STEPHEN R. GREEN

University of Nottingham – School of Mathematical Sciences
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EDUCATION

University of Chicago, Chicago, USA

Ph.D. in Physics (general relativity) 08.2012
– Thesis: *Nonlinear Backreaction in Cosmology*
– Adviser: Robert M. Wald

S.M. in Physical Sciences 06.2006

University of Toronto (Trinity College), Toronto, Canada

Honours B.Sc. in Mathematics and Physics with High Distinction 06.2005

RESEARCH EXPERIENCE

University of Nottingham, Nottingham, UK

Principal Research Fellow, School of Mathematical Sciences 2025–present
(permanent, research-only equivalent to Associate Professor)
– Member of LIGO Scientific Collaboration since 2018
– Member of LISA Consortium since 2021

Senior Research Fellow, School of Mathematical Sciences 2022–2025

Max Planck Institute for Gravitational Physics, Potsdam-Golm, Germany

Senior Scientist 2021–2022

Junior Scientist / Postdoctoral Researcher 2017–2021

Perimeter Institute for Theoretical Physics, Waterloo, Canada

Postdoctoral Researcher 2014–2017

University of Guelph, Guelph, Canada

CITA National Postdoctoral Fellow, Department of Physics 2012–2014
– Adviser: Luis Lehner

University of Chicago, Chicago, USA

Research Assistant, Enrico Fermi Institute 2006–2012
– Adviser: Robert M. Wald

University of Toronto, Toronto, Canada

NSERC Undergraduate Student Research Awards Summers 2002–2004
– Departments of Mathematics and Physics
– Advisers: Ue-Li Pen, Chistopher Matzner, Dror Bar-Natan, and Robert Almgren

FUNDING

Grants and Fellowships

UKRI Future Leaders Fellowship 2024–2028
AI-Driven Inference for Gravitational Waves: Accelerating Discoveries in Fundamental Physics
Amount: £1,522,003
Role: Fellow

STFC Gravitational Waves Consolidated Grant 2025-2028
Precision Gravity with LIGO-Virgo-KAGRA
Amount: £363,058
Role: Project co-Lead

Nottingham Research Fellowship 2022–2025
Black holes, gravitational waves, and machine learning probes
Amount: £221,500
Role: Fellow
– salary + £75,000 research funds
– linked to a permanent faculty position

Supervised Fellowships

1851 Research Fellowship 2025-2028
Fellow: Dr. Matthew Mould
Uncovering black-hole binary origins with gravitational waves and machine learning
Amount: £236,050

TEACHING EXPERIENCE

Advising

PhD students supervised
– Cecilia Fabbri (Nottingham, 2024–present)
– Jacopo Lestingi (Nottingham, 2023–present)
– Alex Roussopoulos (Nottingham, 2023–present)

PhD students co-supervised or worked closely with
– Annalena Kofler (MPI-IS, 2023–present)
– Jonas Wildberger (MPI-IS, 2021–2023)
– Maximilian Dax (MPI-IS, 2020–2025)
– Nihar Gupte (AEI, 2021–2022)
– Pablo Bosch (Perimeter, 2015–2019)

Visiting Masters students
– Hugo Roussille (École Normale Supérieure, visiting Perimeter, 2017)
– Antoine Maillard (École Normale Supérieure, visiting Perimeter, 2015)

Summer undergraduate students
– Jérémie Gagnon-Bischoff (Perimeter, 2017)
– Stanislav Fort (Perimeter, 2015)

Schools

Kavli-Villum Summer School on Gravitational Waves 09.2023
Corfu, Greece
– Lecturer, "Machine Learning for Gravitational Waves"

LISA data analysis: from classical methods to machine learning 11.2022
Toulouse, France
– Lecturer, "GW Parameter Estimation with Bayesian Machine Learning"

Numerical Methods in Gravity and Holography 11.2017–12.2017
Universidad de Concepción, Chile
– Lecturer, "Stability of Gravitational Systems on Bounded Domains"

Courses

Max Planck Institute for Gravitational Physics
– Lecturer, machine learning component of IMPRS course on statistics for GW astronomy (slides and recordings) 12.2021

University of Chicago Department of Physics
– Grader, graduate general relativity course Winters 2008, 2010-2012
– Teaching assistant, introductory physics courses 09.2005–06.2007

SCHOLARSHIPS AND AWARDS

Postdoctoral

Marie Sklodowska-Curie Actions Seal of Excellence (2017)
National Fellowship (Canadian Institute for Theoretical Astrophysics, 2012–2014)

Graduate

Nathan Sugarman Award (Enrico Fermi Institute, 2012)
– for excellence in graduate research
Blue Apple Award (Midwest Relativity Meeting, 2011)
– for best student talk (out of 29)
Harvey B. Plotnick Fellowship (Chicago, 2010)
Postgraduate Scholarship D (NSERC, 2007–2010)
– 21,000 CAD / year
Sachs Fellowship (Chicago, 2006)

Undergraduate

Chancellor's Gold Medal in Science (Trinity College, 2005)
Governor General's Silver Academic Medal Nominee (Trinity College, 2005)
Prince of Wales Prize (Trinity College, 2005)
– for high achievement in mathematics
University of Toronto Scholarship (2002–2005)
Dean's List (2002–2005)
Beatrice Evelyn Rodgers Scholarship (Toronto, Math and Physics, 2005)
Margaret Ronald Taylor and Thomas Paxton Taylor Award (Toronto, Math, 2004–2005)
Isaac Chapman Boyd and Sarah Edith Boyd Scholarship (Trinity College, 2004)
– for highest overall average in third year
Provost's Scholar (Trinity College, 2004)
3T0 M. & P. and Associates Scholarship (Toronto, Physics, 2004)
James Scott Scholarship (Trinity College, 2004)
Ivan Szak Scholarship (Toronto, Math, 2004)
William R. Hossack Memorial Scholarship (Toronto, Math and Physics, 2003)
William Mulock Prize (Toronto, Math and Physics, 2003)
Coxeter Scholarship (Toronto, Math, 2003)
Drew Thompson Scholarship (Trinity College, 2003)
Canadian Association of Physicists University Prize Examination, 10th place (2003)
Elizabeth Kingstone Scholarship (Trinity College, 2002)
Samuel Beatty In-Course Award (Toronto, Math, 2002)
National Biology Competition Scholarship, 4th place (Toronto, 2001)
Trinity College Entrance Scholarship (2001)
Aiming for the Top Scholarship (Government of Ontario, 2001–2004)

High School

Governor General's Bronze Academic Medal (2001)
– for highest overall average in the graduating class
Ontario Scholar

SERVICE

Conference organizing

GWFreeride Workshop, Sexten Center for Astrophysics, Italy 01.2026
GW:UK, University of Nottingham, UK 01.2026
Nonlinear Black Hole Perturbation Theory, University of Nottingham, UK 09.2025
– Funding from *Gravity Theory Trust*
Tales of Gravity, University of Nottingham, UK 04.2025
26th Midwest Relativity Meeting, Perimeter Institute, Canada 10.2016

Local organizing

AEI Colloquium Series 09.2019–01.2022
AEI Astrophysical and Cosmological Relativity Seminar 09.2018–08.2019
PI cosmology group meeting 08.2014–08.2016
University of Guelph general relativity group meeting 09.2013–08.2014

Referee activities

Astronomy & Astrophysics, Classical and Quantum Gravity,
European Physical Journal C, JCAP, JHEP, MNRAS, Nature Astronomy,
Nature Communications, Physics Letters B, Physical Review Letters, Physical Review D

Outreach

Ask-A-Scientist volunteer at PI open house 09.2016
Invited keynote lecturer at EinsteinPlus workshop at PI 07.2016
– for Canadian and international high school physics teachers
Ask-A-Scientist volunteer at PI public lecture 03.2015
Ask-A-Scientist volunteer at PI BrainSTEM Festival 10.2013
Judge at CPES Undergraduate Poster Session (University of Guelph) 2013

Committees

Member of PhD admissions committee 2020–2022
– ACR Division, Max Planck Institute for Gravitational Physics
Member of graduate admissions committee 2007
– University of Chicago Department of Physics

Mentoring

University of Toronto Department of Physics mentoring program 2013–2014

PUBLICATIONS

This list excludes LVK Collaboration papers. For a complete list of publications see INSPIRE.

1. E. Cannizzaro, M. Palleschi, L. Sberna, R. Brito, and S. Green, "Excitation of scalar quasi-normal modes from boson clouds", (2025), arXiv:2512.15878 [gr-qc].
2. A. Kofler, M. Dax, S. R. Green, J. Wildberger, N. Gupte, J. H. Macke, J. Gair, A. Buonanno, and B. Schölkopf, "Flexible Gravitational-Wave Parameter Estimation with Transformers", (2025), arXiv:2512.02968 [gr-qc]

3. M. Caldarola, S. Goyal, N. Gupte, S. R. Green, and M. Zumalacárregui, "Accelerated inference of microlensed gravitational waves with machine learning", (2025), arXiv:2511.08486 [astro-ph.CO].
4. I. Romero-Shaw, J. Stegmann, H. Tagawa, D. Gerosa, J. Samsing, N. Gupte, and S. R. Green, "GW200208_222617 as an eccentric black-hole binary merger: Properties and astrophysical implications", Phys. Rev. D **112**, 063052 (2025), arXiv:2506.17105 [astro-ph.HE].
5. E. Berti et al., "Black hole spectroscopy: from theory to experiment", (2025), arXiv:2505.23895 [gr-qc].
6. F. Santoliquido et al., "Fast and accurate parameter estimation of high-redshift sources with the Einstein Telescope", Phys. Rev. D **112**, 103015 (2025), arXiv:2504.21087 [astro-ph.HE].
7. C. Iuliano, S. Hollands, S. R. Green, and P. Zimmerman, "Extremal black hole weather", Phys. Rev. D **111**, 124038 (2025), arXiv:2412.02821 [gr-qc].
8. R. Bachhar, M. Pürrer, and S. R. Green, "Incorporating waveform calibration error in gravitational-wave modeling and inference for SEOBNRv4", Phys. Rev. D **111**, 084050 (2025), arXiv:2410.17168 [gr-qc].
9. M. Dax, S. R. Green, J. Gair, N. Gupte, M. Pürrer, V. Raymond, J. Wildberger, J. H. Macke, A. Buonanno, and B. Schölkopf, "Real-time inference for binary neutron star mergers using machine learning", Nature **639**, 49–53 (2025), arXiv:2407.09602 [gr-qc].
10. N. Gupte et al., "Evidence for eccentricity in the population of binary black holes observed by LIGO-Virgo-KAGRA", (2024), arXiv:2404.14286 [gr-qc].
11. K. Leyde, S. R. Green, A. Toubiana, and J. Gair, "Gravitational wave populations and cosmology with neural posterior estimation", Phys. Rev. D **109**, 064056 (2024), arXiv:2311.12093 [gr-qc].
12. N. Afshordi et al., "Waveform Modelling for the Laser Interferometer Space Antenna", (2023), arXiv:2311.01300 [gr-qc].
13. E. Cannizzaro, L. Sberna, S. R. Green, and S. Hollands, "Relativistic Perturbation Theory for Black-Hole Boson Clouds", Phys. Rev. Lett. **132**, 051401 (2024), arXiv:2309.10021 [gr-qc].
14. J. B. Wildberger, M. Dax, S. Buchholz, S. R. Green, J. H. Macke, and B. Schölkopf, "Flow matching for scalable simulation-based inference", in Thirty-seventh conference on neural information processing systems (2023), arXiv:2305.17161 [cs.LG].
15. J. Wildberger, M. Dax, S. R. Green, J. Gair, M. Pürrer, J. H. Macke, A. Buonanno, and B. Schölkopf, "Adapting to noise distribution shifts in flow-based gravitational-wave inference", Phys. Rev. D **107**, 084046 (2023), arXiv:2211.08801 [gr-qc].
16. S. R. Green, S. Hollands, L. Sberna, V. Toomani, and P. Zimmerman, "Conserved currents for a Kerr black hole and orthogonality of quasinormal modes", Phys. Rev. D **107**, 064030 (2023), arXiv:2210.15935 [gr-qc].
17. M. Dax, S. R. Green, J. Gair, M. Pürrer, J. Wildberger, J. H. Macke, A. Buonanno, and B. Schölkopf, "Neural Importance Sampling for Rapid and Reliable Gravitational-Wave Inference", Phys. Rev. Lett. **130**, 171403 (2023), arXiv:2210.05686 [gr-qc].
18. T. Whittaker, W. E. East, S. R. Green, L. Lehner, and H. Yang, "Using machine learning to parametrize postmerger signals from binary neutron stars", Phys. Rev. D **105**, 124021 (2022), arXiv:2201.06461 [gr-qc].
19. L. Sberna, P. Bosch, W. E. East, S. R. Green, and L. Lehner, "Nonlinear effects in the black hole ringdown: Absorption-induced mode excitation", Phys. Rev. D **105**, 064046 (2022), arXiv:2112.11168 [gr-qc].
20. M. Dax, S. R. Green, J. Gair, M. Deistler, B. Schölkopf, and J. H. Macke, "Group equivariant neural posterior estimation", in International conference on learning representations (2022), arXiv:2111.13139 [cs.LG].

21. V. Toomani, P. Zimmerman, A. Spiers, S. Hollands, A. Pound, and S. R. Green, "New metric reconstruction scheme for gravitational self-force calculations", Class. Quant. Grav. **39**, 015019 (2022), arXiv:2108.04273 [gr-qc].
22. N. Ortiz, F. Carrasco, S. R. Green, L. Lehner, S. L. Liebling, and J. R. Westernacher-Schneider, "Gamma-radiation sky maps from compact binaries", JCAP **02**, 027 (2022), arXiv:2107.07020 [astro-ph.HE].
23. M. Dax, S. R. Green, J. Gair, J. H. Macke, A. Buonanno, and B. Schölkopf, "Real-Time Gravitational Wave Science with Neural Posterior Estimation", Phys. Rev. Lett. **127**, 241103 (2021), arXiv:2106.12594 [gr-qc].
24. S. R. Green and J. Gair, "Complete parameter inference for GW150914 using deep learning", Mach. Learn. Sci. Tech. **2**, 03LT01 (2021), arXiv:2008.03312 [astro-ph.IM].
25. S. R. Green, C. Simpson, and J. Gair, "Gravitational-wave parameter estimation with autoregressive neural network flows", Phys. Rev. D **102**, 104057 (2020), arXiv:2002.07656 [astro-ph.IM].
26. P. Bosch, S. R. Green, L. Lehner, and H. Roussille, "Excited hairy black holes: dynamical construction and level transitions", Phys. Rev. D **102**, 044014 (2020), arXiv:1912.05598 [gr-qc].
27. S. R. Green, S. Hollands, and P. Zimmerman, "Teukolsky formalism for nonlinear Kerr perturbations", Class. Quant. Grav. **37**, 075001 (2020), arXiv:1908.09095 [gr-qc].
28. J. Gagnon-Bischoff, S. R. Green, P. Landry, and N. Ortiz, "Extended I-Love relations for slowly rotating neutron stars", Phys. Rev. **D97**, 064042 (2018), arXiv:1711.05694 [gr-qc].
29. S. R. Green and R. M. Wald, "A simple, heuristic derivation of our 'no backreaction' results", Class. Quant. Grav. **33**, 125027 (2016), arXiv:1601.06789 [gr-qc].
30. P. Bosch, S. R. Green, and L. Lehner, "Nonlinear Evolution and Final Fate of Charged Anti–de Sitter Black Hole Superradiant Instability", Phys. Rev. Lett. **116**, 141102 (2016), arXiv:1601.01384 [gr-qc].
31. S. R. Green, S. Hollands, A. Ishibashi, and R. M. Wald, "Superradiant instabilities of asymptotically anti-de Sitter black holes", Class. Quant. Grav. **33**, 125022 (2016), arXiv:1512.02644 [gr-qc].
32. S. R. Green, A. Maillard, L. Lehner, and S. L. Liebling, "Islands of stability and recurrence times in AdS", Phys. Rev. **D92**, 084001 (2015), arXiv:1507.08261 [gr-qc].
33. V. Balasubramanian, A. Buchel, S. R. Green, L. Lehner, and S. L. Liebling, "Reply to Comment on "Holographic Thermalization, Stability of Anti-de Sitter Space, and the Fermi-Pasta-Ulam Paradox"", Phys. Rev. Lett. **115**, 049102 (2015), arXiv:1506.07907 [gr-qc].
34. S. R. Green and R. M. Wald, "Comments on Backreaction", (2015), arXiv:1506.06452 [gr-qc].
35. H. Yang, F. Zhang, S. R. Green, and L. Lehner, "Coupled Oscillator Model for Nonlinear Gravitational Perturbations", Phys. Rev. **D91**, 084007 (2015), arXiv:1502.08051 [gr-qc].
36. A. Buchel, S. R. Green, L. Lehner, and S. L. Liebling, "Conserved quantities and dual turbulent cascades in anti-de Sitter spacetime", Phys. Rev. **D91**, 064026 (2015), arXiv:1412.4761 [gr-qc].
37. A. Buchel, S. R. Green, L. Lehner, and S. L. Liebling, "Universality of non-equilibrium dynamics of CFTs from holography", (2014), arXiv:1410.5381 [hep-th].
38. S. R. Green and R. M. Wald, "How well is our universe described by an FLRW model?", Class. Quant. Grav. **31**, 234003 (2014), arXiv:1407.8084 [gr-qc].
39. V. Balasubramanian, A. Buchel, S. R. Green, L. Lehner, and S. L. Liebling, "Holographic Thermalization, stability of AdS, and the Fermi-Pasta-Ulam-Tsingou paradox", Phys. Rev. Lett. **113**, 071601 (2014), arXiv:1403.6471 [hep-th].

40. S. R. Green, J. S. Schiffrin, and R. M. Wald, "Dynamic and Thermodynamic Stability of Relativistic, Perfect Fluid Stars", Class. Quant. Grav. **31**, 035023 (2014), arXiv:1309.0177 [gr-qc].
41. S. R. Green, F. Carrasco, and L. Lehner, "Holographic Path to the Turbulent Side of Gravity", Phys. Rev. **X4**, 011001 (2014), arXiv:1309.7940 [hep-th].
42. S. R. Green and R. M. Wald, "Examples of backreaction of small scale inhomogeneities in cosmology", Phys. Rev. **D87**, 124037 (2013), arXiv:1304.2318 [gr-qc].
43. S. R. Green, "Nonlinear backreaction in cosmology", PhD thesis (University of Chicago, 2012).
44. S. R. Green and R. M. Wald, "Newtonian and Relativistic Cosmologies", Phys. Rev. **D85**, 063512 (2012), arXiv:1111.2997 [gr-qc].
45. S. R. Green, E. J. Martinec, C. Quigley, and S. Sethi, "Constraints on String Cosmology", Class. Quant. Grav. **29**, 075006 (2012), arXiv:1110.0545 [hep-th].
46. S. R. Green and R. M. Wald, "A new framework for analyzing the effects of small scale inhomogeneities in cosmology", Phys. Rev. **D83**, 084020 (2011), arXiv:1011.4920 [gr-qc].
47. B. Pang, U.-L. Pen, C. D. Matzner, S. R. Green, and M. Liebendorfer, "Numerical Parameter Survey of Nonradiative Black Hole Accretion – Flow Structure and Variability of the Rotation Measure", Mon. Not. Roy. Astron. Soc. **415**, 1228–1239 (2011), arXiv:1011.5498 [astro-ph.GA].

SOFTWARE

Lead developer of Dingo (Deep Inference for Gravitational-wave Observations), a package for analyzing gravitational wave data using neural posterior estimation:

- https://github.com/dingo-gw/dingo

RESEARCH TALKS

(* denotes invited)

*1. The Future of Gravitational Wave Astronomy, ICTS, Bangalore, India (2025).
2. 24th International Conference on General Relativity and Gravitation, Glasgow, UK (2025).
*3. CENTRA Seminar, Instituto Superior Técnico, Lisbon, Portugal (2025).
*4. Workshop on Scientific ML for GW Astronomy, ICERM, Brown University (2025).
*5. Gravity Seminar, University of Mississippi; online (2025).
*6. GW Seminar, Universitat de les Illes Balears, Spain (2025).
*7. GW Seminar, KU Leuven, Belgium (2025).
*8. Gravity Seminar, University of Milan Bicocca, Italy (2025).
*9. Gravity Seminar, Cardiff University, UK (2024).
*10. Challenges and future perspectives in gravitational-wave astronomy: O4 and beyond, Lorentz Center, Leiden, The Netherlands (2024).
*11. Panelist on "Data analysis challenges in the signal dominated era" at PAX IX workshop, King's College London, UK (2024).
*12. Panelist on "New data analysis frameworks" at Dawn VII workshop, University of British Columbia, Canada (2024).
*13. ICG Colloquium, University of Portsmouth, UK (2024).
14. Gravitational Wave Physics and Astronomy Workshop, University of Birmingham, UK (2024).

*15. Geometry, Analysis and Gravitation Seminar, Queen Mary University of London, UK (2024).

*16. Gravity Seminar, Niels Bohr Institute, Denmark (2024).

*17. Astrophysics Seminar, University of Birmingham (2023).

*18. London Gravity Meeting, London Institute for Mathematical Sciences, UK (2023)

*19. GravityShapePisa, University of Pisa, Italy (2023).

*20. PCTS/PGI Workshop on Nonlinear Aspects of General Relativity, Princeton University (2023).

*21. Gravity Seminar, University of Southampton, UK (2023).

*22. QSimFP Seminar (2023).

*23. Gr@v Seminar, University of Aveiro, Portugal (2023); (video).

*24. Nottingham Centre of Gravity, University of Nottingham (2022).

*25. Gravity Seminar, University of Virginia (2022).

*26. Sixième Assemblée Générale du GdR Ondes Gravitationnelles, Toulouse, France (2022); (slides).

*27. Keynote Speaker, Workshop on Bayesian Deep Learning for Cosmology and Time Domain Astrophysics #2, Astroparticule et Cosmologie, Paris (2022); (slides) (video).

*28. Physics Colloquium, Montana State University (2022).

*29. Gravity Seminar, Instituto de Ciencias Nucleares, UNAM, Mexico (2022).

30. Gravitational Wave Physics and Astronomy Workshop, Hannover, Germany (2021).

31. Workshop on Machine Learning and the Physical Sciences (NeurIPS 2021); (extended abstract) (poster). (One of three submissions selected for a contributed talk; given by M. Dax.)

*32. Machine Learning Seminar, Princeton Plasma Physics Laboratory (2021).

*33. Berkeley/IAS/UCSB/Weizmann Gravitational Waves Group Meeting Seminar (2021).

*34. Workshop on Source Inference and Parameter Estimation in Gravitational Wave Astronomy, IPAM, UCLA (2021); (slides) (video).

*35. Astrophysics Seminar, Technion – Israel Institute of Technology (2021).

*36. Physics Colloquium, Technion – Israel Institute of Technology (2021).

*37. Observational Relativity and Cosmology Group Meeting Seminar, AEI Hannover, Germany (2021).

38. GW Mull Workshop, Scotland (2021).

39. 14th Edoardo Amaldi Conference on Gravitational Waves, online (2021); (video).

40. 24th Capra Meeting on Radiation Reaction in General Relativity, Perimeter Institute, Waterloo, Canada (2021); (video).

*41. Nikhef Gravity Group Meeting Seminar, Amsterdam, Netherlands (2021).

*42. SISSA & IFPU Gravity Webinar, Trieste, Italy (2021); (slides) (video).

43. American Physical Society April Meeting, online (2021).

44. Third Workshop on Machine Learning and the Physical Sciences (NeurIPS 2020), Vancouver, Canada; (extended abstract) (poster).

*45. Astrophysics Seminar, Technion – Israel Institute of Technology (2020).

*46. Physics Seminar, University of Western Australia (2020).

*47. Workshop on Statistical Methods for the Detection, Classification, and Inference of Relativistic Objects, ICERM (2020); (video).

*48. Applied and Computational Mathematics Seminar, University College Dublin (2020); (video).

49. 23rd Capra Meeting on Radiation Reaction in General Relativity, University of Texas at Austin (2020); (video).

*50. Gravity Seminar, University of Southampton, UK (2020).

51. GWverse COST Action Meeting, IFPU, Trieste, Italy (2020).

*52. BIRS-CMO Workshop on Time-like Boundaries in General Relativistic Evolution Problems, Casa Matématica Oaxaca, Mexico (2019); (video).

53. 22nd International Conference on General Relativity and Gravitation, Valencia, Spain (2019).

*54. Cosmology and Gravitational Physics with Lambda Workshop, Nordita, Sweden (2018).

*55. Mathematical General Relativity Workshop, Mathematisches Forschungsinstitut Oberwolfach, Germany (2018).

*56. CENTRA Seminar, Instituto Superior Técnico, Lisbon, Portugal (2018).

*57. Reduced-Order Model Workshop, Albert Einstein Institute, Potsdam, Germany (2018).

*58. Workshop on Singularities of General Relativity and their Quantum Fate, Banach Mathematical Center, Warsaw, Poland (2018).

*59. University of Amsterdam String Seminar, Amsterdam, Netherlands (2018).

*60. Institute for Theoretical Physics Seminar, Universität Leipzig, Leipzig, Germany (2018).

*61. Gravity at UCEN 2017: Black holes and Cosmology, Universidad Central de Chile, Santiago, Chile (2017).

*62. Astrophysical and Cosmological Relativity Group Seminar, AEI Potsdam, Germany (2017)

*63. Gravity – New Perspectives from Strings and Higher Dimensions Workshop, Benasque, Spain (2017).

64. American Physical Society April Meeting, Washington, DC (2017).

*65. PI-CITA Day, University of Toronto, ON (2016).

66. 21st International Conference on General Relativity and Gravitation, Columbia University, New York, NY (2016).

67. Numerical Relativity and Holography Workshop, Santiago de Compostela, Spain (2016).

*68. Cosmological Frontiers in Fundamental Physics Conference, Perimeter Institute, Waterloo, ON (2016); (video).

69. American Physical Society April Meeting, Salt Lake City, UT (2016).

*70. Quantum Gravity Seminar, Perimeter Institute, Waterloo, ON (2016); (video).

*71. Particle Seminar, Perimeter Institute, Waterloo, ON (2016); (video).

72. Leipzig University Seminar, Leipzig, Germany (2015)

73. University of Cambridge DAMTP Lunch Seminar, Cambridge, UK (2015)

74. 25th Midwest Relativity Meeting, Northwestern University, Evanston, IL (2015)

75. Fields Institute Focus Program on 100 Years of General Relativity, Toronto, ON (2015)

*76. PI-CITA Day, Perimeter Institute, Waterloo ON (2015)

77. American Physical Society April Meeting, Baltimore, MD (2015)

*78. CERN-CKC TH Institute on Numerical Holography, Geneva, Switzerland (2014)

79. 24th Midwest Relativity Meeting, Oakland University, Auburn Hills, MI (2014)

80. 15th Canadian Conference on General Relativity and Relativistic Astrophysics, University of Winnipeg, Winnipeg, MB (2014)

81. Eastern Gravity Meeting, West Virginia University, Morgantown, WV (2014)
82. Compute Ontario Research Day, Perimeter Institute, Waterloo, ON (2014)
*83. Gravity Theory Seminar, University of Maryland, College Park, MD (2014)
84. American Physical Society April Meeting, Savannah, GA (2014)
*85. CITA National Fellows Meeting, University of Toronto, Toronto, ON (2014)
86. 23rd Midwest Relativity Meeting, University of Wisconsin-Milwaukee, Milwaukee, WI (2013)
*87. Astrophysics Lunch Talk, Cornell University, Ithaca, NY (2013)
88. 20th International Conference on General Relativity and Gravitation, Warsaw, Poland (2013)
89. American Physical Society April Meeting, Denver, CO (2013)
*90. CITA National Fellows Meeting, University of Toronto, Toronto, ON (2013)
*91. Gravitation and Cosmology Lunch Seminar, University of Wisconsin-Milwaukee, Milwaukee, WI (2012)
92. 22nd Midwest Relativity Meeting, University of Chicago, Chicago, IL (2012)
93. American Physical Society April Meeting, Atlanta, GA (2012)
94. Strong Gravity Seminar, Perimeter Institute, Waterloo, ON (2012)
95. Cosmology Lunch Talk, Institute for Advanced Study, Princeton, NJ (2012)
96. 21st Midwest Relativity Meeting, University of Illinois at Urbana-Champaign, Urbana-Champaign, IL (2011)
97. Inhomogeneous Cosmologies Workshop, University of Jyväskylä, Jyväskylä, Finland (2011)
98. American Physical Society April Meeting, Anaheim, CA (2011)
99. 20th Midwest Relativity Meeting, University of Guelph, Guelph, ON (2010)
100. 19th International Conference on General Relativity and Gravitation, Mexico City, Mexico (2010)
101. American Physical Society April Meeting, Washington, DC (2010)
102. 19th Midwest Relativity Meeting, University of Michigan, Ann Arbor, MI (2009)
103. 18th Midwest Relativity Meeting, University of Notre Dame, South Bend, IN (2008)
104. 17th Midwest Relativity Meeting, St. Louis University, St. Louis, MO (2007)