

Richard Pires Brito
Curriculum Vitae

Updated on March 14, 2023

- PERSONAL DATA CENTRA, Departamento de Física *Date of Birth:* 23rd January 1989
 Instituto Superior Técnico, *Nationality:* Portuguese
 Avenida Rovisco Pais 1, 1049 Lisboa, Portugal *e-mail:* richard.brito@tecnico.ulisboa.pt
- CURRENT POSITIONS **Junior researcher** funded by the Fundação para a Ciência e a Tecnologia (FCT), Instituto Superior Técnico, Lisboa, Portugal, since July 2021.
 Invited Assistant Professor, Instituto Superior Técnico, Lisboa, Portugal, since September 2021.
- PAST POSITIONS **Postdoctoral researcher** funded by the ERC DarkGRA project [PI: Prof. Paolo Pani], Sapienza University of Rome, Rome, Italy, from February 2021 to June 2021.
 Marie Curie Fellow, Sapienza University of Rome, Rome, Italy, January 2019 to December 2020.
 Junior Scientist/Postdoc, Max Planck Institute for Gravitational Physics (Albert Einstein Institute), Potsdam, Germany, September 2016 to December 2018.
 FCT-IDPASC Ph.D. fellow, CENTRA/Instituto Superior Técnico, Lisboa, Portugal, January 2013 to July 2016.
- EDUCATION **Instituto Superior Técnico** (Universidade de Lisboa), Lisboa, Portugal
 Department of Physics
 Ph.D. degree in Physics, January 2013 to July 2016
 Grade: “Pass with Distinction and Honour”
 • Dissertation Topic: “Fundamental fields around compact objects: Massive spin-2 fields, Superradiant instabilities and Stars with dark matter cores” (arXiv:1607.05146 [gr-qc])
 • Supervisor: Dr. Vitor Cardoso
 • Co-Supervisor: Dr. Paolo Pani
- Instituto Superior Técnico** (Universidade de Lisboa), Lisboa, Portugal
 Department of Physics
 Master’s degree-Msc. in Physics Engineering, September 2010 to November 2012
 Grade: 18/20
 • Dissertation Topic: “Dynamics around black holes: Radiation Emission and Tidal Effects” (arXiv:1211.1679 [gr-qc])
 • Supervisor: Dr. Vitor Cardoso
- Universita’ degli studi di Padova**, Padova, Italy
 Erasmus Student, March-July 2011
- Instituto Superior Técnico** (Universidade de Lisboa), Lisboa, Portugal
 Undergraduate diploma in Physics Engineering, September 2007 to July 2010
- FELLOWSHIPS & • Employed as a Junior Researcher under the program ”Scientific Employment Stimulus” from AWARDS the Fundação para a Ciência e a Tecnologia; (rating: 9.47/10)

- Marie Curie Individual Fellowship, FunGraW-792862 [H2020-MSCA-IF-2017], “Fundamental physics in the era of gravitational-wave astronomy”; 169K euro, funded by European Union H2020, (rating: 91.20/100)
- 2018 Alberto Prize awarded by the Portuguese Society on Relativity and Gravitation to promising young researchers.
- “Professor Abreu Faro” Prize for the best PhD thesis completed at Instituto Superior Técnico in the subjects of electronics, computer science, physics and mathematics completed between 2015 and 2016.
- Visiting Graduate Fellow at the Perimeter Institute for Theoretical Physics, May 2014 to October 2014 .
- Gulbenkian Prize for Young Researchers with the project entitled “Weighing Einstein’s Messengers” in the context of the Program for the Stimulus of Creativity and Quality in Scientific Research, Calouste Gulbenkian Foundation, 2014.
- Prize for 3rd Best poster at the 558. WE-Heraeus-Seminar on “The strong gravity regime of black holes and neutron stars” in Bad Honnef, April 2014.
- Ph.D. Scholarship in the framework of the FCT-IDPASC program, January 2013 to July 2016.
- Scientific Initiation Fellowship from CENTRA (IST), June 2012 to November 2012.
- Erasmus Fellowship, *European Union Lifelong Learning Programme*, March 2011 to July 2011.
- Integration into Research Fellowship from the *Mathematical Physics Group (UL)*, October 2009 to September 2010.

FUNDING

Principal Investigator of the following projects:

- March 2023 – August 2024: **Exploratory Project** funded under FCT’s R&D Grant call, “Fundamental physics with black holes and gravitational waves: a new age of discoveries”; 50K euro, (rating: 8.54/10.0).
- Since July 2021: **Junior researcher position** under FCT’s CEECIND call, “Discovering new physics with gravitational wave observations” (rating: 9.47/10.0).
- January 2019 to December 2020: **Marie Curie Individual Fellowship**, FunGraW-792862 [H2020-MSCA-IF-2017], “Fundamental physics in the era of gravitational-wave astronomy”; 169K euro, funded by European Union H2020, (rating: 91.20). Supervisor: Prof. Paolo Pani

SCIENTIFIC COLLABORATIONS

I am or have been a member of the following scientific collaborations:

- Einstein Telescope Collaboration (since June 2022).
- LISA Consortium (since September 2018). In the consortium I am a co-chair of the Fundamental Physics Working Group and lead a working package on non-GR signatures in EMRIs.
- Member of the “Fundamental Physics” ngEHT Working Group (since September 2021).
- LIGO Scientific Collaboration (from October 2016 until September 2020).

PUBLICATIONS

My papers can be found in the following international journals: *Nature Astronomy*, *Physical Review Letters*, *Physics Letters B*, *Physical Review D* and *Classical and Quantum Gravity*. An up-to-date list of my publications can be found on the INSPIRE database ([link](#)).

Monographs

- 1 [R. Brito](#), V. Cardoso, and P. Pani, “Superradiance: New Frontiers in Black Hole Physics”, 2nd Edition, Lecture Notes in Physics 971 (2020), Springer Nature, Switzerland

Book Chapters

- 1 [R. Brito](#) and P. Pani, “Black-Hole Superradiance: Searching for Ultralight Bosons with Gravitational Waves” (2021), Chapter in the book “Handbook of Gravitational Wave Astronomy”, Springer Singapore, Singapore

Refereed publications

- 38 Y. Chen, X. Xue, [R. Brito](#), and V. Cardoso, “Photon Ring Astrometry for Superradiant Clouds”, *Phys.Rev.Lett.* 130 (2023), 111401; arXiv:2211.03794 [gr-qc]
- 37 N. Loutrel, [R. Brito](#), A. Maselli and P. Pani, “Inspiralling compact objects with generic deformations”, *Phys.Rev. D* 105 (2022), 124050; arXiv:2203.01725 [gr-qc], **Editor’s suggestion of Physical Review D**
- 36 C. Yuan, [R. Brito](#) and V. Cardoso, “Evaporating black holes: constraints on anomalous emission mechanisms”, *Phys.Rev. D* 104 (2021), 124024; arXiv:2107.14244 [gr-qc]
- 35 G. A. Piovano, [R. Brito](#), A. Maselli and P. Pani, “Assessing the detectability of the secondary spin in extreme mass-ratio inspirals with fully-relativistic numerical waveforms”, *Phys.Rev. D* 104 (2021), 124019; arXiv:2105.07083 [gr-qc]
- 34 C. Yuan, [R. Brito](#) and V. Cardoso, “Probing ultralight dark matter with future ground-based gravitational-wave detectors”, *Phys.Rev. D* 104 (2021), 044011; arXiv:2106.00021 [gr-qc]
- 33 A. Ghosh, [R. Brito](#) and A. Buonanno, “Constraints on quasi-normal-mode frequencies with LIGO-Virgo binary-black-hole observations”, *Phys.Rev. D* 103 (2021), 124041; arXiv:2104.01906 [gr-qc]
- 32 L. Tsukada, [R. Brito](#), W. E. East and N. Siemonsen, “Modeling and searching for a stochastic gravitational-wave background from ultralight vector bosons”, *Phys.Rev. D* 103 (2021), 083005; arXiv:2011.06995 [astro-ph.HE]
- 31 N. Sennett, [R. Brito](#), A. Buonanno, V. Gorbenko and L. Senatore, “Gravitational-Wave Constraints on an Effective-Field-Theory Extension of General Relativity”, *Phys.Rev. D* 102 (2020), 044056; arXiv:1912.09917 [gr-qc]
- 30 [R. Brito](#), S. Grillo and P. Pani, “Black hole superradiant instability from ultralight spin-2 fields”, *Phys.Rev.Lett.* 124 (2020) 21, 211101; arXiv:2002.04055 [gr-qc]
- 29 L. Sun, [R. Brito](#) and M. Isi, “Search for ultralight bosons in Cygnus X-1 with Advanced LIGO”, *Phys.Rev. D* 101 (2020), 063020; arXiv:1909.11267 [gr-qc]
- 28 S. Datta, [R. Brito](#), S. Bose, P. Pani and S. A. Hughes, “Tidal heating as a discriminator for horizons in extreme mass ratio inspirals”, *Phys.Rev. D* 101 (2020), 044004; arXiv:1910.07841 [gr-qc]
- 27 E. Berti, [R. Brito](#), C. F. B. Macedo, G. Raposo and J. L. Rosa, “Ultralight boson cloud depletion in binary systems”, *Phys.Rev. D* 99 (2019), 104039; arXiv:1904.03131 [gr-qc]
- 26 S. Ghosh, E. Berti, [R. Brito](#) and M. Richartz, “Follow-up signals from superradiant instabilities of black hole merger remnants”, *Phys.Rev. D* 99 (2019), 104030; arXiv:1812.01620 [gr-qc]
- 25 M. Isi, L. Sun, [R. Brito](#) and A. Melatos, “Directed searches for gravitational waves from ultralight bosons”, *Phys.Rev. D* 99 (2019), 084042; arXiv:1810.03812 [gr-qc]
- 24 O. A. Hannuksela, K. W. K. Wong, [R. Brito](#), E. Berti and T. G. F. Li, “Probing the existence of ultralight bosons with a single gravitational-wave measurement”, *Nature Astronomy* 3, 447–451 (2019); arXiv:1804.09659 [astro-ph.HE]; SharedIt [link](#)
Read also the “Behind the paper” blog post.
- 23 T. Ikeda, [R. Brito](#) and V. Cardoso, “Blasts of Light from Axions”, *Phys.Rev.Lett.* 122 (2019), 081101; arXiv:1811.04950 [gr-qc]
- 22 M. Bošković, [R. Brito](#), V. Cardoso, T. Ikeda and H. Witek, “Axionic instabilities and new black hole solutions”, *Phys.Rev. D* 99 (2019), 035006; arXiv:1811.04945 [gr-qc]

- 21 C. Pacilio and R. Brito, “Quasinormal modes of weakly charged Einstein-Maxwell-dilaton black holes”, *Phys.Rev. D* 98 (2018), 104042; arXiv:1807.09081 [gr-qc]
- 20 R. Brito, A. Buonanno, V. Raymond, “Black-hole Spectroscopy by Making Full Use of Gravitational-Wave Modeling”, *Phys.Rev. D* 98 (2018), 084038; arXiv:1805.00293[gr-qc]
- 19 E. Barausse, R. Brito, V. Cardoso, I. Dvorkin and P. Pani, “The stochastic gravitational-wave background in the absence of horizons”, *Class. Quantum Grav.* Volume 35, Number 20, 2018 ; arXiv:1805.08229 [gr-qc];
Read also the coverage on “CQG+”.
- 18 R. Brito, S. Ghosh, E. Barausse, E. Berti, V. Cardoso, I. Dvorkin, A. Klein and P. Pani, “Gravitational wave searches for ultralight bosons with LIGO and LISA ”, *Phys.Rev. D* 96 (2017), 064050; arXiv:1706.06311[gr-qc]
- 17 R. Brito, S. Ghosh, E. Barausse, E. Berti, V. Cardoso, I. Dvorkin, A. Klein and P. Pani, “Stochastic and resolvable gravitational waves from ultralight bosons”, *Phys.Rev.Lett.* 119 (2017), 131101; arXiv:1706.05097[gr-qc];
Read also the press coverage on Phys.org.
- 16 M. Duarte and R. Brito, “Asymptotically anti-de Sitter Proca stars”, *Phys.Rev. D* 94 (2016), 064055; arXiv:1609.01735[gr-qc]
- 15 R. Brito, V. Cardoso and J. V. Rocha, “Interacting shells in AdS spacetime and chaos”, *Phys.Rev. D* 94 (2016) no.2, 024003; arXiv:1602.03535[hep-th]
- 14 E. Babichev, R. Brito and P. Pani, “Linear stability of nonbidiagonal black holes in massive gravity”, *Phys.Rev. D* 93 (2016), 044041; arXiv:1512.04058[gr-qc]
- 13 R. Brito, V. Cardoso, C. F. B. Macedo, H. Okawa and C. Palenzuela, “Interaction between bosonic dark matter and stars”, *Phys.Rev. D* 93 (2016), 044045; arXiv:1512.00466[astro-ph.SR], **Editor’s suggestion of Physical Review D**
- 12 R. Brito, V. Cardoso, C. A. R. Herdeiro, E. Radu, “Proca Stars: gravitating Bose-Einstein condensates of massive spin 1 particles”, *Physics Letters B* Vol. 752 (2016) 291-295; arXiv:1508.05395[gr-qc]
- 11 R. Brito, V. Cardoso, and H. Okawa, “Accretion of dark matter by stars”, *Phys.Rev.Lett.* 115 (2015), 111301; arXiv:1410.8534[gr-qc];
Read also the press coverage on Phys.org.
- 10 V. Cardoso, R. Brito, J. L. Rosa, “Superradiance in stars”, *Phys.Rev. D* 91 (2015) 12, 124026; arXiv:1508.04773 [gr-qc]
- 9 E. Babichev, R. Brito, “Black holes in massive gravity”, *Class. Quantum Grav.* 32 (2015) 15, 154001, Focus Issue on “Black holes and fundamental fields”; arXiv:1503.07529 [gr-qc];
Read also the coverage on “CQG+”.
- 8 E. Berti, R. Brito, and V. Cardoso, “Ultra-high-energy debris from the collisional Penrose process”, *Phys.Rev.Lett.* 114 (2015) 25, 251103; arXiv:1410.8534[gr-qc];
Read also the Focus in “Physics – spotlighting exceptional research”.
- 7 R. Brito, V. Cardoso, and P. Pani, “Black holes as particle detectors: evolution of superradiant instabilities”, *Class.Quant.Grav.* 32 (2015) 13, 134001, Focus Issue on “Black holes and fundamental fields”; arXiv:1411.0686 [gr-qc];
Read also the coverage on “CQG+”.
- 6 R. Brito, A. Terrana, M. C. Johnson and V. Cardoso, “Nonlinear dynamical stability of infrared modifications of gravity”, *Phys. Rev. D* 90, 124035 (2014); arXiv:1409.0886[hep-th]
- 5 R. Brito, V. Cardoso, and P. Pani, “Superradiant instability of black holes immersed in a magnetic field”, *Phys. Rev. D* 89, 104045 (2014); arXiv:1405.2098[gr-qc]
- 4 R. Brito, V. Cardoso, and P. Pani, “Black holes with massive graviton hair”, *Phys. Rev. D* 88, 064006 (2013); arXiv:1309.0818[gr-qc]

- 3 R. Brito, V. Cardoso, and P. Pani, “Partially massless gravitons do not destroy general relativity black holes”, *Phys. Rev. D* 87, 124024 (2013); arXiv:1306.0908[gr-qc].
- 2 R. Brito, V. Cardoso, and P. Pani, “Massive spin-2 fields on black hole spacetimes: Instability of the Schwarzschild and Kerr solutions and bounds on graviton mass”, *Phys. Rev. D* 88, 023514 (2013); arXiv:1304.6725[gr-qc].
- 1 R. Brito, V. Cardoso, and P. Pani, “Tidal effects around higher-dimensional black holes”, *Phys. Rev. D* 86, 024032 (2012); arXiv:1207.0504[gr-qc].

Co-author of the following LIGO-Virgo Scientific collaboration publications:

- 4 The LIGO Scientific Collaboration and the Virgo Collaboration, “Tests of General Relativity with Binary Black Holes from the second LIGO-Virgo Gravitational-Wave Transient Catalog”, *Phys.Rev. D* 103 (2021), 122002; arXiv:2010.14529 [gr-qc].
- 3 The LIGO Scientific Collaboration and the Virgo Collaboration, “GW190814: Gravitational Waves from the Coalescence of a $23 M_{\odot}$ Black Hole with a $2.6 M_{\odot}$ Compact Object”, *Astrophys.J.* 896 (2020) 2, L44; arXiv:2006.12611 [astro-ph.HE].
- 2 The LIGO Scientific Collaboration and the Virgo Collaboration, “GW190412: Observation of a Binary-Black-Hole Coalescence with Asymmetric Masses”, *Phys. Rev. D* 102, 043015 (2020); arXiv:2004.08342 [astro-ph.HE].
- 1 The LIGO Scientific Collaboration and the Virgo Collaboration, “Tests of General Relativity with the Binary Black Hole Signals from the LIGO-Virgo Catalog GWTC-1”, *Phys. Rev. D* 100, 104036 (2019); arXiv:1903.04467 [gr-qc].

Co-author of the following LISA Consortium or LISA Working Groups white papers or technical reports:

- 2 K. G. Arun *et al*, “New Horizons for Fundamental Physics with LISA”, *Living Reviews in Relativity* 25, 4 (2022); arXiv:2205.01597 [gr-qc], White paper from the LISA “Fundamental Physics Working Group”.
- 1 P. Amaro Seoane *et al*, “The effect of mission duration on LISA Science Objectives”, *General Relativity and Gravitation* 54 (2022) 1, 3; arXiv:2107.09665 [astro-ph.IM]. Technical report from LISA’s Science Interpretation Working Group.

Co-author of the following white papers or reports:

- 6 R. Brito *et al*, “Snowmass2021 Cosmic Frontier White Paper: Probing dark matter with small-scale astrophysical observations”, arXiv:2203.15954 [hep-ph], White paper for Snowmass 2021.
- 5 M. Baryakhtar *et al*, “Dark Matter In Extreme Astrophysical Environments”, arXiv:2203.07984 [hep-ph], White paper for Snowmass 2021.
- 4 V. Kalogera *et al*, “The Next Generation Global Gravitational Wave Observatory: The Science Book”, arXiv:2111.06990 [astro-ph.HE], Report by the GWIC 3G Subcommittee.
- 3 V. Baibhav *et al*, “Probing the Nature of Black Holes: Deep in the mHz Gravitational-Wave Sky”, *Exper.Astron.* 51 (2021) 3, 1385-1416; arXiv:1908.11390 [astro-ph.HE], White paper submitted to ESA’s Voyage 2050 on behalf of the LISA Consortium 2050 Task Force.
- 2 B.S. Sathyaprakash *et al*, “Extreme Gravity and Fundamental Physics”, arXiv:1903.09221 [astro-ph.HE], White Paper submitted to the Astro-2020 (2020 Astronomy and Astrophysics Decadal Survey) by the GWIC-3G Science Case Team.
- 1 L. Barack *et al*, “Black holes, gravitational waves and fundamental physics: a roadmap”, *Class.Quant.Grav.* 36, 143001 (2019); arXiv:1806.05195 [gr-qc], White Paper for the COST action “Gravitational Waves, Black Holes, and Fundamental Physics”.

TRAINING
EXPERIENCE

- 2014 to 2015 – **Tutor of João Luís Rosa**, (master student), Instituto Superior Técnico.
- 2015 to 2016 – **Co-Supervisor of Miguel Duarte**, (master student), Instituto Superior Técnico.
- 2019 to 2020 – **Co-Supervisor of Sara Grillo**, (master student), “Sapienza” Università di Roma.
- 2021 – **Tutor of Paul Roux**, (master student), visiting student at Instituto Superior Técnico from the École Normale Supérieure (Paris).
- 2022 – **Supervisor of Ricardo Arana** (master student), Instituto Superior Técnico.

TEACHING
EXPERIENCE

- Co-responsible for the **course on “Black holes and Gravitational Waves”** for the Master degree in Physics at the Instituto Superior Técnico. I am responsible for teaching and preparing the part of the course on gravitational waves.
- May 2015 – **Minicourse on Superradiance: Energy Extraction and Black hole bombs**, IV Amazonian Workshop on Black Holes and Analogue Models of Gravity Federal University of Pará, Belém.

INVITED TALKS

- 11th Aegean Summer School on “Recent developments in theory and observations in Gravity and Cosmology”, Syros, Greece, September 2022
- Workshop “Gravitational wave probes of black hole environments”, Sapienza University of Rome, Italy, June 2022
- Workshop on “Fundamental Physics with LISA”, International Solvay Institutes, Brussels, April 2022
- CENTRA Seminar, Instituto Superior Técnico, April 2022
- Online Seminar for the Einstein Seminar series, University of Tübingen, December 2021
- Black Holes Inside and Out, Online Conference, September 2021
- Online Seminar, Kavli IPMU/APEC Seminar, March 2021
- Online Seminar, Aveiro University, February 2021
- Seminar, Cardiff University, Wales, February 2020
- IBS-ICTP Workshop on Axion-like particles, Center for Theoretical Physics of the Universe, Institute for Basic Science, Daejeon, Korea, November 2019
- 22nd Capra Meeting on Radiation Reaction in General Relativity, Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, Brazil, June 2019
- Theoretical Seminar, Dipartimento di Fisica, “Sapienza” University of Rome, Italy, February 2019
- Fundamental Physics with LISA workshop, The Galileo Galilei Institute for Theoretical Physics, Florence, Italy, November 2018
- Numerical Relativity beyond General Relativity, Centro de Ciencias de Benasque, Benasque, Spain, June 2018
- Astrophysical and Cosmological Relativity Seminars, Albert Einstein Institute, Potsdam-Golm, Germany, May 2018
- Searching for New Particles with Black Hole Superradiance, Perimeter Institute for Theoretical Physics, Waterloo, Canada, May 2018
- Fluids and gravity: superradiance and analogue black holes, University of Nottingham, Nottingham, England, April 2017
- Strong Gravity and Binary Dynamics with Gravitational Wave Observations Workshop, The University of Mississippi, Oxford, MS, USA, March 2017

- Gravitational Waves and Cosmology Workshop, DESY, Hamburg, Germany, October 2016
- Physics Colloquia, The University of Mississippi, Oxford, MS, USA, March 2016
- Astrophysical and Cosmological Relativity Seminars, Albert Einstein Institute, Potsdam-Golm, Germany, February 2016
- Modern Aspects of Gravity and Cosmology, Laboratoire de Physique Théorique d'Orsay, Paris, France, November 2015
- Cosmology group meeting, Perimeter Institute for Theoretical Physics, Waterloo, Canada, September 2015
- IV Amazonian Workshop on Black Holes and Analogue Models of Gravity, Federal University of Pará, Belém, Brazil, May 2015
- DAMTP Seminar Series, University of Cambridge, Cambridge, England, April 2015
- Dept. Physics Seminar, Universidade de Aveiro, Aveiro, Portugal, April 2014
- Dept. Physics Colloquium, Instituto Superior Técnico, Lisbon, Portugal, March 2014
- Mons Meeting on gravity, University of Mons, Mons, Belgium, July 2013
- II Amazonian Workshop on Black Holes and Analogue Models of Gravity, Federal University of Pará, Belém, Brazil, June 2013

WORKSHOP AND
SEMINAR
CO-ORGANIZATION

- 30 August 2021 - 03 September 2021 – Global meeting of the GWVerse COST action, Lisbon, Portugal ([link](#)).
- September 2016-September 2018 – Co-organizer of the seminars for the Astrophysical and Cosmological Relativity division, Max Planck Institute for Gravitational Physics, Potsdam-Golm ([link](#)).
- 21-22 December 2015 – **VIII Black Holes Workshop**, Instituto Superior Técnico, Lisbon ([link](#)).
- 23-24 July 2015 – **XXV ENAA (Encontro Nacional de Astronomia e Astrofísica) 2015**, Instituto Superior Técnico, Lisbon ([link](#)).
- 10-12 June 2015 – **One Hundred Years of Strong Gravity**, Instituto Superior Técnico, Lisbon ([link](#)).

REFEREE ACTIVITY
FOR INTERNATIONAL
JOURNALS

I have refereed manuscripts for the following international peer-review journals:

- Nature Physics; Physical Review Letters; Physical Review D; Classical and Quantum Gravity; Physics Letters B; Physics Letters A; Journal of High Energy Physics; General Relativity and Gravitation; Journal of Cosmology and Astroparticle Physics; The Astrophysical Journal; International Journal of Modern Physics D; European Physical Journal C; Astroparticle Physics Elsevier; International Journal of Modern Physics A; Canadian Journal of Physics.

OUTREACH

- [R. Brito](#), V. Cardoso, and P. Pani, “The Century of Strong Gravity”, popular science article published in the IST Physics Magazine “Pulsar” and in the Portuguese Physics Magazine “Gazeta de Física”, (2015) Link to the english version: [link](#). Link to the portuguese version: [link](#);
- R. Brito, “The power of an idea”, contribution to the project The Birth of an Idea ([link](#)), 2015.
- (November 2015) Talk at the PubhD Lisbon: [link](#);
- (February 2016) Outreach talk for High School Students, Instituto Superior Técnico, Lisbon, “Olympic games at the speed of light”, [link](#)

- Video-interview to promote the MSCA Fellowships as part of the outreach initiatives for the European Researcher’s Night 2020 organised by the network “ScienzaInsieme” (2020). [link](#).
- Article about the FunGraW project for The Project Repository Journal (pages 118-121) [link](#).

PRESS COVERAGE

Anthony King, *Horizon, The EU Research and Innovation magazine*, “Gravitational waves helping to expose black holes, dark matter and theoretical particles” ([link](#));

Tim Wogan, *Physicsworld*, “Gravitational waves could reveal ultralight bosons lurking near black holes ” ([link](#));

University of Mississippi, *Phys.org*, “Gravitational wave detectors could shed light on dark matter” ([link](#));

Jean-Paul Keulen, *KIJK Magazine*, “Stars may have a dark matter heart” (in Dutch) ([link](#));

Lisa Zyga, *Phys.org*, “Dark matter hiding in stars may cause observable oscillations” ([link](#));

Michael Schirber, *Focus in “Physics – spotlighting exceptional research”*, “Energy Boost from Black Holes” ([link](#));