

Curriculum Vitae of Alberto Roper Pol (PhD)

Research group leader (SNSF Ambizione fellow) at the University of Geneva
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website: <https://albertoroper.github.io>

Education

Aug. 2020. PhD at the University of Colorado. Boulder, CO. USA.

Dissertation thesis: “*Generation of Gravitational Waves due to Magnetohydrodynamic Turbulence in the Early Universe.*” Advisor: Axel Brandenburg.

Dec. 2017. MSc in Aerospace Engineering Sciences at the University of Colorado. Boulder, CO. USA.

Dec. 2017. MSc Certificate in Oceanic and Atmospheric Sciences at the University of Colorado. Boulder, CO. USA.

Jul. 2015. BSc in Aerospace Engineering. Polytechnic University of Catalonia (UPC). Barcelona, Spain.

BSc and MSc courses of the Physics and Mathematics degrees at the National University of Distance Education (UNED).

Research experience

- Feb. 2027–** **University assistant** (*equivalent to non-tenure track assistant professor*) at the Institute for Theoretical Physics. *Technische Universität Wien* (TU Wien). Vienna, Austria.
- Feb. 2023–Jan. 2027** **Research group leader (SNSF Ambizione grantee)** at the Department of Theoretical Physics. *Université de Genève*. Geneva, Switzerland.
- Sep. 2020–Feb. 2023** **Postdoctoral researcher** at the theory group of the *Astroparticule et Cosmologie* (APC) Institute. *Université Paris Cité*. CNRS. Paris, France. *Supervisors*: Chiara Caprini, Andrii Neronov, Dmitri Semikoz. I spent the last 5 months at the University of Geneva.
- Jan. 2017–Aug. 2020** **Graduate research assistant** at the Laboratory for Atmospheric and Space Physics (LASP). University of Colorado. Boulder, CO. USA. *Supervisor*: Axel Brandenburg.
- Jan. 2019–Dec. 2022** **Visiting researcher** at Ilia State University. Tbilisi, Georgia. *Host*: Tina Kahniashvili.
- Aug.–Nov. 2018** **Visiting PhD fellow** at the Nordic Institute for Theoretical Physics (Nordita). Stockholm, Sweden. *Host*: Axel Brandenburg.
- 8 Aug.–Dec. 2019** **Graduate research assistant** at the Uncertainty Quantification Group of the Aerospace Engineering Department. University of Colorado. Boulder, CO. USA. *Supervisor*: Alireza Doostan.
- Aug. 2015–Jan. 2017** **Graduate research assistant** at the Uncertainty Quantification Group of the Aerospace Engineering Department. University of Colorado. Boulder, CO. USA. *Supervisor*: Alireza Doostan.
- Feb.–Jul. 2015** **Undergraduate research assistant** at the *Institute Pprime* at ISAE-ENSMA. Futuroscope, France. *Supervisor*: Frédéric Pons.
- Sep. 2014–Jul. 2015** **Undergraduate research assistant** at CTTC. *Universitat Politècnica de Catalunya* (UPC). Barcelona, Spain. *Supervisors*: Assensi Oliva, Oriol Lehmkuhl.

Teaching experience

- Jan. 12–23, 2026** **Lecturer** at the Nordita Winter School “*Cosmological Magnetic Fields: Generation, Observation, and Modeling.*” Stockholm, Sweden.
- Oct. 20–24, 2025** **Lecturer** at the 1st PENCIL CODE school: “*Early Universe physics and Gravitational Waves.*” CERN. Geneva, Switzerland.
- Sep. 22–26, 2025** **Lecturer** on plasma physics and magnetohydrodynamics at the 3rd “*Cosmo-Lattice school.*” IBS Center for Theoretical Physics of the Universe. Daejeon, South Korea.
- May 21–24, 2024** **Co-lecturer** of 2 ECTS EPFL course “*Simulations of Early Universe Magnetohydrodynamics.*” Lausanne, Switzerland. Co-lectured with *J. Schober*.
- Nov. 2020–Feb. 2021** **Private online lecturer** on *Quantum Chemistry* to BSc students.
- Jan.–May 2020** **Graduate teaching assistant** in ASEN 1022 (BSc) “*Materials Science for Aerospace Engineers*” at the University of Colorado. Boulder, CO. USA.
- Jan.–May 2019** **Graduate teaching assistant** in ASEN 6061 (MSc and PhD) “*Molecular Gas Dynamics and Direct Monte Carlo Simulation*” at the University of Colorado. Boulder, CO. USA.

Language skills: Spanish, English, Catalan (native), French (good command, B2), German and Italian (basic, A).

Advising experience (main advisor)

PhD student: *Antonino Salvino Midiri* (University of Geneva). **Feb. 2023–Jan. 2027.**

MSc student: *Madeline Salomé* (EPFL). **Sep. 2024–Aug. 2025.** Now PhD student at IP2I in Lyon.

Advising experience (supervision in collaborative projects)

PhD students:	<i>Touko Puro</i> (2026) (Aalto University, main supervisor Matthias Rheinhardt) <i>Murman Gurgendze</i> (2025) (Carnegie Mellon University, main supervisor Tina Kahniashvili) <i>Isak Stomberg</i> (2023–2024) (DESY, main supervisor Thomas Konstandin, now postdoc at IFIC, Valencia) <i>Yutong He</i> (2021–2022) (Nordita, main supervisor Axel Brandenburg, now working in industry)
Postdocs:	<i>Deepen Garg</i> (2024–2026) (joint project with C. Caprini at Univeristy of Geneva, now in Bonn) <i>Sovan Sau</i> (2024–2026) (IIT Guwahati) <i>Alireza Talebian</i> (2024–2026) (IPM, Tehran) <i>Kenneth Marschall</i> (2023–2026) (joint project with D. G. Figueroa at IFIC) <i>Simona Procacci</i> (2023–2025) (joint project with C. Caprini at University of Geneva)
PhD mentees (LECS mentorship program)	<i>Zarnigah Kayani</i> (2023–2024) <i>Vivienne Langen</i> (2022–2023) <i>Sofia Canevarolo</i> (2021–2022)

Collaborations and peer-review

Core member of the Laser Interferometer Space Antenna (**LISA**) Consortium:

- Member of the **Cosmology Working Group** and the **Swiss theory group**.
- Member of LISA Early Career Scientists (**LECS**).

Full member of the European (EPTA) and International Pulsar Timing Array (IPTA) Collaborations.

Co-leader of the *new physics group* for EPTA and IPTA.

Member of the Lunar Gravitational Wave Antenna (**LGWA**) Working Group,
the French *Groupement de Recherche Ondes Gravitationnelles*,
the European Consortium for Astroparticle Theory (**EuCAPT**).

Junior member of the International Astronomical Union (**IAU**).

Referee reviewer for *J. Cosmol. Astropart. Phys.* (**JCAP**), *Phys. Rev. D* (**PRD**), *Phys. Rev. Lett.* (**PRL**),
Nature Astronomy, *Reports on Progress in Physics*, *Scientific Reports* (Springer Nature).

Reviewer of scientific applications for the *Humboldt Research Fellowship* (Germany).

Organization experience

<i>Sep. 27–Oct. 15, 2027</i>	Co-organizer of the 3-week MITP program “ <i>Phase Transitions from Microscopic to Cosmological Scales</i> ” at the Mainz Institute for Theoretical Physics (MITP), Germany. Organized with M. Nemevšek, D. Racco, P. Schicho, P. Schwaller, B. Świeżewska.
<i>Jun. 7–Jul. 2, 2027</i>	Lead organizer of the 4-week Nordita program “ <i>Exploring Cosmological Phase Transitions with Gravitational Waves</i> ” at Nordita. Stockholm, Sweden. Organized with M. Nemevšek, D. Racco, P. Schicho, B. Świeżewska. Funded 540k SEK (~52k EUR) .
<i>Nov. 30–Dec 4, 2026</i>	Lead organizer of the workshop “ <i>Magnetic fields in the primordial universe</i> ” at the International Centre for Theoretical Sciences (ICTS). Bengaluru, India. Organized with P. Bhat, K. Subramanian, T. Vachaspati.
<i>Jan. 2026–Jan. 2027</i>	Joint “ <i>Thermal field theory and gravitational waves</i> ” group meetings at University of Geneva/CERN. Co-organized with P. Schicho.
<i>Oct. 20–31, 2025</i>	Main organizer of the CERN TH Institute “ <i>1st PENCIL CODE school on early universe physics and gravitational waves</i> ” and “ <i>21st PENCIL CODE user meeting 2025</i> .” CERN. Geneva, Switzerland. Funded 17k CHF .
<i>Aug. 25–29, 2025</i>	Co-organizer of the CERN TH institute “ <i>Advancing gravitational wave predictions from cosmological first-order phase transitions</i> ” at CERN. Geneva, Switzerland. Organized with C. Caprini, H. M. Lee, S.C. Park, S. Procacci, P. Schicho, J. van de Vis. Funded 10k CHF .
<i>Jul. 28–Aug. 15, 2025</i>	Lead organizer of the 3-week Nordita program “ <i>Numerical simulations of early Universe sources of gravitational waves</i> ” at Nordita. Stockholm, Sweden. Organized with C. Caprini, A. Drew, D. G. Figueroa, D. Weir. Funded 440k SEK (~40k EUR) .
<i>Apr. 29–Jun. 7, 2024</i>	Lead organizer of the 6-week program “ <i>Generation, evolution, and observations of cosmological magnetic fields</i> ” at the Bernoulli Center at EPFL. Lausanne, Switzerland. Organized with A. Boyarsky, C. Caprini, M. Hirschmann, T. Montaruli, A. Neronov, Y. Revaz, J. Schober. Funded 100k CHF .
<i>Sep. 2020–Sep. 2022</i>	Main organizer of the APC theory group weekly seminar.

Code developing experience

Active developer and code administrator of the open-source PENCIL CODE, stored on [GitHub](#), with 100 developers and 20 code administrators.

Active developer of the open-source *CosmoLattice*.

Main developer of the COSMOGW package, stored on [GitHub](#), released in Aug. 2025, installable via [PyPi](#) (using `pip install`), see documentation in Read the Docs.

Main developer of the `GW_turbulence` public package for gravitational wave backgrounds from MHD turbulence.

Extended collaborative visits

Sep. 2022–Present	CERN. Geneva, Switzerland	
Jun. 2026	University of Stavanger, Norway	Host: <i>Helena Kolesova</i>
Apr. 2026	University of Barcelona, Spain	Host: <i>David Mateos</i>
Dec. 2025	Ilia State University. Tbilisi, Georgia	Host: <i>Tina Kahniashvili</i>
Jan. 2025	IUCAA. Pune, India	Host: <i>Kandaswamy Subramanian</i>
Dec. 2024	IFIC. Valencia, Spain	Host: <i>Daniel Figueroa</i>
Jan. 2024	DESY. Hamburg, Germany	Host: <i>Thomas Konstandin</i>
Dec. 2024	IFIC. Valencia, Spain	Host: <i>Daniel Figueroa</i>
Oct. 2023	Nordita. Stockholm, Sweden	Host: <i>Axel Brandenburg</i>
Nov. 2021	CERN and University of Geneva, Switzerland	Host: <i>Chiara Caprini</i>
Dec. 2019	Ilia State University. Tbilisi, Georgia	Host: <i>Tina Kahniashvili</i>
Aug. –Dec. 2019	Nordita. Stockholm, Sweden	Host: <i>Axel Brandenburg</i>
Feb. 2019	CMU. Pittsburgh (PA), USA	Host: <i>Tina Kahniashvili</i>
Aug. –Nov. 2018	Nordita. Stockholm, Sweden	Host: <i>Axel Brandenburg</i>
May 2018	CMU. Pittsburgh (PA), USA	Host: <i>Tina Kahniashvili</i>

Awards and Grants as PI

PI of the SNSF Ambizione grant 208807: “*Exploring the early universe with gravitational waves and primordial magnetic fields*” at the *Department of Theoretical Physics* at the University of Geneva. Funding for PI, for one PhD student (Antonino S. Midiri), and for project costs. **Feb. 2023–Jan. 2027. ~ 900k CHF.**

2020 Summer Fellowship from the Graduate School at the University of Colorado to support doctoral students. **May–Aug. 2020. 6k USD.**

Participant of the competitive **Argonne Training Program on Extreme-Scale Computing (ATPESC).**

Jul. 26–Aug. 7, 2020. Argonne National Laboratory. *Attended online due to Covid-19 pandemic.*

APS **Distinguished Student** award to present my research at the APS April Meeting 2020.

International travel grant by the University of Colorado to attend the PENCIL CODE user meeting at Aalto University and the Nordita program “*Gravitational Waves from the Early Universe.*” **Aug. 2019. 500 USD.**

Nordita visiting PhD fellowship. Funding for accommodation, travel, and local expenses.

Awarded twice: **Aug.–Nov. 2018** and **Aug.–Dec. 2019.**

Balsells graduate fellowship at the University of Colorado. Boulder, CO. USA. Funding to cover tuition fees for graduate studies and monthly stipend as research assistant **Aug. 2015–Aug. 2017. ~ 120k USD.**

ERASMUS+ **and** AGAUR **scholarships** at ISAE–ENSMA. Futuroscope, France. Funding to cover expenses during undergraduate exchange program. **Jan. –Jul. 2015. 3.6k EUR.**

Collaboration fellowship of Spain’s Ministry of Education at the Heat Transfer department of the UPC. Barcelona, Spain. Funding for undergraduate research. **Sep. 2014–Jul. 2015. 2k EUR.**

Banco Santander fellowship to work at Termofluids start-up company as a research assistant. Terrassa, Spain. **Jun. –Aug. 2014. 1.8k EUR.**

Scholarship of Spain’s Ministry of Education. Funding to cover tuition fees for undergraduate studies and yearly stipend at UPC. Terrassa, Spain. **Aug. 2011–Jul. 2015. ~ 25k EUR.**

Participation in collaborative research grants (not as PI)

Postdoctoral researcher of the SNSF grant 182044: “*Testing General Relativity with Cosmological Observations*” at the *Université de Genève, Département de Physique Théorique.* **Sep. 2022–Feb. 2023.** PI: Ruth Durrer.

Postdoctoral researcher of the ANR-19-CE31-0020 collaborative project MMUniverse: “*Opening new windows on early-universe with multi-messenger astronomy*” at the *Astroparticule et Cosmologie (APC) Institute.* **Sep. 2020–Sep. 2022.** PI: Dmitri Semikoz.

Visiting researcher of the Shota Rustaveli Georgian National Science Foundation grant FR18-1462: “*Reconstructing the Early Universe: Cosmic Magnetic Fields and Gravitational Waves*” at Ilia State University. Tbilisi, Georgia. **2019–2022.** PI: Tina Kahniashvili.

Graduate Research Assistant of the National Science Foundation grant 1615100: “*A Comprehensive Theoretical Study of Cosmic Magnetic Fields, their Origin, Evolution, and Signatures*” at the Laboratory for Atmospheric and Space Physics (LASP), University of Colorado. Boulder (CO), USA. **2017–2020**.

PIs: Axel Brandenburg and Tina Kahniashvili.

Computing research grants and allocations

Member of the allocation “Astrophysical turbulence and dynamo action” (projects SNIC 2019/2-22, 2020/3-30, 2021/3-29, 2022/3-23, NAISS 2023/3-23, 2024/3-6) of the Swedish National Infrastructure for Computing (SNIC).

Jan. 2020–Jan. 2025. PI: Axel Brandenburg.

300k CPU hours at the GENCI’s Jean Zay CSL supercomputer, as part of the A11 DARI allocation to the project: “*Opening new windows on Early Universe with multi-messenger astronomy*.” **Nov. 2021–Oct. 2022**.

PI: Alberto Roper Pol.

300k CPU hours at the GENCI’s Occigen supercomputer, as part of the A9 DARI allocation to the project: “*Opening new windows on Early Universe with multi-messenger astronomy*.” **Nov. 2020–Oct. 2021**. PI: Alberto Roper Pol.

200k CPU hours at the CNES HPC facilities as a member of the LISA group at APC. **Sep. 2020–Jan. 2023**.

PI: Chiara Caprini.

Publications*

Total citations: 2504 (1180 excluding LISA/EPTA/LGWA collaboration papers), h-index: 17.

Sources: ADS, Google Scholar, iNSPIRE. *Updated on Jul. 8, 2026*

Published:

22. C. Caprini, A. S. Midiri*, S. Procacci, **A. Roper Pol***, “Fluid perturbations from expanding bubbles in first-order phase transitions,” arXiv:2604.02240 (2026), *accepted for J. Cosmol. Astropart. Phys.*
21. M. Gurgendze, A. J. Long, **A. Roper Pol**, A. Brandenburg, T. Kahniashvili, “Primordial magnetic field from chiral plasma instability with sourcing,” arXiv:2512.09177 (2025), *accepted for Phys. Rev. D*.
20. **A. Roper Pol**, A. S. Midiri, “Relativistic magnetohydrodynamics in the early Universe,” *J. Cosmol. Astropart. Phys.* **06** (2026) 70, arXiv:2501.05732.
19. **A. Roper Pol**, A. Neronov, C. Caprini, T. Boyer, and D. Semikoz, “LISA and γ -ray telescopes as multi-messenger probes of a first-order cosmological phase transition,” *Astron. Astrophys.* **708** (2026) A337, arXiv:2307.10744.
18. C. Caprini, R. Jinno, T. Konstandin, **A. Roper Pol***, H. Rubira, I. Stomberg*, “Gravitational waves from first-order phase transitions: from weak to strong,” *J. High Energy Phys.* **07** (2025) 217, arXiv:2409.03651.
17. J. Harms *et al.* [LGWA Collaboration] (incl. **A. Roper Pol**), “The Lunar Gravitational-wave Antenna: Mission studies and science case,” *J. Cosmol. Astropart. Phys.* **01** (2025) 108, arXiv:2404.09181.
16. C. Caprini, R. Jinno, M. Lewicki*, E. Madge*, M. Merchand, G. Nardini*, M. Pieroni*, **A. Roper Pol**, and V. Vaskonen, “Gravitational waves from first-order phase transitions in LISA: Reconstruction pipeline and physics interpretation,” *J. Cosmol. Astropart. Phys.* **10** (2024) 020, arXiv:2403.03723.
15. [EPTA and InPTA Collaborations] (incl. **A. Roper Pol**), “The second data release from the European Pulsar Timing Array IV: Implications for massive black holes, dark matter and the early Universe,” *Astron. Astrophys.* **685** (2024) A94, arXiv:2306.16227.
14. **A. Roper Pol**, S. Procacci, C. Caprini, “Characterization of the gravitational wave spectrum from sound waves within the sound shell model,” *Phys. Rev. D* **109**, 063531 (2024), arXiv:2308.12943.
13. [LISA Cosmology Working Group] (incl. **A. Roper Pol**), “Cosmology with the Laser Interferometer Space Antenna,” *Living Rev. Relativ.* **26**, 5 (2023), arXiv:2204.05434.
12. Y. He, **A. Roper Pol**, and A. Brandenburg, “Modified propagation of gravitational waves from the early radiation era,” *J. Cosmol. Astropart. Phys.* **06** (2023) 025, arXiv:2212.06082.
11. **A. Roper Pol**, C. Caprini, A. Neronov, and D. Semikoz, “The gravitational wave signal from primordial magnetic fields in the Pulsar Timing Array frequency band,” *Phys. Rev. D* **105**, 123502 (2022), arXiv:2201.05630.
10. **A. Roper Pol**, S. Mandal, A. Brandenburg, and T. Kahniashvili, “Polarization of gravitational waves from helical MHD turbulent sources,” *J. Cosmol. Astropart. Phys.* **04** (2022) 019, arXiv:2107.05356.
9. A. Brandenburg, G. Gogoberidze, T. Kahniashvili, S. Mandal*, **A. Roper Pol**, and N. Shenoy, “The scalar, vector, and tensor modes in gravitational wave turbulence simulations,” *Class. Quantum Grav.* **38**, 145002 (2021), arXiv:2103.01140.
8. T. Kahniashvili, A. Brandenburg, G. Gogoberidze, S. Mandal, and **A. Roper Pol**, “Circular polarization of gravitational waves from early-universe helical turbulence,” *Phys. Rev. Res.* **3**, 013193 (2021), arXiv:2011.05556.
7. A. Neronov, **A. Roper Pol**, C. Caprini, and D. Semikoz, “NANOGrav signal from MHD turbulence at the QCD phase transition in the early universe,” *Phys. Rev. D* **103**, L041302 (2021), arXiv:2009.14174.

*Corresponding author is marked with an asterisk when the authors list is in alphabetical order.

6. **A. Roper Pol**, S. Mandal, A. Brandenburg, T. Kahniashvili, and A. Kosowsky, “Numerical simulations of gravitational waves from early-universe turbulence,” *Phys. Rev. D* **102**, 083512 (2020), arXiv:1903.08585.
5. **A. Roper Pol**, A. Brandenburg, T. Kahniashvili, A. Kosowsky, and S. Mandal, “The timestep constraint in solving the gravitational wave equations sourced by hydromagnetic turbulence,” *Geophys. Astrophys. Fluid Dyn.* **114**, 130 (2020), arXiv:1807.05479.
4. A. Brandenburg, T. Kahniashvili, S. Mandal, **A. Roper Pol**, A.G. Tevzadze, and T. Vachaspati, “The dynamo effect in decaying helical turbulence,” *Phys. Rev. Fluids* **4**, 024608 (2019), arXiv:1710.01628.
3. A. Brandenburg, A. Bracco, T. Kahniashvili, S. Mandal, **A. Roper Pol**, G.J.D. Petrie, N.K. Singh, “*E* and *B* polarizations from inhomogeneous and solar surface turbulence,” *Astrophys. J.* **870**, 87 (2019), arXiv:1807.11457.
2. A. Brandenburg, T. Kahniashvili, S. Mandal, **A. Roper Pol**, A.G. Tevzadze, and T. Vachaspati, “Evolution of hydromagnetic turbulence from the electroweak phase transition,” *Phys. Rev. D* **96**, 123538 (2017), arXiv:1711.03804.

Preprints:

1. Y. He, **A. Roper Pol**, and A. Brandenburg, “Leading-order nonlinear gravitational waves from reheating magnetogenesis,” arXiv:2110.14456 (2021).

Proceedings:

4. I. Stomberg, **A. Roper Pol**, “Gravitational wave spectra for cosmological phase transitions with non-linear decay of the fluid motion.” Contribution to the “2025 Gravitation: Proceedings of the 59th Rencontres de Moriond” (2025), arXiv:2508.04263.
3. **A. Roper Pol**, “Gravitational waves from MHD turbulence at the QCD phase transition as a source for Pulsar Timing Arrays.” Contribution to the “2022 Gravitation: Proceedings of the 56th Rencontres de Moriond” (2022), arXiv:2205.09261.
2. **A. Roper Pol**, “Gravitational radiation from MHD turbulence in the early universe.” Contribution to the “2021 Gravitation: Proceedings of the 55th Rencontres de Moriond,” ARISF, ISBN:979-10-96879-14-4 (2021), arXiv:2105.08287.
1. T. Kahniashvili, A. Brandenburg, A. Kosowsky, S. Mandal, and **A. Roper Pol**, “Magnetism in the Early Universe,” FM8: New Insights in Extragalactic Magnetic Fields, IAU Proceedings (2019), arXiv:1810.11876.

Invited and contributed talks

Total of **84** talks at international workshops, seminars, and conferences, of which **36 are invited talks** at a total of **23 different countries around the world**. For a map with the locations of all the talks, see MyMaps.

Updated on Jul. 8, 2026.

84. **Aug. 26, 2026**. Speaker at the Swiss Physical Society *Annual Meeting* at EPFL. Lausanne, Switzerland.
83. **Aug. 17, 2026**. Plenary invited speaker at *Strong and Electroweak Matter* at the University of Helsinki.
82. **Jun. 22, 2026**. Plenary invited speaker at the *IPTA science meeting* in Drakensberg, South Africa.
81. **Jun. 14, 2026**. Invited speaker at the *Norwegian Network for Particle Astroparticle and Cosmology Theory (NPACT)* at the University of Stavanger, Norway.
80. **Jun. 3, 2026**. Invited speaker at the *LISA CosWG meeting* at the UB. Barcelona, Spain.
79. **May 4, 2026**. Invited seminar at the *Instituto de Física Teórica* (IFT) in Madrid, Spain.
78. **Apr. 29, 2026**. Invited seminar at *EHU*. Bilbao, Spain.
77. **Apr. 23, 2026**. Invited seminar at *IFAE*. Barcelona, Spain.
76. **Apr. 22, 2026**. Invited seminar at *ICCUB*. Barcelona, Spain.
75. **Mar. 10, 2026**. Invited speaker at the *joint ETH/UZh Particle Theory Seminars*. Zurich, Switzerland.
74. **Feb. 20, 2026**. Invited seminar at *TU Wien*, Austria.
73. **Dec. 18, 2025**. Invited public lecture at *Ilia State University*. Tbilisi, Georgia.
72. **Dec. 5, 2025**. Main colloquium speaker at *MPIFR*. Bonn, Germany.
71. **Sep. 5, 2025**. Plenary invited speaker at *Invisibles 2025*. CERN, Switzerland.
70. **Jul. 28, 2025**. Invited speaker at the *Niels Bohr Colloquium*. Stockholm University, Sweden.
69. **Jun. 24, 2025**. Invited speaker at the *Gravitational Wave Probes of Physics Beyond Standard Model* conference. University of Warsaw, Poland.
68. **Jun. 11, 2025**. Speaker at the *CosmoFondue conference*. University of Geneva, Switzerland.
67. **Jun. 4, 2025**. Speaker at the *LISA CosWG meeting*. Tallinn, Estonia.
66. **Jan. 16, 2025**. Invited speaker at *IUCAA*. Pune, India.
65. **Jan. 6, 2025**. Invited lecturer at the “*Hearing beyond the standard model with cosmic sources of Gravitational Waves*” program. ICTS, Bangalore, India.
64. **Nov. 27, 2024**. Invited speaker at *CEICO*. Prague, Czech Republic.
63. **Nov. 19, 2024**. Invited speaker at the *University of Bern*, Switzerland.

62. *Sep. 24, 2024.* Speaker at the *PENCIL CODE user meeting* at the Institute of Space Science. Barcelona, Spain.
61. *Jul. 8, 2024.* Speaker at the *International LISA Symposium*. University College Dublin, Ireland.
60. *Jul. 1, 2024.* Speaker at the *EAS Annual Meeting*. Padova, Italy.
59. *Jun. 19, 2024.* Speaker at the *LISA CosWG meeting*. Universidade do Porto, Portugal.
58. *Apr. 6, 2024.* Speaker at the *Cosmology Rencontres de Moriond* in La Thuile, Italy.
57. *Mar. 19, 2024.* Speaker at the “*Cosmology in the Alps*” meeting in Les Diablerets, Switzerland.
56. *Feb. 21, 2024.* Speaker at the YITP workshop “*Gravity and Cosmology*.” Kyoto University, Japan.
55. *Jan. 18, 2024.* Invited speaker at the *astroparticle physics seminars* at DESY. Hamburg, Germany.
54. *Dec. 14, 2023.* Plenary speaker at the *Swiss CTA Observatory day* ISS. Bern, Switzerland.
53. *Dec. 5, 2023.* Invited seminar at *IFIC*. Valencia, Spain.
52. *Oct. 16, 2023.* Speaker at the *GdR Ondes Gravitationnelles* meeting. Observatoire de Paris, France.
51. *Oct. 12, 2023.* Speaker at the *TUG* meeting. LPENS, Paris, France.
50. *Sep. 29, 2023.* Invited speaker at the Nordita program “*Hydrodynamics at all scales*.” Stockholm, Sweden.
49. *Sep. 18, 2023.* Invited speaker at “*Early Universe cosmology with Gravitational Waves and Primordial Black Holes*” meeting. University of Warsaw, Poland.
48. *Sep. 13, 2023.* Speaker at *COSMO 2023*. IFT. Madrid, Spain.
47. *Sep. 5, 2023.* Speaker at the *PENCIL CODE user meeting*. University of Graz, Austria.
46. *Jun. 5, 2023.* Speaker at the *LISA CosWG meeting*. University of Stavanger, Norway.
45. *May 2, 2023.* Speaker at *PONT 2023*. Palais des papes, Avignon, France.
44. *Apr. 20, 2023.* Speaker at “*Hot topics in cosmology*” workshop. IESC. Cargèse, France.
43. *Mar. 8, 2023.* Invited speaker at the *CERN TH Cosmo Coffee*. Geneva, Switzerland.
42. *Nov. 22, 2022.* Invited seminar at the *Observatory of Geneva*, Switzerland.
41. *Oct. 13, 2022.* Invited seminar at the *University of Geneva*, Switzerland.
40. *Jul. 27, 2022.* Speaker at the *LISA Symposium* (online).
39. *Jul. 5, 2022.* Invited speaker at the IPTA data analysis workshop meeting (online).
38. *Jul. 5, 2022.* Speaker at the 23rd International Conference on *General Relativity and Gravitation* (online).
37. *Jun. 31, 2022.* Speaker at the workshop “*A shot in the dark: New Challenges in Cosmology*.” Lorentz Center. Leiden, The Netherlands.
36. *Jun. 30, 2022.* Invited seminar at the *LPP, École Polytechnique* (online).
35. *Jun. 20, 2022.* Invited speaker at the “*Cosmology*” and “*Tests of GR and modified alternatives*.” GdR working groups. IJCLab. Orsay, France.
34. *Jun. 8, 2022.* Speaker at the *Iberian Gravitational Waves Meeting* (online).
33. *May 6 & 7, 2022.* Speaker and discussion leader at the *PENCIL CODE user meeting* (online).
32. *Mar. 24, 2022.* Invited speaker at the *EPTA meeting* (online).
31. *Mar. 19, 2022.* Speaker at the Asia-Pacific School and Workshop on *Gravitation and Cosmology* (online).
30. *Feb. 22, 2022.* Speaker at the *Central European Relativity Seminar*. Budapest, Hungary.
29. *Feb. 4, 2022.* Speaker at the *Gravitation Rencontres de Moriond* in La Thuile, Italy.
28. *Dec. 8, 2021.* Speaker at the *LISA CosWG meeting* (online).
27. *Nov. 23, 2021.* Speaker at the *Astroparticle Symposium* at the Institut Pascal. Orsay, France.
26. *Oct. 11, 2021.* Speaker at the *GdR Ondes Gravitationnelles meeting*. LAPP. Annecy, France.
25. *Sep. 15, 2021.* Speaker at the *Spanish-Portuguese Relativity Meeting* (online).
24. *Jul. 28, 2021.* Lecturer at the CIRM school “*Theory of Gravitation and Variation in Cosmology*” (online).
23. *Jul. 13, 2021.* Invited speaker at the workshop “*Gravitational Waves Probes of Physics Beyond Standard Model*” (online).
22. *May 19, 2021.* Speaker at the *PENCIL CODE user meeting* (online).
21. *Apr. 12, 2021.* Speaker at the *BritGrav meeting* (online).
20. *Mar. 31, 2021.* Speaker at the *GdR Ondes Gravitationnelles meeting* (online).
19. *Mar. 9, 2021.* Poster presentation at the *Gravitation Rencontres de Moriond* (online).
18. *Jan. 28, 2021.* Speaker at the *ICAP journal club* (online).
17. *Jan. 28, 2021.* Speaker at the cosmology group meeting of the *GdR Ondes Gravitationnelles* (online).
16. *Dec. 20, 2020.* Speaker at the *IAGRG meeting* (online).
15. *Dec. 10, 2020.* Speaker at *PONT 2020* (online).
14. *Nov. 10, 2020.* Speaker at the AAPPS-DACG workshop “*Astrophysics, Cosmology, and Gravitation*” (online).
13. *Oct. 14, 2020.* Invited speaker at the “*Action Dark Energy*” colloquium (online).
12. *Sep. 22, 2020.* Speaker at the *theory group at APC* (online).

11. **Apr. 20, 2020.** Distinguished Student award speaker at the APS April meeting “*Quarks to Cosmos*” (online).
10. **Feb. 7, 2020.** Speaker at the *researchpalooza* of the Aerospace Engineering Sciences Department. University of Colorado. Boulder, CO, USA.
9. **Dec. 3, 2019.** Invited seminar at the *Helsinki Institute of Physics*, Finland.
8. **Aug. 26–Sep. 20, 2019.** Speaker of 3 talks during the Nordita program “*Gravitational Waves from the Early Universe.*” Stockholm, Sweden.
5. **Aug. 13, 2019.** Speaker at the PENCIL CODE *user meeting* at Aalto University. Helsinki, Finland.
4. **Aug. 22, 2018.** Speaker at the Nordita *Astrophysics seminar*. Stockholm, Sweden..
3. **Jul. 8, 2018.** Poster presentation at the International *LISA Symposium*. Chicago, IL, USA.
2. **Jun. 15, 2018.** Speaker at the PENCIL CODE *user meeting*. University of Colorado. Boulder, CO, USA..
1. **May 8, 2018.** Speaker at the *Phenomenology Symposium*. University of Pittsburgh, PA, USA..

Outreach talks

1. **Feb. 20, 2020.** Lecture for ASEN 1022 students *at the University of Colorado*. Boulder, CO, USA. “*Quantum mechanics and orbitals: What is an orbital?, and common misconceptions.*”