDER OF MAGNITUDE ASTROPHYSICS	F2019
GUEST LECTURER	ASTR 8001	F2021
GUEST LECTURER	PHYS 1911: PRINCIPLES OF PHYSICS I	F2019-2020
GUEST LECTURER	ASTR 1010: INTRODUCTION TO ASTRONOMY	S2021

*California Institute of Technology*

GUEST LECTURER	PH237: GRAVITATIONAL WAVES	S2016
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*Niels Bohr International Academy*

GUEST LECTURER	GRAVITATIONAL-WAVE ASTROPHYSICS	SUMMER 2021
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### Supervisory Research Training

*Postdoctoral Fellows*

Matthew Miles	2025-present
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Alexander Criswell	2024-present
Nima Laal	2023-present
Nihan Pol	2020-2023
*faculty at Texas Tech University	
Maria Charisi	2020-2023
*faculty at Washington State and Institute of Astrophysics, FORTH	

**Graduate students– directing thesis/dissertation research**

Sebastian Banaszak	2025-present
Levi Schult	2022-present
Polina Petrov	2021-present
Kyle Gersbach	2021-present
William Lamb	2020-present

**Master's students– directing thesis/dissertation research**

Celia Toral (VU-Fisk Bridge)	2023-2025
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**Undergraduate students**

17 students since 2016

**PhD Committee Member (excludes students under my direct supervision)**

7 ongoing, 2 defended and conferred

**Master's Committee Member (excludes students under my direct supervision)**

3 ongoing, 2 defended and conferred

**Undergraduate Honors Thesis Committee Member (excludes students under my direct supervision)**

4 students since 2021

**SERVICE****Vanderbilt Department of Physics & Astronomy**

Director of Graduate Studies, Astrophysics Graduate Program	F2025-present
Chair, P&A Faculty Search Committee in Astrophysics	F2025-S2026
Chair, Department Colloquium Committee	F2023-S2025
Member, High Energy Nuclear Physics Search Committee	F2021-S2022
Member, Climate Committee	F2020-S2022
Member, Physics Undergraduate Program Committee	F2019-S2020
Member, Astrophysics Graduate Program Committee	F2019-present
Co-Chair, VU P&A node of APS Inclusion, Diversity, & Equity Alliance	F2020-S2022

**Vanderbilt College of Arts & Science and University**

Member, Curriculum Committee, College of Arts & Science	F2024-present
Featured Faculty Member, Dare To Grow Campaign Event, New York NY	Sep 2023
Fireside Chat Speaker, Board of Trust Meeting, Nashville TN	Feb 2024

**Professional****Research Leadership**

Member, OzGrav ARC Center for Excellence Science Advisory Board	2025-present
Member, ESA-NASA LISA Science Team	2024-present
Chair, NANOGrav Collaboration	2023-present
Representative, Gravitational Wave International Committee	2023-present
Member, NANOGrav Management Team	2020-present

Member, International Pulsar Timing Steering Committee	2020-2021
Chair, NANOGrav Gravitational Wave Detection Working Group	2018-2022
Co-Chair, IPTA Gravitational Wave Analysis Group	2018-2019

*Conference Organization*

SOC member, LISA Symposium	Jul 2024
SOC member, Lorentz Center Workshop on Massive Black-hole Binaries	Jun 2024
SOC member, Amaldi Virtual Conference	Jul 2023
Organizer, EMIT Summer School (2 weeks)	Jul 2023
Organizer, VIPER Pulsar Timing Array Summer School (2 weeks)	Jul 2022
LOC Chair, NANOGrav Fall Meeting, Vanderbilt University	Oct 2021
Session Organizer, American Astronomical Society	
Special Session “The Next Decade Of nHz GW Astrophysics with PTAs”	Jan 2021
Special Session “New Results from NANOGrav” in Honolulu HI	Jan 2020
SOC member for International Pulsar Timing Array meeting in Pune, India	Jun 2019
Organizer of NANOGrav Deep Learning workshop at Caltech	May 2019
Organizer of International Pulsar Timing Array workshop at Caltech	Feb 2019
Co-organizer of NANOGrav Detection workshop at Caltech	Feb 2018
SOC member for International Pulsar Timing Array meeting in Sèvres, France	Jul 2017
Organizer of NANOGrav Astrophysics sprint week at West Virginia University	Apr 2017
Co-organizer of NANOGrav Detection workshop at Caltech	Mar 2017
Co-organizer of NANOGrav Hackathon at NCSA	Oct 2016
SOC Chair, NANOGrav Fall meeting, University of Illinois Urbana Champaign	Oct 2016
SOC and LOC member for NANOGrav Spring meeting at Caltech	Mar 2016
Co-organizer of NANOGrav student workshop at Caltech	Mar 2016
SOC and LOC member for British Gravity meeting (BritGrav) at Cambridge, UK	Mar 2014

*Seminar Organization*

Vanderbilt Astrophysics Seminar Series (committee)	2020-present
Caltech TAPIR Seminar Series (committee)	2019
Caltech/JPL Association for Gravitational Wave Research (executive committee)	2017-2019
Caltech TAPIR & LIGO Postdoctoral Lunch Seminar Series (organizer)	2015-2016

*Reviewer of International Journals*

Nature, Science, The Astrophysical Journal (and Letters), Monthly Notices of the Royal Astronomical Society, Physical Review D, Physical Review Letters

*Reviewer of Grant Proposals*

NASA Graduate Fellowship Program (NESSF, FINESST)  
 UK Science & Technology Facilities Council  
 National Science Foundation Division of Graduate Education (NRT, Gravitational-PHY, AAG)  
 Swiss National Science Foundation

## MEDIA ENGAGEMENT

*Selected Recent Articles*

[BBC News – featured profile](#)

[Scientific American](#)

[Washington Post](#)

The Guardian  
National Geographic

*Radio / Podcasts*

NSF's Discovery Files Podcast  
NPR Nashville

*Television / Video*

News Channel 5, Nashville  
Live broadcast of NANOGrav results from NSF HQ

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**FULL REVERSE-CHRONOLOGICAL PUBLICATION LIST**

**Submitted and in press**

1. D. Wright, K. Wayt, J. S. Hazboun, X. Siemens, R. van Haasteren, L. Schult, and S. R. Taylor (2025), "FrankenStat I: a New Approach to Pulsar Timing Array Data Combination", arXiv:2512.14807.  
**Submitted to Physical Review Letters.**
  2. N. Laal, S. R. Taylor, C. Matt, and K. Gultekin (2025), "Multimessenger Probes of the Supermassive Black Hole Binary Population: The Role of PTAs", arXiv:2512.11981. **Submitted to ApJ.**
  3. \*J. S. Hazboun, J. Simon, J. Baier, B. Larsen, D. J. Oliver, P. T. Baker, B. Bécsy, S. Chen, A. Diaz Hernandez, and 58 colleagues (2025), "The NANOGrav 12.5-year Data Set: Chromatic Noise Characterization & Mitigation with Time-Domain Kernels", arXiv:2511.22597. **Submitted to ApJ.**
  4. W. G. Lamb, J. M. Wachter, A. Mitridate, S. C. Sardesai, B. Bécsy, E. L. Hagen, S. R. Taylor, and L. Z. Kelley (2025), "Finite Populations & Finite Time: The Non-Gaussianity of a Gravitational Wave Background", arXiv:2511.09659. **Submitted to Physical Review D.**
  5. L. Schult, P. Petrov, S. R. Taylor, N. Pol, N. Laal, M. Charisi, and C.-P. Ma (2025), "Expectations for the first supermassive black-hole binary resolved by PTAs I: Model efficacy", arXiv:2510.01317.  
**Submitted to Physical Review D.**
  6. P. Petrov, L. Schult, S. R. Taylor, N. Pol, N. Laal, M. Charisi, and C.-P. Ma (2025), "Expectations for the first supermassive black-hole binary resolved by PTAs II: Milestones for binary characterization", arXiv:2510.01316. **Submitted to Physical Review D.**
  7. K. A. Gersbach, S. R. Taylor, B. Bécsy, A.-M. Lemke, A. Mitridate, and N. Pol (2025), "Mapping the Gravitational-wave Background Across the Spectrum with a Next-Generation Anisotropic Per-frequency Optimal Statistic", arXiv:2509.07090. **Submitted to Physical Review D.**
  8. A. W. Criswell, S. Banagiri, J. Lawrence, L. Schult, S. Rieck, S. R. Taylor, and V. Mandic (2025), "Flexible Spectral Separation of Multiple Isotropic and Anisotropic Stochastic Gravitational Wave Backgrounds in LISA", arXiv:2508.20308. **Submitted to ApJ.**
  9. \*N. Agarwal, G. Agazie, A. Anumarlapudi, A. M. Archibald, Z. Arzoumanian, J. G. Baier, P. T. Baker, B. Bécsy, L. Blecha, A. Brazier, and 109 colleagues (2025), "The NANOGrav 15 yr Data Set: Targeted Searches for Supermassive Black Hole Binaries", arXiv:2508.16534. **Submitted to ApJL.**
  10. \*Y. Chen, M. Daniel, D. J. D'Orazio, A. Mitridate, L. Sagunski, X. Xue, G. Agazie, J. G. Baier, P. T. Baker, B. Bécsy, and 82 colleagues (2024), "Galaxy Tomography with the Gravitational Wave Background from Supermassive Black Hole Binaries", arXiv:2411.05906. **Submitted to Nature Astronomy.**
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**Published**

1. S. R. Taylor (2025), "The dawn of gravitational wave astronomy at light-year wavelengths: insights from pulsar timing arrays", *Astrophysics and Space Science*, 370, 124 ( pp), <https://doi.org/10.1007/s10509-025-04513-9>, arXiv:2511.08966.
2. B. Larsen, C. M. F. Mingarelli, P. T. Baker, J. S. Hazboun, S. Chen, L. Schult, S. R. Taylor, J. Simon, J. Antoniadis, J. Baier, and 33 colleagues (2025), "Rapid construction of joint pulsar timing array data sets: the Lite method", *Monthly Notices of the Royal Astronomical Society*, 542, 3028-3048 (21 pp), <https://doi.org/10.1093/mnras/staf1420>, arXiv:2503.20949.
3. B. Bécsy, N. J. Cornish, P. Petrov, X. Siemens, S. R. Taylor, S. J. Vigeland, and C. A. Witt (2025), "Towards robust gravitational wave detections from individual supermassive black hole binaries", *Classical and Quantum Gravity*, 42, 175016 (19 pp), <https://doi.org/10.1088/1361-6382/adfd36>, arXiv:2502.18114.
4. N. Veronesi, M. Charisi, S. R. Taylor, J. Runnoe, and D. J. D'Orazio (2025), "The Host Galaxies of Pulsar Timing Array Sources: Converting Supermassive Black Hole Binary Parameters into Electromagnetic Observables", *The Astrophysical Journal*, 990, 46 (14 pp), <https://doi.org/10.3847/1538-4357/adf065>, arXiv:2505.11598.
5. \*G. Agazie, A. Anumarlapudi, A. M. Archibald, Z. Arzoumanian, J. G. Baier, P. T. Baker, B. Bécsy, L. Blecha, A. Brazier, P. R. Brook, and 95 colleagues (2025), "The NANOGrav 15 yr Data Set: Search for Gravitational-wave Memory", *The Astrophysical Journal*, 987, 5 (10 pp), <https://doi.org/10.3847/1538-4357/add874>.
6. \*G. Agazie, A. Anumarlapudi, A. M. Archibald, Z. Arzoumanian, J. G. Baier, P. T. Baker, B. Bécsy, L. Blecha, K. K. Boddy, A. Brazier, and 97 colleagues (2025), "The NANOGrav 15 yr Data Set: Harmonic Analysis of the Pulsar Angular Correlations", *The Astrophysical Journal*, 985, 99 (12 pp), <https://doi.org/10.3847/1538-4357/adc997>, arXiv:2411.13472.
7. N. Laal, S. R. Taylor, R. van Haasteren, W. G. Lamb, and X. Siemens (2025), "Solving the PTA data analysis problem with a global Gibbs scheme", *Physical Review D*, 111, 063067 (19 pp), <https://doi.org/10.1103/PhysRevD.111.063067>, arXiv:2410.11944.
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### Published Conference Proceedings (Refereed)

104. R. M. Shannon, S. Chamberlin, N. J. Cornish, J. A. Ellis, C. M. F. Mingarelli, D. Perrodin, P. Rosado, A. Sesana, S. R. Taylor, L. Wen, C. G. Bassa, J. Gair, G. H. Janssen, R. Karuppusamy, M. Kramer, K. J. Lee, K. Liu, I. Mandel, M. Purver, T. Sidery, R. Smits, B. W. Stappers, and A. Vecchio (2014), "Summary of session C1: pulsar timing arrays", *General Relativity and Gravitation*, 46, 1765 (11 pp), <https://doi.org/10.1007/s10714-014-1765-4>.

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### FULL LIST OF PRESENTATIONS

#### Invited Talks - International Conferences

\*Note that many talks from 03/2020 to 12/2021 are virtual as a result of the COVID-19 pandemic.

1. **[Invited Talk]** "LISA Data Analysis: Challenges & Opportunities", American Physical Society Global Summit, Anaheim CA, Mar 2025
2. **[Invited Closing Plenary Remarks]** "Science & AI", Science & Technology In Society Forum, Kyoto, Japan, Oct 2024
3. **[Invited Review Talk]** "Hunting Supermassive Black-hole Binaries: The Next Frontier In Multi-messenger Astrophysics", IoA@50 Conference, Institute of Astronomy, Cambridge, UK, Jul 2024
4. **[Award Lecture] Eddington Lecture:** "The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths", Royal Astronomical Society Meeting, London, UK, Mar 2024.

5. **[Award Plenary]** *Fred Kavli Lecture: “NANOGrav – The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths”, American Astronomical Society Meeting, New Orleans LA, Jan 2024.*
6. **[Plenary]** *The First Evidence for Nanohertz-frequency Gravitational Waves.* Texas Symposium for Relativistic Astrophysics, Shanghai, China, Dec 2023.
7. *NANOGrav Searches for a SGWB: Near-future Prospects & Milestones*  
Gravitational Wave Orchestra, Université Catholique de Louvain, Belgium, Sep 2022.
8. *Supermassive Black-hole Binary Demographics & Dynamics From PTA Gravitational Waves*  
Building Bridges: Towards a Unified Picture of Stellar and Black Hole Binary Accretion and Evolution, KITP, Santa Barbara CA, Mar 2022
9. *What’s Next?: The Upcoming Decade of PTA Science*  
European Pulsar Timing Array Meeting, (virtual), Mar 2022.
10. **[Plenary]** *NANOGrav: Cutting-edge Results From Pulsar Timing Anomalies* 2021, Indian Institute of Technology (IIT Hyderabad; virtual), Nov 2021.
11. *Charting The Next Frontier Of Gravitational Wave Astronomy With Pulsar Timing Arrays*  
Deutsche Forschungsgemeinshaft Research Training Group “Models Of Gravity” Colloquium, University of Bielefeld (virtual), Bielefeld, Germany, Jun 2020.
12. *Charting The Next Frontier Of Nanohertz Gravitational Wave Astronomy With The IPTA*  
Invited seminar, l’Observatoire de Paris, Paris, France, Dec 2019.
13. **[Plenary]** *Pulsar Timing Arrays: The Next Frontier Of Gravitational Wave Astronomy*  
22nd International Conference on General Relativity and Gravitation (GR22) & 13th Edoardo Amaldi Conference on Gravitational Waves (Amaldi13), Valencia, Spain, Jul 2019.
14. *Supermassive Black-hole Demographics In The Era of Nanohertz Multi-messenger Astronomy*  
American Astronomical Society, Seattle WA, Jan 2019.
15. *Nanohertz-frequency gravitational-wave astrophysics with pulsar-timing arrays*  
COSPAR 2018, Pasadena CA, Jul 2018.
16. *Pulsar Timing Arrays: new advances toward detecting low-frequency gravitational waves*  
American Physical Society, Columbus OH, Apr 2018.
17. *Non-Black-Hole science with pulsar-timing arrays*  
Black Holes Across The GW Spectrum, International Institute of Physics, Natal, Brazil, Aug 2017.
18. *Bayesian inference for pulsar-timing arrays*  
Black Holes Across The GW Spectrum, International Institute of Physics, Natal, Brazil, Aug 2017.
19. *Supermassive black-hole binary astrophysics with pulsar-timing arrays*  
Black Holes Across The GW Spectrum, International Institute of Physics, Natal, Brazil, Aug 2017.
20. *Probing the nanohertz GW landscape with PTAs: a status report*  
Gravitational Wave Physics & Astronomy Workshop (GWPAW), Annecy, France, May 2017.
21. *GW constraints on disc migration via pulsar timing*  
The Disc Migration Issue (Kavli workshop), Institute of Astronomy, Cambridge, UK, May 2017.
22. *Gravitational-wave Data-analysis Techniques for Pulsar Timing Arrays*  
International Pulsar Timing Array conference, Stellenbosch, South Africa, Jun 2016.

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#### Invited Talks - Major National Conferences & Symposia

23. *Pulsar Timing Arrays: Unveiling the Nanohertz-frequency Gravitational Wave Landscape*  
SESAPS 2022 (South Eastern Section of the APS), Oxford MS, Nov 2022.
  24. *Supermassive Black Hole Demographics In The Era Of Multimessenger PTA Detection*  
SESAPS 2019 (South Eastern Section of the APS), Wilmington NC, Nov 2019.
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#### Invited Departmental Colloquia & Program-wide Seminars

25. *Charting the Gravitational Wave Universe at Light-year Wavelengths*, University of Kentucky, Lexington KY, Oct 2025.
26. *Standing out from the crowd: Finding supermassive black-hole binaries in gravity & light*, Black Hole Initiative Seminar, Harvard University, Cambridge MA, Oct 2025.
27. *Standing out from the crowd: Finding supermassive black-hole binaries in gravity & light*, Astro Seminar, Niels Bohr International Academy, Sep 2025.
28. *Charting the Gravitational Wave Universe at Light-year Wavelengths*, Niels Bohr Lecture, Niels Bohr International Academy, Sep 2025.
29. *Charting The Gravitational-wave Universe At Light-year Wavelengths*,  
McGill University, Trottier Space Institute Seminar, Montreal, Canada, Mar 2025
30. *Standing Out From The Crowd: Finding Supermassive Black-hole Binaries In Gravity & Light*,  
Cornell University, Astronomy Lunch Seminar, Ithaca NY, Jan 2025
31. *Charting The Gravitational-wave Universe At Light-year Wavelengths*,  
Cornell University, Astronomy Colloquium, Ithaca NY, Jan 2025
32. *Charting The Gravitational-wave Universe At Light-year Wavelengths*,  
Caltech, Pasadena CA, Dec 2024
33. *A Voyage Through The Warped Universe*,  
Cumberland University, Lebanon TN, Nov 2024
34. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
The University of Florida, Gainesville, Florida, Sep 2024.
35. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
The University of Alabama–Huntsville, Huntsville, Alabama, Apr 2024.
36. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
The Ohio State University, Columbus, Ohio, Mar 2024.
37. *Eddington Lecture: "The Dawn of Gravitational Wave Astronomy at Lightyear Wavelengths"*,  
Institute of Astronomy, University of Cambridge, UK, Mar 2024.
38. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
Johns Hopkins University, New York NY, Feb 2024.
39. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
Columbia University, New York NY, Feb 2024.
40. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
The University of Pennsylvania, Philadelphia PA, Jan 2024.
41. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
University of Tennessee–Knoxville, Knoxville TN, Nov 2023.
42. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*,  
University of Maryland, College Park MD, Nov 2023.

43. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*, University of North Carolina, Chapel Hill NC, Oct 2023.
44. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*, The Pennsylvania State University, State College PA, Oct 2023.
45. *The Road Ahead for Gravitational-wave Astrophysics at Lightyear Wavelengths*, Vanderbilt University, Nashville TN, Sep 2023.
46. *The Dawn of PTA Gravitational-wave Astronomy*, APS DGRAV Virtual Seminar, Mar 2023
47. *Exploring the nanohertz-frequency gravitational-wave landscape with pulsar timing arrays*, Colloquium, Max Planck Institut für Radioastronomie, Bonn, Germany, Feb 2023
48. *Near-future Prospects for Astrophysics & Cosmology with a Galaxy-scale Gravitational Wave Detector*, Particle Theory Seminar, Johns Hopkins University, Baltimore MD, Nov 2022
49. *Pulsar Timing Arrays: The Next Window Onto The Warped Cosmos*  
Department of Physics & Astronomy, University of Wyoming, Laramie WY, May 2022
50. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Joint DAA-DTP-InPTA Seminar, Tata Institute of Fundamental Research (virtual), Mar 2021
51. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Department of Physics & Astronomy Colloquium, Western Kentucky University (virtual), Feb 2021
52. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Department of Physics Seminar, Southern Methodist University (virtual), Nov 2020
53. *Pulsar Timing Arrays: The Next Frontier of Gravitational Wave Astronomy*  
Department of Physics Colloquium, Franklin & Marshall College, Lancaster PA, Nov 2019.
54. *Pulsar Timing Arrays: The Next Frontier of Gravitational Wave Astronomy*  
Astrophysics Division Seminar, NASA Goddard Space Flight Center, MD, Nov 2019.
55. *Pulsar Timing Arrays: The Next Frontier of Gravitational Wave Astronomy*  
The Josephine Lawrence Hopkins Foundation Colloquium, Cornell University, Ithaca NY, Oct 2019.
56. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Colloquium, Institute of Astronomy, University of Cambridge, Cambridge, UK, Mar 2019.
57. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
CGCA Seminar, University of Wisconsin-Milwaukee, Milwaukee WI, Mar 2019.
58. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Invited seminar, Flatiron Center for Computational Astrophysics, New York NY, Feb 2019.
59. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Department of Physics & Astronomy colloquium, University of Mississippi, Oxford MS, Feb 2019.
60. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Department of Physics & Astronomy colloquium, Vanderbilt University, Nashville TN, Jan 2019.
61. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Dept of Physics & Astronomy colloquium, Carnegie Mellon University, Pittsburgh PA, Jan 2019.
62. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Dept of Physics & Astronomy colloquium, University of Minnesota, Minneapolis MN, Jan 2019.
63. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Department of Physics colloquium, University of Virginia, Charlottesville VA, Jan 2019.

64. *Compact Object Genealogy Across The Gravitational Wave Spectrum*  
USC Colloquium, University of Southern California, Los Angeles CA, Sep 2018.
  65. *Beyond Black Holes With Pulsar Timing Arrays*  
University of Virginia colloquium, Charlottesville VA, Mar 2018.
  66. *Constraining the physics of the final parsec of supermassive black-hole binary evolution*  
Astronomy Colloquium, Swinburne University of Technology, Melbourne, Australia, Feb 2017.
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#### Invited Talks - Other Conferences & Workshops

67. *Supermassive black holes & their revelations: Musings on the future of nanohertz GW astrophysics,*  
Fundamental Physics Across The GW Spectrum, KICP UChicago, August 2025
  68. *Searching For Low Frequency GW Signals with space-borne & Galaxy-scale detectors,* Unveiling  
massive black hole evolution with gravitational waves and light, Paris, France, May 2025
  69. *Pulsar Timing Arrays: Evidence for a Nanohertz-frequency Gravitational-wave Background,* RESCEU-  
NBI Workshop on Gravitational-Wave Sources, Tokyo, Japan, Dec 2023.
  70. *The Dawn of Galaxy-scale Gravitational Wave Astronomy,* Lunar Gravitational Wave Workshop,  
Vanderbilt University, Nashville TN, Feb 2023.
  71. *Gravitational Wave Observations Using Pulsar Timing Arrays,* NCfA Symposium, UNLV, Las Vegas  
NV, Feb 2023.
  72. *Pulsar Timing Arrays: The Next Window onto the Low-frequency Gravitational Wave Universe*  
Cambridge High Energy Workshop (CHEW 2022): Phase Transitions & Topological Defects in the  
Early Universe, Harvard University, Cambridge MA, Aug 2022.
  73. *Unveiling The Warped Side Of The Cosmos With Gravitational Waves*  
Tennessee Section of the American Association of Physics Teachers, Austin Peay State University,  
Clarksville TN, Apr 2022.
  74. *Pulsar Timing Arrays*  
Summer School on Gravitational Wave Astrophysics, Niels Bohr International Academy (virtual),  
Copenhagen, Denmark, Aug 2021.
  75. *Solar System Ephemeris Noise*  
OzGrav Pulsar Timing Workshop, Swinburne University of Technology (virtual), Melbourne,  
Australia, May 2019
  76. *Sources of nanohertz gravitational-waves for pulsar-timing array searches*  
NANOGrav student workshop, Caltech, Pasadena CA, Mar 2016.
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#### Other Invited Seminars

77. *A Parallelized Bayesian Approach to Accelerated Gravitational Wave Background Characterization*  
IPTA Gravitational Wave Group telecon, Mar 2022
78. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Theoretical Astrophysics Seminar, University of Florida (virtual), Mar 2021
79. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Bahcall Lunch, Princeton University (virtual), Oct 2020
80. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
SITP Seminar, Stanford University (virtual), Oct 2020

81. *New Results From The Pulsar Timing Array Hunt For Nanohertz-frequency Gravitational Waves*  
Birmingham Astrophysics Seminar, University of Birmingham (virtual), Birmingham, UK, Oct 2020
82. *Charting The Next Frontier Of Gravitational Wave Astronomy With Pulsar Timing Arrays*  
CIERA Astrophysics Seminar, CIERA, Northwestern University (virtual), Sep 2020
83. *Charting The Next Frontier Of Gravitational Wave Astronomy With Pulsar Timing Arrays*  
Astrophysical and Cosmological Relativity Seminar, Albert Einstein Institute (virtual), Potsdam, Germany, Jul 2020
84. *Pulsar Timing Arrays: The Next Window On The Warped Universe*  
NSF QuarkNet Seminar, Vanderbilt University (virtual), Nashville TN, Jun 2020
85. *Compact Object Genealogy Across The Gravitational Wave Spectrum*  
UVa+NRAO WUNA Lunch Talk, University of Virginia, Charlottesville VA, Oct 2018.
86. *Frontiers Of Pan-Spectral Gravitational-Wave Astrophysics*  
Invited departmental seminar, Radboud University (virtual), Nijmegen, Netherlands, Oct 2018
87. *Compact Object Genealogy Across The Gravitational Wave Spectrum*  
CGCA Seminar, University of Wisconsin-Milwaukee, Milwaukee WI, Sep 2018.
88. *Compact Object Genealogy Across The Gravitational Wave Spectrum*  
TAPIR Seminar, California Institute of Technology, Pasadena CA, Sep 2018.
89. *Astrophysical inference of supermassive black-hole binaries with pulsar-timing arrays*  
Leonard E. Parker Center seminar, University of Wisconsin-Milwaukee, Milwaukee WI, Oct 2016.
90. *Astrophysical inference of supermassive black-hole binaries with pulsar-timing arrays*  
CIERA seminar, Northwestern University, Evanston IL, Oct 2016.
91. *New data-analysis approaches for gravitational-wave searches with pulsar-timing arrays*  
Montana State University seminar, Bozeman MT, Oct 2016.
92. *New horizons in gravitational-wave astronomy with pulsar-timing arrays*  
Armagh Observatory seminar, Armagh, UK, Jul 2016.
93. *Probing the final-parsec problem with pulsar-timing arrays*  
Anton Pannekoek Institutt seminar, University of Amsterdam, Amsterdam, Netherlands, Jul 2016.
94. *Probing the final-parsec problem with pulsar-timing arrays*  
Radboud University astrophysics seminar, Radboud, Netherlands, Jul 2016.
95. *Prospects for near future detection and astrophysical inference with PTAs*  
Gravitational-wave Group seminar, University of Birmingham, UK, Dec 2015.
96. *Prospects for near future detection and astrophysical inference with PTAs*  
Statistics Group seminar (School of Mathematics), University of Edinburgh, UK, Dec 2015.
97. *Prospects for near future detection and astrophysical inference with PTAs*  
CaJAGWR seminar, California Institute of Technology, Pasadena, Dec 2015.
98. *Searching For Anisotropic Gravitational-wave Backgrounds Using Pulsar Timing Arrays*  
Albert Einstein Institute (AEI) GW seminar, Hanover, Germany, May 2013.
99. *Weighing the evidence for a gravitational-wave background*  
Institute of Astronomy seminar, University of Cambridge, UK, Feb 2013.
100. *Weighing the evidence for a gravitational-wave background*  
Gravitational-wave group seminar, University of Birmingham, UK, Dec 2012.

- 101.*Milestones in Spacetime: Double Neutron-Star Binaries as Gravitational-Wave Standard Sirens*  
Institute of Astronomy seminar, University of Cambridge, UK, Jun 2012.
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### Contributed Conference Presentations

- 102.*Localizing GW signals from supermassive binary black holes*, GR24 & Amaldi16 Meeting, Glasgow, UK, July 2025
- 103.*Localizing GW signals from supermassive binary black holes*, International Pulsar Timing Array Meeting 2025, Caltech, Pasadena CA, June 2025
- 104.*Localizing GW Signals & Identifying Galaxy Hosts With Pulsar Timing Arrays*  
APS Global Summit, Anaheim CA, Mar 2025
- 105.*Targeted Multimessenger Searches for Supermassive Black-hole Binaries*  
AAS Winter Meeting, Seattle WA, Jan 2023
- 106.*Multimessenger time-domain signature of supermassive black-hole binaries*  
AAS Summer Meeting, Pasadena CA, Jun 2022
- 107.*A Parallelized Gravitational Wave Detection Pipeline for Pulsar Timing Arrays*  
APS April Meeting, New York City NY, Apr 2022
- 108.*Mapping The Ultra Low-Frequency Gravitational-Wave Sky With A Network Of Pulsars*  
14th Amaldi Meeting (virtual), Jul 2021
- 109.*Fast Bayesian GWB Amplitude Estimation Through Parallelized Methods*  
IPTA Meeting (virtual), Jun 2021
- 110.*Fast Bayesian GWB Amplitude Estimation Through Parallelized Methods*  
NANOGrav Spring Meeting (virtual), May 2021
- 111.*Mapping The Supermassive Binary Black-Hole Sky With Pulsar Timing Arrays*  
AAS Winter Meeting (virtual), Jan 2021
- 112.*Spatiotemporal Inference Strategies In The Quest For Gravitational Wave Detection With PTAs*  
ICERM: Statistical Methods for the Detection, Classification, and Inference of Relativistic Objects (virtual), Brown University, Nov 2020
- 113.*The First 10 Years Of PTA Nanohertz GW Astronomy*  
APS April Meeting (virtual), Apr 2020
- 114.*Supermassive Black Hole Demographics In The Era Of Multimessenger PTA Detection*  
30th Texas Symposium on Relativistic Astrophysics, Portsmouth, UK, Dec 2019
- 115.*From Bright Binaries To Bumpy Backgrounds: Mapping Realistic Gravitational Wave Skies With PTAs*  
NANOGrav Fall Meeting, Cornell University, Ithaca NY, Oct 2019
- 116.*Constraining the environments & progenitors of binary black holes across the GW spectrum*  
12th International LISA Symposium, Chicago IL, Jul 2018
- 117.*The first 10 years of nanohertz gravitational-wave astronomy*  
International Pulsar Timing Array meeting, Albuquerque NM, Jun 2018
- 118.*Progress updates in the NANOGrav gravitational-wave detection working group*  
NANOGrav Spring 2018 meeting, University of Virginia, Charlottesville VA, Mar 2018
- 119.*The First Bayesian Solar-System Ephemeris*  
NANOGrav Fall 2017 meeting, Lafayette College, Easton PA, Nov 2017

- 120.*GW constraints in the presence of solar-system ephemeris uncertainties*  
International Pulsar Timing Array meeting, Sèvres, France, Jul 2017
- 121.*Solar-system ephemeris uncertainties & GW constraints*  
NANOGrav Spring Meeting, West Virginia University, Morgantown WV, Apr 2017
- 122.*Modeling solar-system ephemeris uncertainties & the impact on GW constraints*  
European Pulsar Timing Array meeting, Amsterdam, Netherlands, Apr 2017
- 123.*Bayesian model emulation of GW spectra for probes of the final parsec problem with PTAs*  
American Astronomical Society meeting, Grapevine TX, Jan 2017
- 124.*Bayesian model emulation of GW spectra for probes of the final parsec problem with PTAs*  
American Physical Society April meeting, Washington DC, Jan 2017
- 125.*Optimized gravitational-wave sky mapping with pulsar-timing arrays*  
NANOGrav Fall Meeting 2016, NCSA, Urbana-Champaign IL, Oct 2016
- 126.*Carrying the physics of supermassive black-hole binary evolution into pulsar-timing array searches*  
European Pulsar Timing Array meeting, Bielefeld, Germany, May 2016
- 127.*Are we there yet? Time to detection of nanohertz gravitational waves*  
American Physical Society meeting, Salt Lake City UT, Apr 2016
- 128.*Carrying the physics of supermassive black-hole binary evolution into pulsar-timing array searches*  
NANOGrav Spring Meeting, Caltech, Pasadena CA, Mar 2016
- 129.*Are we there yet? Time to detection of nanohertz gravitational waves*  
NANOGrav Fall Meeting, McGill University, Montreal, Canada, Oct 2015
- 130.*Eccentric supermassive black-hole binary signals in pulsar-timing data*  
European Pulsar Timing Array meeting, Bonn, Germany, Jun 2015
- 131.*Eccentric supermassive black-hole binary signals in pulsar-timing data*  
American Physical Society meeting, Baltimore MD, Apr 2015
- 132.*Eccentric supermassive black-hole binary signals in pulsar-timing data*  
NANOGrav Spring Meeting, Arecibo, Puerto Rico, Feb 2015
- 133.*Exploring the cosmos with gravitational waves*  
American Astronomical Society meeting, Seattle WA, Jan 2015
- 134.*EPTA constraints on gravitational-wave anisotropy*  
European Pulsar Timing Array meeting, Cambridge, UK, Nov 2014
- 135.*EPTA and IPTA searches for gravitational-wave background anisotropy*  
International Pulsar Timing Array meeting, Banff, Canada, Jun 2014
- 136.*EPTA limits on gravitational-wave anisotropy*  
European Pulsar Timing Array meeting, Astron, Netherlands, May 2014
- 137.*The pulsar-term in PTA continuous-wave searches: a blessing and a curse*  
European Pulsar Timing Array meeting, Pula, Sardinia, Oct 2013
- 138.*Probing anisotropy of the GW background with pulsar timing arrays*  
20th International Conference on GR and Gravitation, 10th Amaldi Conference, Warsaw, Jul 2013
- 139.*The first PTA search pipeline for anisotropy in the GW background*  
International Pulsar Timing Array meeting, Krabi, Thailand, Jun 2013

140. *Searching For Anisotropic Gravitational-wave Backgrounds Using Pulsar Timing Arrays*

European Pulsar Timing Array meeting, l'Observatoire de Paris, Paris, France, Apr 2013

141. *Weighing the evidence for a gravitational-wave background*

European Pulsar Timing Array meeting, Albert Einstein Institute (AEI), Potsdam, Germany, Nov 2012

142. *Hubble without the Hubble: Cosmology using advanced gravitational-wave detectors alone*

1st Iberian Gravitational-Wave Meeting, Institut de Ciències de l'Espanya, Barcelona, Spain, Feb 2012