

COSIMO BAMBI

Date and Place of Birth: 21 September 1980, Florence (Italy)

Citizenship: Italian (Passport), Chinese (Permanent Residence Permit)

Contact details Department of Physics, Fudan University, 2005 Songhu Road, Shanghai 200438, China

Tel: +86-187-2171-1498, E-mail: bambi@fudan.edu.cn

Webpage: <https://cosimobambi.github.io>

Current Academic Positions

2016 – Present Xie Xide Junior Chair Professor of Physics. Fudan University (China)

Education

2007 Ph.D. in Physics. Ferrara University (Italy). Supervisor: Prof. Alexander D. Dolgov.

2003 Laurea in Physics *summa cum laude*. Florence University (Italy).

Previous Academic Positions

2015 – 2018 Humboldt Fellow (visiting position). University of Tuebingen (Germany)

2013 – 2015 Full Professor. Fudan University (China)

2012 – 2013 Associate Professor. Fudan University (China)

2011 – 2012 Postdoctoral Research Fellow. Dvali's Group, LMU Munich (Germany)

2008 – 2011 Project Researcher. IPMU, The University of Tokyo (Japan)

2007 – 2008 Postdoctoral Research Fellow. Wayne State University (Michigan, USA)

Editorial Positions

2025 – Present Editorial Board Member. *Vertex Physics*

2023 – Present Editor-in-Chief. *Handbook of Quantum Gravity* (Springer Singapore)

2022 – Present Founding Editor. *Springer Series in Astrophysics and Cosmology* (Springer Nature)

2022 – Present Editor-in-Chief. *Handbook of X-ray and Gamma-ray Astrophysics* (Springer Singapore)

2020 – Present Editor-in-Chief. *Handbook of Gravitational Wave Astronomy* (Springer Singapore)

2018 – Present Editorial Advisory Board Member. *iScience* (CellPress), IF: 4.1

Honors and Awards (selected)

2025 Chinese Government Friendship Award from the State Council of PRC, China

2025 International Senior Scientists Award (RFIS-III) from NSFC, China

2025 China New Development Award from Springer Nature, China

2023 National Teaching Achievement Award from the Ministry of Education, China

2022 Magnolia Gold Award from the Municipality of Shanghai, China

2022 International Excellent Young Scientists Award (RFIS-II) from NSFC, China

2019 Team Leader of an International ISSI Team, Switzerland

2018 Magnolia Silver Award from the Municipality of Shanghai, China

2018 Xu Guangqi Prize from the Embassy of Italy in Beijing, Italy

2016 Invitation Fellowship for Research in Japan from JSPS, Japan

2016 Named Xie Xide Junior Chair Professor of Physics at Fudan University, China

2015 Humboldt Fellowship (Experienced Researcher) from Humboldt Foundation, Germany

2012 Thousand Young Talents Award (Qingnian Qianren) from the State Council of PRC, China

Publication Summary

Books: 1 monograph, 2 textbooks, 3 encyclopedias, 7 edited books, 1 popular science book

Total number of SCI papers: 251 SCI papers as first/corresponding author: 223

Total number of citations: 15,302 (Google Scholar) h-index: 64 (Google Scholar)

Google Scholar Profile

Among the 223 SCI papers as first/corresponding author:

1 Reviews of Modern Physics (single author)

2 Physical Review Letters

1 Nature Astronomy

70 PRD, 39 APJ, 31 EPJC, 28 JCAP, 11 MNRAS, 10 PLB, 7 CQG, 2 JHEP, 1 SSRv

Representative publications (* is to indicate the corresponding author)

1. **C. Bambi**, *An interstellar mission to test astrophysical black holes*, *iScience* **28**, 113142 (2025).
 2. T. Mirzaev, **C. Bambi***, A.B. Abdikamalov, J. Jiang, H. Liu, S. Riaz and S. Shashank, *X-ray spectra of black hole X-ray binaries with returning radiation*, *Astrophys. J.* **976**, 229 (2024).
 3. A. Tripathi, Y. Zhang, A.B. Abdikamalov, D. Ayzenberg, **C. Bambi***, J. Jiang, H. Liu and M. Zhou, *Testing General Relativity with NuSTAR data of Galactic Black Holes*, *Astrophys. J.* **913**, 79 (2021).
 4. Z. Cao, S. Nampalliwar, **C. Bambi***, T. Dauser and J.A. Garcia, *Testing general relativity with the reflection spectrum of the supermassive black hole in 1H0707–495*, *Phys. Rev. Lett.* **120**, 051101 (2018).
 5. **C. Bambi***, A. Cardenas-Avendano, T. Dauser, J.A. Garcia and S. Nampalliwar, *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy*, *Astrophys. J.* **842**, 76 (2017).
 6. **C. Bambi**, *Testing black hole candidates with electromagnetic radiation*, *Rev. Mod. Phys.* **89**, 025001 (2017).
 7. **C. Bambi**, D. Malafarina and L. Modesto, *Non-singular quantum-inspired gravitational collapse*, *Phys. Rev. D* **88**, 044009 (2013).
 8. **C. Bambi** and L. Modesto, *Rotating regular black holes*, *Phys. Lett. B* **721**, 329-334 (2013).
 9. **C. Bambi** and K. Freese, *Apparent shape of super-spinning black holes*, *Phys. Rev. D* **79**, 043002 (2009).

Student Supervision Summary

Supervised 68 theses (39 Bachelor theses, 12 Master theses, and 17 Doctoral theses)

Member

2023 – Present	Einstein Probe Science Team	2022 – Present	TianQin Science Team
2021 – Present	Athena Science Team	2019 – Present	Insight-HXMT Science Team
2017 – Present	American Physical Society	2015 – Present	Association of Italian Scholars in China
2014 – Present	XTP/eXTP Science Team	2013 – Present	Chinese Physical Society
2013 – Present	International Society on General Relativity and Gravitation		

FUNDING

External Grants as PI

1. NSFC (China). Research Fund for International Senior Scientists
Developing a new generation of reflection models with machine learning techniques, Grant No. W2531002
Budget: 1.6M CNY (200k EUR). Period: 2026-2027 (2 years)
2. NSFC (China). Research Fund for International Excellent Young Scientists
Advanced reflection models for precision measurements of accreting black holes, Grant No. 12250610185
Budget: 1M CNY (150k EUR). Period: 2023-2024 (2 years)
3. Science and Technology Commission of Shanghai Municipality (China). General Grant
Studying the accretion process of Galactic black holes with Insight-HXMT data, Grant No. 22ZR1403400
Budget: 200k CNY (28k EUR). Period: 2022-2025 (3 years)
4. NSFC (China). General Grant
Testing Einstein's gravity using the continuum-fitting method, Grant No. 11973019
Budget: 630k CNY (80k EUR). Period: 2020-2023 (4 years)
5. ISSI (Switzerland). International ISSI Team
Can we use X-ray reflection spectroscopy for precision measurements of accreting black holes?, Team ID 458
Budget: 24k CHF (22k EUR). Period: 2019-2021 (2 years)
6. Shanghai Municipal Education Commission (China). Grant for Innovative Programs
Testing Einstein's gravity using X-ray reflection spectroscopy, Grant No. 2019-01-07-00-07-E00035
Budget: 3M CNY (400k EUR). Period: 2019-2023 (5 years)
7. NSFC (China). Grant for Astrophysics
Testing astrophysical black holes with X-ray observations, Grant No. U1531117
Budget: 450k CNY (60k EUR). Period: 2016-2018 (3 years)
8. Alexander von Humboldt Foundation (Germany). Humboldt Fellowship for Experienced Researchers
Budget: 43k EUR. Period: 2015-2018 (12 months)
9. Shanghai Municipal Education Commission (China). Grants for Innovative Programs
A study to explore the possibility of observing quantum gravity effects in the gravitational collapse of very massive stars, Grant No. 14ZZ001
Budget: 160k CNY (20k EUR). Period: 2014-2016 (3 years)
10. NSFC (China). Grant for Young Scientists
A numerical study to investigate the possibility of testing the gravitational collapse and the cosmic censorship with observations, Grant No. 11305038
Budget: 220k CNY (27k EUR). Period: 2014-2016 (3 years)
11. State Council of PRC (China). Thousand Young Talents Program (Qingnian Qianren Jihua)
Budget: 1.5M CNY (180k EUR). Period: 2012-2015 (3 years)
12. JSPS (Japan). Grant-in-Aid for Young Scientists B
Study of the accretion flow onto super-spinars, Grant No. 22740147
Budget: 3.12M JPY (30k EUR). Period: 2010-2012 (2 years)

External Grants as co-PI

1. ISSI (Switzerland). International ISSI Team
Maximizing the Potential of X-ray Polarimetric Data to Understand Accreting BHs (PI: Honghui Liu), Team ID 25-649
Budget: **24k CHF** (22k EUR). Period: 2025-2027 (2 years)
2. COSPAR and IAU. Grant for IAU Hands-On Workshops (I-HOW)
A New Era of High-Resolution X-ray Spectroscopy (PI: Junjie Mao)
Budget: **32k EUR**. Grant to organize a Summer school in 2024
3. NSFC (China). Grant for International Collaborations; NSFC-RSF Joint Grant (China-Russia)
Theoretical Studies of Nonlinear Primordial Perturbations and its Testing in Cosmological Observations (PI: Yang Zhang), Grant No. 12261131497
Budget: **1.05M CNY** (140k EUR). Period: 2023-2025 (3 years)

Internal Grants as PI

1. Fudan University (China) and University of Warwick (UK). Fudan-Warwick Joint Seed Fund
 PI: Cosimo Bambi (Fudan University) and Jiachen Jiang (University of Warwick)
Probing the Inner Accretion Flow of Black Holes: A Synergy Between Warwick and Fudan, Grant No. JMH6282518
Budget: **17k GBP** (20k EUR). Period: 2025-2026 (1 year)
2. Fudan University (China). Excellence 2025 Grant. Grant No. JIH1512604
Budget: **300k CNY** (40k EUR). Period: 2020-2023 (3 years)
3. Fudan University (China). First Class Construction Project
Testing the Kerr Paradigm using X-ray reflection spectroscopy, Grant No. IDH1512060
Budget: **300k CNY** (40k EUR). Period: 2017-2019 (3 years)
4. Department of Physics, Fudan University (China). Seed Funding
Astrophysical implications of quantum gravity
Budget: **100k CNY** (12k EUR). Period: 2013-2014 (1 year)
5. Department of Physics, Fudan University (China). Start-Up Research Grant
 Grant No. EZH1512600/010
Budget: **400k CNY** (50k EUR). Period: 2012-
6. Fudan University (China). Start-Up Research Grant
Testing the Kerr Black Hole Hypothesis, Grant No. EZH1512514
Budget: **800k CNY** (100k EUR). Period: 2012-
7. IPMU, The University of Tokyo (Japan). Start-Up Research Grant
Budget: **1.5M JPY** (15k EUR). Period: 2008-2011 (3 years)

MEETING ORGANIZATION

- SOC Member *2nd China-India-Thailand Workshop on High Energy Astrophysics*
14–16 October 2026, Bangkok, Thailand
- Chair *Workshop on the Future of Exploration Beyond the Solar System*
19–20 September 2026, Shanghai, China
- SOC Member *Scientific workshop on the eXTP mission*
31 August–2 September 2026, Turku, Finland
- SOC Member 46th COSPAR Scientific Assembly, Scientific Event E1.8:
Accretion disks and coronae in AGN: Observational and Theoretical Advances
1–9 August 2026, Florence, Italy
- SOC Member *Frontier Research in Astrophysics – V*
15–20 June 2026, Palermo, Italy
- SOC Member *China-India-Thailand Workshop on High Energy Astrophysics*
3–5 December 2025, Nakhon Ratchasima, Thailand
- Chair *Testing General Relativity with Black Holes*
26 April 2025, Shanghai, China
- SOC Member *International Conference on Theoretical Physics and Astrophysics (ICTPA-2025)*
24–28 March 2025, Tashkent, Uzbekistan
- SOC Member *5th China-India Workshop on High Energy Astrophysics*
16–20 December 2024, online meeting
- Chair *Mini-Workshop on Machine Learning Techniques for High Energy Astrophysics*
25–26 November 2024, Shanghai, China
- LOC Chair *Fudan-Tuebingen-(and Friends) Workshop on the Relativistic and Exotic Universe*
18–20 September 2024, Shanghai, China
- LOC Chair *I-HOW/COSPAR Workshop: A New Era of High-Resolution X-Ray Spectroscopy*
19–30 August 2024, Shanghai, China
- SOC Member 45th COSPAR Scientific Assembly, Scientific Event E1.9:
Spectral/Timing Properties of AGN: Theory and Observations
13–21 July 2024, Busan, South Korea
- SOC Member *International Conference on Theoretical Physics and Astrophysics (ICTPA-2024)*
13–17 May 2024, Tashkent, Uzbekistan
- Chair *4th China-India Workshop on High Energy Astrophysics*
21–23 October 2023, Shanghai, China
- Chair *New Frontiers in GRMHD Simulations of Accreting Black Holes*
3–6 April 2023, online meeting
- Chair *3rd China-India Workshop on High Energy Astrophysics*
28 November–2 December 2022, online meeting
- Chair *Modeling black hole X-ray emission: recent progress and future developments*
8–10 June 2022, online meeting

Chair	<i>Recent Progress on Gravity Tests</i> 16–18 February 2022, online meeting. INSPIRE ID: C22-02-16
Chair	<i>2nd China-India Workshop on High Energy Astrophysics</i> 6–10 December 2021, online meeting
SOC Member	<i>International Workshop on Relativistic Astrophysics and Gravitation</i> 12–14 May 2021, online meeting
Chair	<i>China-India Workshop on High Energy Astrophysics</i> 6–8 November 2020, online meeting. INSPIRE ID: C20-11-06
Chair	<i>Accretion 2020 @ Fudan</i> 21–23 October 2020, online meeting. INSPIRE ID: C20-07-01
Chair	<i>Recent Progress in Relativistic Astrophysics</i> 6–8 May 2019, Shanghai, China. INSPIRE ID: C19-05-06.1
Chair	<i>International Conference on Quantum Gravity</i> 26–28 March 2018, Shenzhen, China. INSPIRE ID: C18-03-26.1
Chair	<i>Winter School on X-ray Data Analysis</i> 22 January–2 February 2018, Shanghai, China
SOC Member	<i>High-throughput X-ray Astronomy in the eXTP era</i> 6–8 February 2017, Rome, Italy
Chair	<i>Mini-Workshop on Black Holes</i> 6–11 November 2017, Shanghai, China
Chair	<i>2nd Fudan Winter School on Astrophysical Black Holes</i> 9–14 January 2017, Shanghai, China. INSPIRE ID: C17-01-09.2
LOC Chair	<i>eXTP Science Workshop</i> 14–15 April 2016, Shanghai, China
Chair	<i>Black Holes and Friends 2</i> 11–13 April 2016, Shanghai, China. INSPIRE ID: C16-04-11.1
Chair	<i>Mini-Workshop on Black Holes</i> 24 November 2015, Shanghai, China
Chair	<i>Black Holes and Friends</i> 30 March–1 April 2015, Shanghai, China. INSPIRE ID: C15-03-30
Chair	<i>Fudan Winter School on Astrophysical Black Holes</i> 10–15 February 2014, Shanghai, China. INSPIRE ID: C14-02-10
Chair	<i>Workshop on Collapsing Objects</i> 21–24 October 2013, Shanghai, China. INSPIRE ID: C13-10-21
Chair	<i>Testing Gravity with Astrophysical and Cosmological Observations</i> 23 January–3 February 2012, Kashiwa, Japan. INSPIRE ID: C12-01-23
Chair	<i>IPMU Workshop on Black Holes</i> 21–25 February 2011, Kashiwa, Japan. INSPIRE ID: C11-02-21

MAIN RESEARCH ACHIEVEMENTS

My main research achievements are related to theoretical and observational studies of black holes and how to use these objects for testing General Relativity (GR) in the strong field regime.

New tests of GR (2009-2017)

I was the first to study black hole shadows beyond GR and discuss how to test GR with the Event Horizon Telescope (EHT) when this was not yet a hot topic (Bambi & Freese PRD 79, 043002, 2009). After that work, I started studying how to test the Kerr black hole hypothesis, namely that the spacetime around black holes is described by the Kerr solution as predicted by GR. Thanks to my contributions in the field, I was invited to write a review article on Reviews of Modern Physics, eventually published as Bambi, RMP 89, 025001, 2017.

Towards precision tests of GR with X-ray data (2017-Present)

A breakthrough in GR tests in the strong field regime was the development of the reflection model `relxill_nk` (Bambi et al. ApJ 842, 76, 2017). `relxill_nk` is specifically designed to test the Kerr hypothesis with X-ray reflection spectroscopy. With my students at Fudan University, we were the first to test the spacetime geometry around black holes with electromagnetic data (Cao et al. PRL 120, 051101, 2018). In the past years, we have further developed this model and our method currently provides the most stringent tests on the spacetime geometry around black holes (Tripathi et al. ApJ 907, 31, 2021; ApJ 913, 79, 2021; Zhang et al. ApJ 924, 72, 2022), somewhat stronger than current tests possible with gravitational wave data and significantly stronger than the current tests with black hole imaging data from the EHT experiment.

Development of a new generation of reflection models (2023-Present)

The analysis of the relativistically blurred reflection features in the X-ray spectra of accretion black holes can be a powerful tool to study the physics and astrophysics of these systems. While the past decade has seen remarkable improvements in our capability to analyze these reflection features, current reflection models are still based on a number of simplifications. With my students at Fudan University, we are developing a new generation of reflection models for precise and accurate measurements of accreting black holes (Mirzaev et al. ApJ 965, 66, 2024; ApJ 976, 229, 2024).

An interstellar mission to the closest black hole (2025-Present)

Recently I proposed the idea of an interstellar mission with a nanocraft to the closest black hole (Bambi, iScience 28, 113142, 2025). Although speculative and very challenging, such a possibility is not unrealistic. While the mission may require the contribution of three generations of scientists, we would be able to obtain very valuable information about black holes and GR that might be difficult to obtain in other ways. With my students at Fudan University, now I am trying to develop this bold idea into a possible real mission.

Solutions to the problem of spacetime singularities (2013-Present)

One of the most puzzling and longstanding problems in GR is the presence of spacetime singularities in almost all physically relevant solutions of the Einstein Equations. At a singularity, predictability is lost and standard physics breaks down. With my collaborator Leonardo Modesto, I proposed a number of quantum-inspired models in which it is possible to avoid the formation of singularities when a body collapses under its own weight (e.g., Bambi et al. PRD 88, 044009, 2013; JHEP 04, 147, 2016; JCAP, 05, 003, 2017).

LIST OF PUBLICATIONS: BOOKS

Monographs

1. **C. Bambi**, *Black Holes: A Laboratory for Testing Strong Gravity* (Springer Singapore, 2017). Hardcover ISBN: 9789811045233. eBook ISBN: 9789811045240.

Textbooks

1. **C. Bambi**, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* (Springer Singapore, 2018). Softcover ISBN: 9789811310898. eBook ISBN: 9789811310904.
C. Bambi, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* [in Chinese] (Fudan University Press, 2020). Softcover ISBN: 9787309151503.
C. Bambi, *Introducción a la relatividad general: Un curso para estudiantes de física* [in Spanish] (Editorial Reverté, 2021). Softcover ISBN: 9788429144376. eBook ISBN: 9788429196351.
C. Bambi, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* [in Persian] (Jahan-Adib, 2021). Softcover ISBN: 9786005440546.
C. Bambi, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* [in Uzbek] (Renessans Press, 2025). Hardcover ISBN: 9789910861567.
2. **C. Bambi** and A.D. Dolgov, *Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems* (Springer-Verlag Heidelberg Berlin, 2016). Hardcover ISBN: 9783662480779. eBook ISBN: 9783662480786.
C. Bambi and A.D. Dolgov, *Introduction to Particle Cosmology: The Standard Model of Cosmology and its Open Problems* [in Chinese] (Fudan University Press, 2017). Softcover ISBN: 9787309127942.

Encyclopedias

1. **C. Bambi**, L. Modesto and I.L. Shapiro (Editors), *Handbook of Quantum Gravity* (Springer Singapore, 2024). Hardcover ISBN: 9789819976805. eBook ISBN: 9789819976812.
Living Edition ISBN: 9789811930799.
96 chapters, 163 authors, XXXIX+4,328 pages (6 volumes).
2. **C. Bambi** and A. Santangelo (Editors), *Handbook of X-ray and Gamma-ray Astrophysics* (Springer Singapore, 2024). Hardcover ISBN: 9789811969591. eBook ISBN: 9789811969607.
Living Edition ISBN: 9789811645440.
156 chapters, 373 authors, LVII+5,950 pages (8 volumes).
3. **C. Bambi**, S. Katsanevas and K. Kokkotas (Editors), *Handbook of Gravitational Wave Astronomy* (Springer Singapore, 2022). Hardcover ISBN: 9789811643057. eBook ISBN: 9789811643064.
Living Edition ISBN: 9789811547027.
45 chapters, 101 authors, XXVII+1,899 pages (2 volumes).

Popular Science Books

1. **C. Bambi**, *Niente è impossibile: Viaggiare nel tempo, attraversare i buchi neri e altre sfide scientifiche* [in Italian] (il Saggiatore, 2020). Softcover ISBN: 9788842826941. eBook ISBN: 9788865768391.
C. Bambi, *Nothing is impossible* [in Chinese] (Fudan University Press, 2024). Softcover ISBN: 9787309166262.

Edited Books

1. C. Bambi, V.L. Kashyap, S. Shashank and N. Yoshida (Editors), *Machine Learning Techniques for Astrophysics and Cosmology* (Springer Singapore, in preparation, expected in 2026).
2. A. Akil and C. Bambi (Editors), *The Black Hole Information Paradox: A Fifty-Year Journey* (Springer Singapore, 2025). Hardcover ISBN: 9789819661695. eBook ISBN: 9789819661701.
3. C. Bambi, Y. Mizuno, S. Shashank and F. Yuan (Editors), *New Frontiers in GRMHD Simulations* (Springer Singapore, 2025). Hardcover ISBN: 9789819785216. eBook ISBN: 9789819785223.
4. C. Bambi and A. Cardenas-Avendano (Editors), *Recent Progress on Gravity Tests: Challenges and Future Perspectives* (Springer Singapore, 2024). Hardcover ISBN: 9789819728701. eBook ISBN: 9789819728718.
5. C. Bambi and J. Jiang (Editors), *High Resolution X-Ray Spectroscopy: Instrumentation, Data Analysis, and Science* (Springer Singapore, 2023). Hardcover ISBN: 9789819944088. eBook ISBN: 9789819944095.
6. C. Bambi (Editor), *Regular Black Holes: Towards a New Paradigm of Gravitational Collapse* (Springer Singapore, 2023). Hardcover ISBN: 9789819915958. eBook ISBN: 9789819915965.
7. C. Bambi (Editor), *Tutorial Guide to X-ray and Gamma-ray Astronomy: Data Reduction and Analysis* (Springer Singapore, 2020). Hardcover ISBN: 9789811563362. eBook ISBN: 9789811563379.
8. C. Bambi (Editor), *Astrophysics of Black Holes: From Fundamental Aspects to Latest Developments* (Springer-Verlag Heidelberg Berlin, 2016). Hardcover ISBN: 9783662528570. eBook ISBN: 9783662528594.

Videos

1. C. Bambi, *Astrophysical Black Holes* (Springer, 2022). Online ISBN: 9783031179167.

LIST OF PUBLICATIONS: ARTICLES

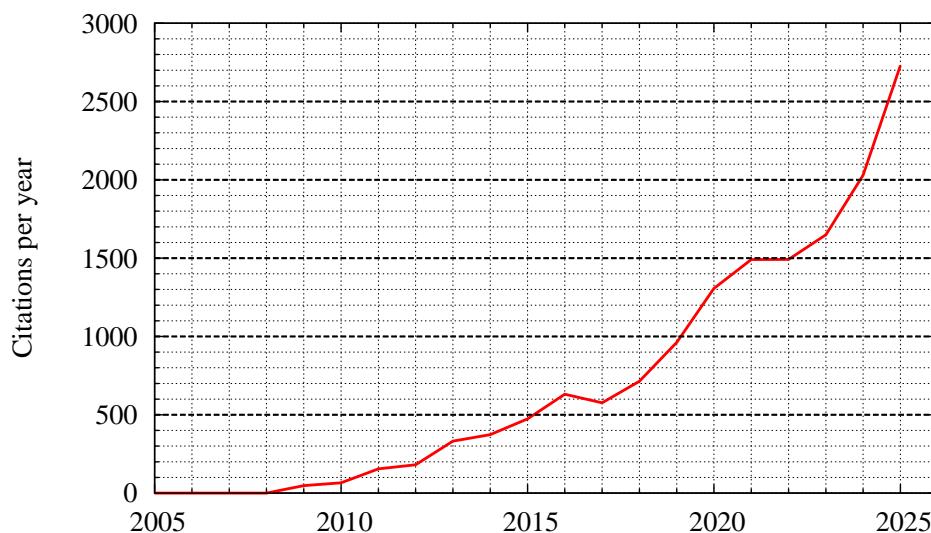
(In the list below, * is to indicate the corresponding author)

Citation Summary (from Google Scholar)

Google Scholar Profile: <https://scholar.google.com/citations?user=W9EMTqIAAAJ&hl=en>

Citations of this year in the table and in the plot are updated to December 31, 2025.

	All years	Since 2020
Citations	15,302	10,713
h-index	64	53
i10-index	225	189



Papers in refereed journals

1. J. Gu, L. Modesto and C. Bambi*, *Taming singularities and chaos in conformal gravity*, EPJC (in press).
2. Z. Zhang, J. Jiang, F. Carotenuto, H. Liu, C. Bambi*, R.P. Fender, A.J. Young, J. van den Eijnden, C.S. Reynolds, A.C. Fabian, J.N. Girard, J. Neilsen, J.F. Steiner, J.A. Tomsick, S. Corbel and A.K. Hughes, *Evidence of mutually exclusive outflow forms from a black hole X-ray binary*, Nature Astronomy (in press).
3. S. Shashank, A.B. Abdikamalov, H. Liu, T. Mirzaev, J. Jiang, C. Bambi*, F. Baker and A. Young, *Modeling reflection spectra of super-Eddington X-ray sources*, Astrophys. J. **996**, 51 (2026).
4. S. Shashank, A.B. Abdikamalov, H. Liu, A. Nosirov, C. Bambi*, I.K. Dihingia and Y. Mizuno, *Measuring black hole spins with X-ray reflection spectroscopy: A GRMHD outlook*, Phys. Rev. D **112**, 123030 (2025).
5. N. Fan, C. Bambi*, J.F. Steiner and W. Zhang, *Possible Coronal Geometry in the Hard and Soft State of Black Hole X-ray Binaries from MONK Simulations*, Astrophys. J. **995**, 124 (2025).
6. T. Mirzaev, B. Ahmedov and C. Bambi*, *Exploring black hole shadows in axisymmetric spacetimes with coordinate-independent methods and neural networks*, Eur. Phys. J. C **85**, 1194 (2025).

7. S.-N. Zhang, A. Santangelo, Y. Xu, H. Feng, F. Lu, Y. Chen, M. Ge, K. Nandra, X. Wu, M. Feroci, ..., C. Bambi, et al., *The enhanced X-ray Timing and Polarimetry mission – eXTP for launch in 2030*, Science China Phys. Mech. Astron. **68**, 119502 (2025).
8. Q. Bu, C. Bambi, L. Gou, Y. Xu, P. Uttley, A. De Rosa, A. Santangelo, S. Zane, H. Feng, S.-N. Zhang, et al., *Probing the Strong Gravity Region of Black Holes with eXTP*, Science China Phys. Mech. Astron. **68**, 119504 (2025).
9. C. Bambi, *Stellar-Mass Black Holes*, Symmetry **17**, 1393 (2025).
10. C. Bambi, *An interstellar mission to test astrophysical black holes*, iScience **28**, 113142 (2025).
11. Y. Huang, H. Liu*, T. Mirzaev, N. Fan, C. Bambi*, Z. Zhang, T. Dauser, J.A. Garcia, A. Ingram, J. Jiang, G. Mastroserio, S. Riaz and S. Shashank, *X-ray reflection spectroscopy with improved calculations of the emission angle*, Astrophys. J. **989**, 168 (2025).
12. L. Modesto, A. Akil and C. Bambi*, *Conformalons: a new class of black hole mimickers*, Eur. Phys. J. C **85**, 603 (2025).
13. E.-K. Li, S. Liu, A. Torres-Orjuela, X. Chen, K. Inayoshi, L. Wang, Y.-M. Hu, P. Amaro-Seoane, A. Askar, C. Bambi, et al., *Gravitational Wave Astronomy With TianQin*, Rep. Prog. Phys. **88**, 056901 (2025).
14. N. Fan, J.F. Steiner, C. Bambi*, E. Kara, Y. Zhang and O. König, *NICER Spectral and Timing Analysis of 4U 1630–47 and its Heartbeat State*, Astrophys. J. **984**, 31 (2025).
15. Y. Guo, S. Shashank and C. Bambi*, *Quasi-normal modes of slowly-rotating Johannsen black holes*, Eur. Phys. J. C **85**, 425 (2025).
16. S. Riaz, M. Kyriazis, A.B. Abdikamalov, C. Bambi*, and S. Shashank, *Testing Regular Black Holes with X-ray data of GX 339–4*, JCAP 03 (2025) 022.
17. K. Huang, H. Liu*, C. Bambi*, J.A. Garcia and Z. Zhang, *Impact of the returning radiation on X-ray reflection spectroscopy measurements: the case of Galactic black holes*, Phys. Rev. D **111**, 063025 (2025).
18. M. Zhou, V. Grinberg, A. Santangelo, C. Bambi, Q. Bu, C.M. Diez, L. Kong, J.F. Steiner and Y. Tuo, *Dimming GRS 1915+105 observed with NICER and Insight-HXMT*, Astron. Astrophys. **694**, A104 (2025).
19. H. Liu, A.B. Abdikamalov, T. Mirzaev, C. Bambi*, T. Dauser, J.A. Garcia and Z. Zhang, *About the accuracy of the relxill/relxill_nk models in view of the next generation of X-ray missions*, MNRAS **536**, 2594–2602 (2025).
20. C. Bambi, *A Tutorial on the Strong Gravity Effects in Black Hole X-Ray Spectra*, Universe **10**, 451 (2024).
21. D. Das, S. Shashank and C. Bambi*, *Non-Kerr Constraints using Binary Black Hole inspirals considering phase modifications up to 4 PN order*, Eur. Phys. J. C **84**, 1237 (2024).
22. T. Mirzaev, C. Bambi*, A.B. Abdikamalov, J. Jiang, H. Liu, S. Riaz and S. Shashank, *X-ray spectra of black hole X-ray binaries with returning radiation*, Astrophys. J. **976**, 229 (2024).
23. Z. Zhang, C. Bambi*, H. Liu, J. Jiang, F. Shi, Y. Zhang, A.J. Young, J.A. Tomsick, B.M. Coughenour and M. Zhou, *A variable ionized disk wind in MAXI J1803–298 revealed by NICER*, Astrophys. J. **975**, 22 (2024).
24. B. Narzilloev, A. Abdujabbarov, B. Ahmedov and C. Bambi*, *Observed jet power and radiative efficiency of black hole candidates in Kerr + PFDM model*, Eur. Phys. J. C **84**, 909 (2024).
25. Z. Zhang, H. Liu, D. Rawat, C. Bambi*, R. Misra, P. Wang, L. Ji, S. Zhang and S. Zhang, *Evolution of QPOs in GX 339–4 and EXO 1846–031 with Insight-HXMT and NICER*, Astrophys. J. **971**, 148 (2024).
26. S. Li, H. Liu, C. Bambi*, J.F. Steiner and Z. Zhang, *Impact of reflection Comptonization on X-ray reflection spectroscopy: the case of EXO 1846–031*, Phys. Rev. D **110**, 043021 (2024).

27. O. Mukazhanov, R. Roy, T. Mirzaev and C. Bambi*, *Numerical parameterization of stationary axisymmetric black holes in a theory agnostic framework*, Phys. Rev. D **110**, 024060 (2024).
28. N. Fan, S. Li, R. Zhan, H. Liu, Z. Zhang, C. Bambi*, L. Ji, X. Ma, J.F. Steiner, S. Zhang and M. Zhou, *The 2018 outburst of MAXI J1820+070 as seen by Insight-HXMT*, Astrophys. J. **969**, 61 (2024).
29. T. Mirzaev, S. Riaz, A.B. Abdikamalov, C. Bambi*, T. Dauser, J.A. Garcia, J. Jiang, H. Liu and S. Shashank, *Towards more accurate synthetic reflection spectra: improving the calculations of returning radiation*, Astrophys. J. **965**, 66 (2024).
30. S. Zhao, S. Riaz and C. Bambi*, *About the ability of agnostic X-ray tests of the Kerr hypothesis to discover new physics*, Phys. Rev. D **109**, 064059 (2024).
31. G. Mall, H. Liu, C. Bambi*, J.F. Steiner and J.A. Garcia, *Measuring Black Hole Spins through X-ray Reflection Spectroscopy and the Relativistic Precession Model: the case of XTE J1859+226*, MNRAS **527**, 12053-12064 (2024).
32. B. Narzilloev, A. Abdujabbarov, B. Ahmedov and C. Bambi*, *Kerr-Taub-NUT spacetime to explain the jet power and the radiative efficiency of astrophysical black holes*, Phys. Rev. D **108**, 103013 (2023).
33. J. Tao, S. Riaz, B. Zhou, A.B. Abdikamalov, C. Bambi* and D. Malafarina, *Testing the δ -Kerr metric with black hole X-ray data*, Phys. Rev. D **108**, 083036 (2023).
34. S. Riaz, A.B. Abdikamalov and C. Bambi*, *Impact of the returning radiation in current tests of the Kerr black hole hypothesis using X-ray reflection spectroscopy*, Eur. Phys. J. C **83**, 838 (2023).
35. T. Mirzaev, A.B. Abdikamalov, A.A. Abdujabbarov, D. Ayzenberg, B. Ahmedov and C. Bambi*, *Observational appearance of Kaluza-Klein black holes*, Eur. Phys. J. C **83**, 800 (2023).
36. Q. Yuan, P. Kushwaha, A.C. Gupta, A. Tripathi, P.J. Wiita, M. Zhang, X. Liu, A. Lähteenmäki, M. Tornikoski, J. Tammi, V. Ramakrishnan, L. Cui, X. Wang, M.F. Gu, C. Bambi and A.E. Volvach, *Multi-wavelength temporal variability of the blazar PKS 1510–089*, Astrophys. J. **953**, 47 (2023).
37. S. Vagnozzi, R. Roy, Y.D. Tsai, L. Visinelli, M. Afrin, A. Allahyari, P. Bambhaniya, D. Dey, S.G. Ghosh, P.S. Joshi, K. Jusufi, M. Khodadi, R.K. Walia, A. Övgün and C. Bambi, *Horizon-scale tests of gravity theories and fundamental physics from the Event Horizon Telescope image of Sagittarius A**, Class. Quantum Grav. **40**, 165007 (2023).
38. H. Liu, J. Jiang, Z. Zhang, C. Bambi*, A.C. Fabian, J.A. García, A. Ingram, E. Kara, J.F. Steiner, J.A. Tomsick, D.J. Walton and A.J. Young, *High-density reflection spectroscopy for black hole X-ray binaries in the hard state*, Astrophys. J. **951**, 145 (2023).
39. C. Bambi*, *X-Ray Tests of General Relativity with Black Holes*, Symmetry **15**, 1277 (2023).
40. H. Liu, C. Bambi*, J. Jiang, J.A. García, L. Ji, L. Kong, X. Ren, S. Zhang and S. Zhang, *The hard to soft transition of GX 339–4 as seen by Insight-HXMT*, Astrophys. J. **950**, 5 (2023).
41. Z. Zhang, J. Jiang, H. Liu, C. Bambi*, C.S. Reynolds, A.C. Fabian, T. Dauser, K. Madsen, A. Young, L. Gallo, Z. Yu and J. Tomsick, *The Low Temperature Corona in ESO 511-G030 Revealed by NuSTAR and XMM-Newton*, Astrophys. J. **949**, 4 (2023).
42. Z. Yu, J. Jiang, C. Bambi, L.G. Gallo, D. Grupe, A.C. Fabian, C.S. Reynolds and W.N. Brandt, *An XMM-Newton Study of Narrow-Line Seyfert 1 Galaxies at $z = 0.35 - 0.92$* , MNRAS **522**, 5456-5468 (2023).
43. G. Mall, A. Tripathi, A.B. Abdikamalov and C. Bambi*, *Impact of ionization and electron density gradients in X-ray reflection spectroscopy measurements*, MNRAS **517**, 5721-5733 (2022).
44. S. Shashank, S. Riaz, A.B. Abdikamalov and C. Bambi*, *Testing relativistic reflection models with GRMHD simulations of accreting black holes*, Astrophys. J. **938**, 53 (2022).
45. S. Riaz, S. Shashank, R. Roy, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, Z. Zhang and M. Zhou, *Testing regular black holes with X-ray and GW data*, JCAP 10 (2022) 040.

46. J. Gu, S. Riaz, A.B. Abdikamalov, D. Ayzenberg and C. Bambi*, *Probing bumblebee gravity with black hole X-ray data*, Eur. Phys. J. C **82**, 708 (2022).
47. K. Jusufi, Saurabh K., M. Azreg-Aïnou, M. Jamil, Q. Wu and C. Bambi, *Constraining Wormhole Geometries using the Orbit of S2 Star and the Event Horizon Telescope*, Eur. Phys. J. C **82**, 633 (2022).
48. H. Liu, Y. Fu, C. Bambi*, J. Jiang, M.L. Parker, L. Ji, L. Kong, L. Zhang, S. Zhang and Y. Zhang, *The disk wind in GRS 1915+105 as seen by Insight-HXMT*, Astrophys. J. **933**, 122 (2022).
49. J. Jiang, A.B. Abdikamalov, C. Bambi and C.S. Reynolds, *Black Hole Spin Measurements Based on a Thin Disc Model with Finite Thickness I. An example study of MCG-06-30-15*, MNRAS **514**, 3246-3259 (2022).
50. H. Liu, J. Jiang, Z. Zhang, C. Bambi*, L. Ji, L. Kong and S. Zhang, *Rapidly alternating flux states of GX 339-4 during its 2021 outburst captured by Insight-HXMT*, MNRAS **513**, 4308-4317 (2022).
51. S. Shashank and C. Bambi*, *Constraining the Konoplya-Rezzolla-Zhidenko deformation parameters III: limits from stellar-mass black holes using gravitational-wave observations*, Phys. Rev. D **105**, 104004 (2022).
52. Q. Liu, H. Liu, C. Bambi* and L. Ji, *The spins of the Galactic black holes in MAXI J1535-571 and 4U 1630-472 from Insight-HXMT*, MNRAS **512**, 2082-2092 (2022).
53. S. Riaz, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, H. Wang and Z. Yu, *Reflection spectra of accretion disks illuminated by disk-like coronae*, Astrophys. J. **925**, 51 (2022).
54. Z. Zhang, H. Liu, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and M. Zhou, *Testing the Kerr black hole hypothesis with GRS 1716-249 by combining the continuum-fitting and the iron-line methods*, Astrophys. J. **924**, 72 (2022).
55. A. Tripathi, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, V. Grinberg, H. Liu and M. Zhou, *Testing the Kerr black hole hypothesis with the continuum-fitting and the iron line methods: the case of GRS 1915+105*, JCAP 01 (2022) 019.
56. A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, H. Liu and A. Tripathi, *A reflection model with a radial disk density profile*, Astrophys. J. **923**, 175 (2021).
57. B. Narzilloev, I. Hussain, A. Abdujabbarov, B Ahmedov and C. Bambi*, *Dynamics and Fundamental Frequencies of Test Particles Orbiting Kerr-Newman-NUT-Kiselev Black Hole in Rastall Gravity*, Eur. Phys. J. Plus **136**, 1032 (2021).
58. Z. Yu, Q. Jiang, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, H. Liu, S. Nampalliwar and A. Tripathi, *Constraining the Konoplya-Rezzolla-Zhidenko deformation parameters II: limits from stellar-mass black hole X-ray data*, Phys. Rev. D **104**, 084035 (2021).
59. B. Narzilloev, S. Shaymatov, I. Hussain, A. Abdujabbarov, B Ahmedov and C. Bambi*, *Motion of particles and gravitational lensing around the (2+1)-dimensional BTZ black holes in Gauss-Bonnet gravity*, Eur. Phys. J. C **81**, 849 (2021).
60. B. Narzilloev, D. Malafarina, A. Abdujabbarov, B Ahmedov and C. Bambi*, *Particle motion around a static axially symmetric wormhole*, Phys. Rev. D **104**, 064016 (2021).
61. H. Liu, M.L. Parker, J. Jiang, E. Kara, C. Bambi, D. Grupe and S. Komossa, *A systematic study of photoionized emission and warm absorption signatures of the NLS1 Mrk 335*, MNRAS **506**, 5190-5200 (2021).
62. R. Roy, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, S. Riaz and A. Tripathi, *Testing the Weak Equivalence Principle near black holes*, Phys. Rev. D **104**, 044001 (2021).
63. A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, S. Nampalliwar and A. Tripathi, *Constraining the Konoplya-Rezzolla-Zhidenko deformation parameters: Limits from supermassive black hole X-ray data*, Phys. Rev. D **104**, 024058 (2021).

64. C. Bambi*, L.W. Brenneman, T. Dauser, J.A. Garcia, V. Grinberg, A. Ingram, J. Jiang, H. Liu, A.M. Lohfink, A. Marinucci, G. Mastrosorio, R. Middei, S. Nampalliwar, A. Niedzwiecki, J.F. Steiner, A. Tripathi and A.A. Zdziarski, *Towards precision measurements of accreting black holes using X-ray reflection spectroscopy*, *Space Sci. Rev.* **217**, 65 (2021).
65. A. Tripathi, B. Zhou, A.B. Abdikamalov, D. Ayzenberg and C. Bambi*, *Constraints on Einstein-Maxwell dilaton-axion gravity from X-ray reflection spectroscopy*, *JCAP* 07 (2021) 002.
66. S. Shaymatov, B. Narzilloev, A. Abdujabbarov and C. Bambi, *Charged particle motion around magnetized Reissner-Nordström black hole*, *Phys. Rev. D* **103**, 124066 (2021).
67. A. Tripathi, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and H. Liu, *Impact of the disk thickness on X-ray reflection spectroscopy measurements*, *Astrophys. J.* **913**, 129 (2021).
68. A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, H. Liu and Y. Zhang, *Implementation of a radial disk ionization profile in the relxill_nk model*, *Phys. Rev. D* **103**, 103023 (2021).
69. A. Tripathi, Y. Zhang, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, J. Jiang, H. Liu and M. Zhou, *Testing General Relativity with NuSTAR data of Galactic Black Holes*, *Astrophys. J.* **913**, 79 (2021).
70. P. Uttley, R. den Hartog, C. Bambi, D. Barret, S. Bianchi, et al., *The high energy universe at ultra-high resolution: the power and promise of X-ray interferometry*, *Exp. Astron.* **51**, 1081-1107 (2023).
71. C. Bambi* and D. Stojkovic, *Astrophysical Wormholes*, *Universe* **7**, 136 (2021).
72. B. Narzilloev, J. Rayimbaev, A. Abdujabbarov, B. Ahmedov and C. Bambi*, *Dynamics of charged particles and magnetic dipoles around magnetized quasi-Schwarzschild black holes*, *Eur. Phys. J. C* **81**, 269 (2021).
73. S. Riaz, M. Szanecki, A. Niedźwiecki, D. Ayzenberg and C. Bambi*, *Impact of the returning radiation on the analysis of the reflection spectra of black holes*, *Astrophys. J.* **910**, 49 (2021).
74. H. Liu, L. Ji, C. Bambi*, P. Jain, R. Misra, D. Rawat, J.S. Yadav and Y. Zhang, *Testing evolution of LFQPOs with mass accretion rate in GRS 1915+105 with Insight-HXMT*, *Astrophys. J.* **909**, 63 (2021).
75. Z. Zhang, H. Liu, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and M. Zhou, *Probing the near-horizon region of Cygnus X-1 with Suzaku and NuSTAR*, *Phys. Rev. D* **103**, 024055 (2021).
76. B. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, S. Nampalliwar and A. Tripathi, *Shining X-rays on asymptotically safe quantum gravity*, *JCAP* 01 (2021) 047.
77. A. Tripathi, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, V. Grinberg and M. Zhou, *Testing the Kerr Black Hole Hypothesis with GX 339-4 by a combined analysis of its thermal spectrum and reflection features*, *Astrophys. J.* **907**, 31 (2021).
78. A. Tripathi, A.C. Gupta, M.F. Aller, P.J. Wiita, C. Bambi*, H. Aller and M. Gu, *Quasi-Periodic Oscillations in the long term radio light curves of the blazar AO 0235+164*, *MNRAS* **501**, 5997-6006 (2021).
79. S. Nampalliwar, S. Xin, S. Srivastava, A.B. Abdikamalov, D. Ayzenberg, C. Bambi, T. Dauser, J.A. Garcia and A. Tripathi, *Testing General Relativity with X-ray reflection spectroscopy: The Konoplya-Rezzolla-Zhidenko parametrization*, *Phys. Rev. D* **102**, 124071 (2020).
80. B. Narzilloev, J. Rayimbaev, S. Shaymatov, A. Abdujabbarov, B. Ahmedov and C. Bambi*, *Dynamics of test particles around a Bardeen black hole surrounded by perfect fluid dark matter*, *Phys. Rev. D* **102**, 104062 (2020).
81. B. Narzilloev, J. Rayimbaev, A. Abdujabbarov and C. Bambi*, *Charged particle motion around non-singular black holes in conformal gravity in the presence of external magnetic field*, *Eur. Phys. J. C* **80**, 1074 (2020).
82. A. Tripathi, B. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Testing the Keplerian disk hypothesis using X-ray reflection spectroscopy*, *Phys. Rev. D* **102**, 103009 (2020).

83. A. Tripathi, H. Liu and C. Bambi*, *Impact of the reflection model on the estimate of the properties of accreting black holes*, MNRAS **498**, 3565-3577 (2020).
84. B. Narzilloev, D. Malafarina, A. Abdujabbarov and C. Bambi*, *On the properties of a deformed extension of the NUT space-time*, Eur. Phys. J. C **80**, 784 (2020).
85. A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia, S. Nampalliwar, A. Tripathi and M. Zhou, *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy and a thin disk model with finite thickness*, Astrophys. J. **899**, 80 (2020).
86. B. Narzilloev, J. Rayimbaev, S. Shaymatov, A. Abdujabbarov, B. Ahmedov and C. Bambi*, *Can the dynamics of test particles around charged stringy black holes mimic the spin of Kerr black holes?*, Phys. Rev. D **102**, 044013 (2020).
87. J. Zhu, A.B. Abdikamalov, D. Ayzenberg, M. Azreg-Aïnou, C. Bambi*, M. Jamil, S. Nampalliwar, A. Tripathi and M. Zhou, *X-ray reflection spectroscopy with Kaluza-Klein black holes*, Eur. Phys. J. C **80**, 622 (2020).
88. A. Tripathi, M. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, L. Gou, V. Grinberg, H. Liu and J.F. Steiner, *Testing general relativity with the stellar-mass black hole in LMC X-1 using the continuum-fitting method*, Astrophys. J. **897**, 84 (2020).
89. H. Liu, H. Wang, A.B. Abdikamalov, D. Ayzenberg and C. Bambi*, *Reflection features in the X-ray spectrum of Fairall 9 and implications for tests of general relativity*, Astrophys. J. **896**, 160 (2020).
90. A. Cardenas-Avendano, M. Zhou and C. Bambi*, *Modeling uncertainties in X-ray reflection spectroscopy measurements. II. Impact of the radiation from the plunging region*, Phys. Rev. D **101**, 123014 (2020).
91. C.A. Benavides-Gallego, A. Abdujabbarov, D. Malafarina and C. Bambi*, *Quasi-harmonic oscillations of charged particles in static axially symmetric space-times immersed in a uniform magnetic field*, Phys. Rev. D **101**, 124024 (2020).
92. M. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, V. Grinberg and A. Tripathi, *Thermal spectra of thin accretion disks of finite thickness around Kerr black holes*, MNRAS **496**, 497-503 (2020).
93. S. Riaz, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Modeling bias in supermassive black hole spin measurements*, Astrophys. J. **895**, 61 (2020).
94. J. Wang, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia, S. Nampalliwar and J.F. Steiner, *Testing the Kerr metric using X-ray reflection spectroscopy: spectral analysis of GX 339-4*, JCAP 05 (2020) 026.
95. B. Zhou, A. Tripathi, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, S. Nampalliwar and M. Zhou, *Relativistic reflection spectra of super-spinning black holes*, Eur. Phys. J. C **80**, 400 (2020).
96. H. Chakrabarty, A. Abdujabbarov, D. Malafarina and C. Bambi*, *A toy model for a baby universe inside a black hole*, Eur. Phys. J. C **80**, 373 (2020).
97. S. Vagnozzi, C. Bambi and L. Visinelli, *Concerns regarding the use of black hole shadows as standard rulers*, Class. Quantum Grav. **37**, 087001 (2020).
98. A. Tripathi, B. Zhou, A.B. Abdikamalov, D. Ayzenberg and C. Bambi*, *Search for traversable wormholes in active galactic nuclei using X-ray data*, Phys. Rev. D **101**, 064030 (2020).
99. C.A. Benavides-Gallego, A.A. Abdujabbarov and C. Bambi*, *Rotating and non-linear magnetic-charged black hole surrounded by quintessence*, Phys. Rev. D **101**, 044038 (2020).
100. K. Jusufi, M. Jamil, H. Chakrabarty, Q. Wu, C. Bambi and A. Wang, *Rotating regular black holes in conformal massive gravity*, Phys. Rev. D **101**, 044035 (2020).
101. M. Zhou, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Modeling uncertainties in X-ray reflection spectroscopy measurements. I. Impact of higher order disk images*, Phys. Rev. D **101**, 043010 (2020).

102. S. Riaz, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Reflection spectra of thick accretion disks*, MNRAS **491**, 417-426 (2020).
103. B. Turimov, B. Ahmedov, A. Abdujabbarov and C. Bambi, *Gravitational lensing by magnetized compact object in the presence of plasma*, IJMPD 2040013, 1 (2020).
104. A. De Rosa, P. Uttley, L. Gou, Y. Liu, C. Bambi, et al., *Accretion in Strong Field Gravity with eXTP*, Science China Phys. Mech. Astron. **62**, 029504 (2019).
105. Y. Zhang, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Tests of the Kerr hypothesis with GRS 1915+105 using different RELXILL flavors*, Astrophys. J. **884**, 147 (2019).
106. C. Bambi, K. Freese, S. Vagnozzi and L. Visinelli, *Testing the rotational nature of the supermassive object M87* from the circularity and size of its first image*, Phys. Rev. D **100**, 044057 (2019).
107. A.B. Abdikamalov, A.A. Abdujabbarov, D. Ayzenberg, D. Malafarina, C. Bambi* and B. Ahmedov, *A black hole mimicker hiding in the shadow: Optical properties of the γ metric*, Phys. Rev. D **100**, 024014 (2019).
108. K. Choudhury, S. Nampalliwar, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser and J.A. Garcia, *Testing the Kerr metric with X-ray Reflection Spectroscopy of Mrk 335 Suzaku data*, Astrophys. J. **879**, 80 (2019).
109. A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia and S. Nampalliwar, *Public Release of RELXILL_NK: A Relativistic Reflection Model for Testing Einstein's Gravity*, Astrophys. J. **878**, 91 (2019).
110. H. Liu, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia and S. Nampalliwar, *Testing the Kerr hypothesis using X-ray reflection spectroscopy with NuSTAR data of Cygnus X-1 in the soft state*, Phys. Rev. D **99**, 123007 (2019).
111. M. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, H. Liu and S. Nampalliwar, *An XSPEC model for testing the Kerr black hole hypothesis using the continuum-fitting method*, Phys. Rev. D **99**, 104031 (2019).
112. B. Narzilloev, A. Abdujabbarov, C. Bambi* and B. Ahmedov, *Charged particle motion around a quasi-Kerr compact object immersed in an external magnetic field*, Phys. Rev. D **99**, 104009 (2019).
113. A. Tripathi, S. Nampalliwar, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia and A. Marinucci, *Towards precision tests of general relativity with black hole X-ray reflection spectroscopy*, Astrophys. J. **875**, 56 (2019).
114. Y. Zhang, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia and S. Nampalliwar, *About the Kerr nature of the stellar-mass black hole in GRS 1915+105*, Astrophys. J. **875**, 41 (2019).
115. A. Tripathi, A.B. Abdikamalov, D. Ayzenberg, C. Bambi* and S. Nampalliwar, *Constraining the Johannsen deformation parameter ϵ_3 with black hole X-ray data*, Phys. Rev. D **99**, 083001 (2019).
116. A. Tripathi, J. Yan, Y. Yang, Y. Yan, M. Garnham, Y. Yao, S. Li, Z. Ding, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia, J. Jiang and S. Nampalliwar, *Constraints on the spacetime metric around seven “bare” AGNs using X-ray reflection spectroscopy*, Astrophys. J. **874**, 135 (2019).
117. H. Chakrabarty, A. Abdujabbarov and C. Bambi*, *Scalar perturbations and quasi-normal modes of a non-linear magnetic-charged black hole surrounded by quintessence*, Eur. Phys. J. C **79**, 179 (2019).
118. M. Zhou, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, L. Modesto, S. Nampalliwar, and Y. Xu, *Singularity-free black holes in conformal gravity: new observational constraints*, Europhys. Lett. **125**, 30002 (2019).
119. A.C. Gupta, A. Tripathi, P.J. Wiita, P. Kushwaha, Z. Zhang and C. Bambi, *Detection of a quasi-periodic oscillation in gamma-ray light curve of the high redshift blazar B2 1520+31*, MNRAS **484**, 5785-5790 (2019).
120. C.A. Benavides-Gallego, A. Abdujabbarov, D. Malafarina, B. Ahmedov and C. Bambi*, *Charged particle motion and electromagnetic field in γ spacetime*, Phys. Rev. D **99**, 044012 (2019).

121. Y. Xu, S. Nampalliwar, A.B. Abdikamalov, D. Ayzenberg, C. Bambi*, T. Dauser, J.A. Garcia and J. Jiang, *A study of the strong gravity region of the black hole in GS 1354–645*, *Astrophys. J.* **865**, 134 (2018).
122. C.A. Benavides-Gallego, A.A. Abdujabbarov and C. Bambi*, *Gravitational lensing for a boosted Kerr black hole in the presence of plasma*, *Eur. Phys. J. C* **78**, 694 (2018).
123. H. Liu, M. Zhou and C. Bambi*, *Distinguishing black holes and naked singularities with iron line spectroscopy*, *JCAP* 08 (2018) 044.
124. A.C. Gupta, A. Tripathi, P.J. Wiita, M. Gu, C. Bambi and L.C. Ho, *Possible ~ 1 hour quasi-periodic oscillation in narrow-line Seyfert 1 galaxy MCG–06–30–15*, *Astron. Astrophys.* **616**, L6 (2018).
125. J. Yang, D. Ayzenberg and C. Bambi*, *Iron Line Spectroscopy of Black Holes in Vector-Tensor Galileons Modified Gravity*, *Phys. Rev. D* **98**, 044024 (2018).
126. A. De Angelis, V. Tatischeff, I.A. Grenier, J. McEnery, M. Mallamaci, et al., *Science with e-ASTROGAM: A space mission for MeV-GeV gamma-ray astrophysics*, *J. High Energy Astrophys.* **19**, 1-106 (2018).
127. A. Tripathi, S. Nampalliwar, A.B. Abdikamalov, D. Ayzenberg, J. Jiang and C. Bambi*, *Testing the Kerr nature of the supermassive black hole in Ark 564*, *Phys. Rev. D* **98**, 023018 (2018).
128. H. Chakrabarty, A.B. Abdikamalov, A.A. Abdujabbarov and C. Bambi*, *Weak gravitational lensing: a compact object with arbitrary quadrupole moment immersed in plasma*, *Phys. Rev. D* **98**, 024022 (2018).
129. M. Zhou, Z. Cao, A. Abdikamalov, D. Ayzenberg, C. Bambi*, L. Modesto and S. Nampalliwar, *Testing conformal gravity with the supermassive black hole in 1H0707–495*, *Phys. Rev. D* **98**, 024007 (2018).
130. Q. Zhang, L. Modesto and C. Bambi, *A general study of regular and singular black hole solutions in Einstein’s conformal gravity*, *Eur. Phys. J. C* **78**, 506 (2018).
131. B. Turimov, B. Ahmedov, A. Abdujabbarov and C. Bambi, *Electromagnetic fields of slowly rotating magnetized compact stars in conformal gravity*, *Phys. Rev. D* **97**, 124005 (2018).
132. Y. Zhang, M. Zhou and C. Bambi*, *Iron line spectroscopy of black holes in asymptotically safe gravity*, *Eur. Phys. J. C* **78**, 376 (2018).
133. C. Bambi, *Astrophysical Black Holes: A Compact Pedagogical Review*, *Ann. Phys. (Berlin)* **530**, 1700430 (2018).
134. S. Sun, M. Guainazzi, Q. Ni, J. Wang, C. Qian, F. Shi, Y. Wang and C. Bambi*, *Multi-epoch analysis of the X-ray spectrum of the active galactic nucleus in NGC 5506*, *MNRAS* **478**, 1900-1910 (2018).
135. S. Nampalliwar, C. Bambi, K. Kokkotas and R. Konoplya, *Iron line spectroscopy with Einstein-dilaton-Gauss-Bonnet black holes*, *Phys. Lett. B* **781**, 626-632 (2018).
136. J. Wang-Ji, J.A. Garcia, J.F. Steiner, J.A. Tomsick, F.A. Harrison, C. Bambi, P.-O. Petrucci, J. Ferreira, S. Chakravorty and Maïca Clavel, *The evolution of GX 339-4 in the low-hard state as seen by NuSTAR and Swift*, *Astrophys. J.* **855**, 61 (2018).
137. H. Chakrabarty, C.A. Benavides-Gallego, C. Bambi* and L. Modesto, *Unattainable extended spacetime regions in conformal gravity*, *JHEP* 03 (2018) 013.
138. C. Bambi, L. Modesto, S. Porey and L. Rachwal, *Formation and evaporation of an electrically charged black hole in conformal gravity*, *Eur. Phys. J. C* **78**, 116 (2018).
139. Z. Cao, S. Nampalliwar, C. Bambi*, T. Dauser and J.A. Garcia, *Testing general relativity with the reflection spectrum of the supermassive black hole in 1H0707–495*, *Phys. Rev. Lett.* **120**, 051101 (2018).
140. K. Choudhury, J.A. Garcia, J.F. Steiner and C. Bambi*, *Testing the performance and accuracy of the RELXILL model for the relativistic X-ray reflection from accretion disks*, *Astrophys. J.* **851**, 57 (2017).
141. C. Bambi, L. Modesto, S. Porey and L. Rachwal, *Black hole evaporation in conformal gravity*, *JCAP* 09 (2017) 033.

142. B. Toshmatov, C. Bambi, B. Ahmedov, Z. Stuchlík and J. Schee, *Scalar perturbations of non-singular non-rotating black holes in conformal gravity*, Phys. Rev. D **96**, 064028 (2017).
143. B. Toshmatov, C. Bambi, B. Ahmedov, A. Abdujabbarov and Z. Stuchlík, *Energy conditions of non-singular black hole spacetimes in conformal gravity*, Eur. Phys. J. C **77**, 542 (2017).
144. T. Shen, M. Zhou, C. Bambi*, C.A.R. Herdeiro and E. Radu, *Iron K α line of Proca stars*, JCAP 08 (2017) 014.
145. B. Ilyas, J. Yang, D. Malafarina and C. Bambi, *Observational properties of rigidly rotating dust configurations*, Eur. Phys. J. C **77**, 461 (2017).
146. C. Bambi*, A. Cardenas-Avendano, T. Dauser, J.A. Garcia and S. Nampalliwar, *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy*, Astrophys. J. **842**, 76 (2017).
147. H. Zhang, M. Zhou, C. Bambi*, B. Kleihaus, J. Kunz and E. Radu, *Testing Einstein-dilaton-Gauss-Bonnet gravity from the reflection spectrum of accreting black holes*, Phys. Rev. D **95**, 104043 (2017).
148. M. Zhou, C. Bambi*, C.A.R. Herdeiro and E. Radu, *Iron K α line of Kerr black holes with Proca hair*, Phys. Rev. D **95**, 104035 (2017).
149. C. Bambi, L. Modesto and L. Rachwal, *Spacetime completeness of non-singular black holes in conformal gravity*, JCAP 05 (2017) 003.
150. C. Bambi, *Testing black hole candidates with electromagnetic radiation*, Rev. Mod. Phys. **89**, 025001 (2017).
151. C. Bambi, Z. Cao and L. Modesto, *Testing conformal gravity with astrophysical black holes*, Phys. Rev. D **95**, 064006 (2017).
152. C. Bambi, L. Modesto and Y. Wang, *Lee-Wick Black Holes*, Phys. Lett. B **764**, 306-309 (2017).
153. C. Bambi and S. Nampalliwar, *Quasi-periodic oscillations as a tool for testing the Kerr metric: A comparison with gravitational waves and iron line*, Europhys. Lett. **116**, 30006 (2016).
154. M. Ghasemi-Nodehi and C. Bambi*, *Constraining the Kerr parameters via X-ray reflection spectroscopy*, Phys. Rev. D **94**, 104062 (2016).
155. Z. Cao, A. Cardenas-Avendano, M. Zhou, C. Bambi*, C.A.R. Herdeiro and E. Radu, *Iron K α line of boson stars*, JCAP 10 (2016) 003.
156. G. Pei, S. Nampalliwar, C. Bambi* and M.J. Middleton, *Blandford-Znajek mechanism in black holes in alternative theories of gravity*, Eur. Phys. J. C **76**, 534 (2016).
157. Y. Ni, J. Jiang and C. Bambi*, *Testing the Kerr metric with the iron line and the KRZ parametrization*, JCAP 09 (2016) 014.
158. C. Bambi, D. Rubiera-Garcia and Y. Wang, *Black hole solutions in functional extensions of Born-Infeld gravity*, Phys. Rev. D **94**, 064002 (2016).
159. Y. Ni, M. Zhou, A. Cardenas-Avendano, C. Bambi*, C.A.R. Herdeiro and E. Radu, *Iron K α line of Kerr black holes with scalar hair*, JCAP 07 (2016) 049.
160. M. Zhou, A. Cardenas-Avendano, C. Bambi*, B. Kleihaus and J. Kunz, *Search for astrophysical rotating Ellis wormholes with X-ray reflection spectroscopy*, Phys. Rev. D **94**, 024036 (2016).
161. A. Cardenas-Avendano, J. Jiang and C. Bambi*, *Testing the Kerr black hole hypothesis: comparison between the gravitational wave and the iron line approaches*, Phys. Lett. B **760**, 254-258 (2016).
162. J. Jiang, C. Bambi* and J.F. Steiner, *Testing the Kerr nature of black hole candidates using iron line reverberation mapping in the CPR framework*, Phys. Rev. D **93**, 123008 (2016).
163. M. Ghasemi-Nodehi and C. Bambi*, *Note on a new parametrization for testing the Kerr metric*, Eur. Phys. J. C **76**, 290 (2016).

164. Y. Cheng, D. Liu, S. Nampalliwar and **C. Bambi***, *X-ray spectropolarimetric signature of a warped disk around a stellar-mass black hole*, Class. Quantum Grav. **33**, 125015 (2016).
165. A. Cardenas-Avendano, J. Jiang and **C. Bambi***, *A study for testing the Kerr metric with AGN iron line eclipses*, JCAP 04 (2016) 054.
166. **C. Bambi**, D. Malafarina and L. Modesto, *Black supernovae and black holes in non-local gravity*, JHEP 04 (2016) 147.
167. **C. Bambi**, A. Cardenas-Avendano, G.J. Olmo and D. Rubiera-Garcia, *Wormholes and nonsingular space-times in Palatini $f(R)$ gravity*, Phys. Rev. D **93**, 064016 (2016).
168. **C. Bambi**, J. Jiang and J.F. Steiner, *Testing the no-hair theorem with the continuum-fitting and the iron line methods: a short review*, Class. Quantum Grav. **33**, 064001 (2016).
169. N. Lin, N. Tsukamoto , M. Ghasemi-Nodehi and **C. Bambi***, *A parametrization to test black hole candidates with the spectrum of thin disks*, Eur. Phys. J. C **75**, 599 (2015).
170. G. Pei and **C. Bambi***, *Scattering of particles by deformed non-rotating black holes*, Eur. Phys. J. C **75**, 560 (2015).
171. J. Jiang, **C. Bambi*** and J.F. Steiner, *Testing the Kerr Nature of Black Hole Candidates using Iron Line Spectra in the CPR Framework*, Astrophys. J. **811**, 130 (2015).
172. N. Lin, Z. Li, J. Arthur, R. Asquith and **C. Bambi***, *Testing SgrA* with the spectrum of its accretion structure*, JCAP 09 (2015) 038.
173. D. Liu, Z. Li, Y. Cheng and **C. Bambi***, *X-ray spectropolarimetric measurements of the Kerr metric*, Eur. Phys. J. C **75**, 383 (2015).
174. **C. Bambi**, M. Ghasemi-Nodehi and D. Rubiera-Garcia, *Modified gravity in three dimensional metric-affine scenarios*, Phys. Rev. D **92**, 044016 (2015).
175. M. Ghasemi-Nodehi, Z. Li and **C. Bambi***, *Shadows of CPR black holes and tests of the Kerr metric*, Eur. Phys. J. C **75**, 315 (2015).
176. N. Tsukamoto and **C. Bambi***, *Collisional Penrose Process in Rotating Wormhole Spacetime*, Phys. Rev. D **91**, 104040 (2015).
177. J. Jiang, **C. Bambi*** and J.F. Steiner, *Using iron line reverberation and spectroscopy to distinguish Kerr and non-Kerr black holes*, JCAP 05 (2015) 025.
178. **C. Bambi**, G.J. Olmo and D. Rubiera-Garcia, *Melvin Universe in Born-Infeld gravity*, Phys. Rev. D **91**, 104010 (2015).
179. **C. Bambi**, *Testing the nature of the black hole candidate in GRO J1655-40 with the relativistic precession model*, Eur. Phys. J. C **75**, 162 (2015).
180. N. Tsukamoto and **C. Bambi***, *High energy collision of two particles in wormhole spacetimes*, Phys. Rev. D **91**, 084013 (2015).
181. Y. Zhang, Y. Zhu, L. Modesto and **C. Bambi***, *Can static regular black holes form from gravitational collapse?*, Eur. Phys. J. C **75**, 96 (2015).
182. **C. Bambi**, *Constraining the Cardoso-Pani-Rico metric with future observations of SgrA**, Class. Quantum Grav. **32**, 065005 (2015).
183. **C. Bambi**, *Attempt to explain black hole spin in X-ray binaries with new physics*, Eur. Phys. J. C **75**, 22 (2015).
184. D. Liu, Z. Li and **C. Bambi***, *Testing a class of non-Kerr metrics with hot spots orbiting SgrA**, JCAP 01 (2015) 020.

185. L. Kong, D. Malafarina and **C. Bambi***, *Gravitational blueshift from a collapsing object*, Phys. Lett. B **741**, 82-86 (2015).
186. S. Alexander, **C. Bambi**, A. Marciano and L. Modesto, *Fermi-bounce Cosmology and scale invariant power-spectrum*, Phys. Rev. D **90**, 123510 (2014).
187. L. Kong, Z. Li and **C. Bambi***, *Constraints on the spacetime geometry around 10 stellar-mass black hole candidates from the disk's thermal spectrum*, Astrophys. J. **797**, 78 (2014).
188. **C. Bambi**, *Note on the Cardoso-Pani-Rico parametrization to test the Kerr black hole hypothesis*, Phys. Rev. D **90**, 047503 (2014).
189. Y. Liu, D. Malafarina, L. Modesto and **C. Bambi***, *Singularity avoidance in quantum-inspired inhomogeneous dust collapse*, Phys. Rev. D **90**, 044040 (2014).
190. L. Kong, D. Malafarina and **C. Bambi***, *Can we observationally test the weak cosmic censorship conjecture?*, Eur. Phys. J. C **74**, 2983 (2014).
191. Z. Li and **C. Bambi***, *Distinguishing black holes and wormholes with orbiting hot spots*, Phys. Rev. D **90**, 024071 (2014).
192. **C. Bambi**, D. Malafarina and N. Tsukamoto, *Note on the effect of a massive accretion disk in the measurements of black hole spins*, Phys. Rev. D **89**, 127302 (2014).
193. N. Tsukamoto, Z. Li and **C. Bambi***, *Constraining the spin and the deformations parameters from the black hole shadow*, JCAP 06 (2014) 043.
194. Z. Li, L. Kong and **C. Bambi***, *Testing the nature of the supermassive black hole candidate in SgrA* with light curves and images of hot spots*, Astrophys. J. **787**, 152 (2014).
195. **C. Bambi**, D. Malafarina, A. Marciano and L. Modesto, *Singularity avoidance in classical gravity from four-fermion interaction*, Phys. Lett. B **734**, 27-30 (2014).
196. **C. Bambi**, *Constraining possible variations of the fine structure constant in strong gravitational fields with the K α iron line*, JCAP 03 (2014) 034.
197. **C. Bambi**, D. Malafarina and L. Modesto, *Terminating black holes in asymptotically free quantum gravity*, Eur. Phys. J. C **74**, 2767 (2014).
198. Z. Li and **C. Bambi***, *Measuring the Kerr spin parameter of regular black holes from their shadow*, JCAP 01 (2014) 041.
199. **C. Bambi**, *Testing the Bardeen metric with the black hole candidate in Cygnus X-1*, Phys. Lett. B **730**, 59-62 (2014).
200. **C. Bambi** and D. Malafarina, *K α iron line profile from accretion disks around regular and singular exotic compact objects*, Phys. Rev. D **88**, 064022 (2013).
201. **C. Bambi**, *Measuring the Kerr spin parameter of a non-Kerr compact object with the continuum-fitting and the iron line methods*, JCAP 08 (2013) 055.
202. **C. Bambi**, D. Malafarina and L. Modesto, *Non-singular quantum-inspired gravitational collapse*, Phys. Rev. D **88**, 044009 (2013).
203. Z. Li and **C. Bambi***, *Destroying the event horizon of regular black holes*, Phys. Rev. D **87**, 124022 (2013).
204. **C. Bambi**, *A note on the observational evidence for the existence of event horizons in astrophysical black hole candidates*, The Scientific World Journal **2013**, 204315 (2013).
205. **C. Bambi**, *Can the supermassive objects at the centers of galaxies be traversable wormholes? The first test of strong gravity for mm/sub-mm VLBI facilities*, Phys. Rev. D **87**, 107501 (2013).
206. **C. Bambi** and G. Lukes-Gerakopoulos, *Testing the existence of regions of stable orbits at small radii around black hole candidates*, Phys. Rev. D **87**, 083006 (2013).

207. **C. Bambi**, *Broad K α iron line from accretion disks around traversable wormholes*, Phys. Rev. D **87**, 084039 (2013).
208. Z. Li and **C. Bambi***, *Super-spinning compact objects generated by thick accretion disks*, JCAP 03 (2013) 031.
209. **C. Bambi** and L. Modesto, *Rotating regular black holes*, Phys. Lett. B **721**, 329-334 (2013).
210. **C. Bambi**, *Testing the space-time geometry around black hole candidates with the analysis of the broad K α iron line*, Phys. Rev. D **87**, 023007 (2013).
211. **C. Bambi**, *Testing the space-time geometry around black hole candidates with the available radio and X-ray data*, Astron. Rev. **8**, 4-39 (2013).
212. **C. Bambi**, *Attempt to find a correlation between the spin of stellar-mass black hole candidates and the power of steady jets: relaxing the Kerr black hole hypothesis*, Phys. Rev. D **86**, 123013 (2012).
213. **C. Bambi**, *A code to compute the emission of thin accretion disks in non-Kerr space-times and test the nature of black hole candidates*, Astrophys. J. **761**, 174 (2012).
214. **C. Bambi**, *Probing the space-time geometry around black hole candidates with the resonance models for high-frequency QPOs and comparison with the continuum-fitting method*, JCAP 09 (2012) 014.
215. **C. Bambi**, F. Caravelli and L. Modesto, *Direct imaging rapidly-rotating non-Kerr black holes*, Phys. Lett. B **711**, 10-14 (2012).
216. **C. Bambi**, *Testing the Kerr-nature of stellar-mass black hole candidates by combining the continuum-fitting method and the power estimate of transient ballistic jets*, Phys. Rev. D **85**, 043002 (2012).
217. **C. Bambi**, *Towards the use of the most massive black hole candidates in AGN to test the Kerr paradigm*, Phys. Rev. D **85**, 043001 (2012).
218. **C. Bambi** and L. Modesto, *Can an astrophysical black hole have a topologically non-trivial event horizon?*, Phys. Lett. B **706**, 13-18 (2011).
219. **C. Bambi**, *Testing the Kerr black hole hypothesis*, Mod. Phys. Lett. A **26**, 2453-2468 (2011).
220. **C. Bambi** and E. Barausse, *The final stages of accretion onto non-Kerr compact objects*, Phys. Rev. D **84**, 084034 (2011).
221. **C. Bambi**, *Can we constrain the maximum value for the spin parameter of the super-massive objects in galactic nuclei without knowing their actual nature?*, Phys. Lett. B **705**, 5-8 (2011).
222. **C. Bambi**, *Spinning super-massive objects in galactic nuclei up to $a_* > 1$* , Europhys. Lett. **94**, 50002 (2011).
223. **C. Bambi**, *Evolution of the spin parameter of accreting compact objects with non-Kerr quadrupole moment*, JCAP 05 (2011) 009.
224. **C. Bambi**, *Constraint on the quadrupole moment of super-massive black hole candidates from the estimate of the mean radiative efficiency of AGN*, Phys. Rev. D **83**, 103003 (2011).
225. **C. Bambi** and E. Barausse, *Constraining the quadrupole moment of stellar-mass black-hole candidates with the continuum fitting method*, Astrophys. J. **731**, 121 (2011) [Erratum-ibid. **813**, 79 (2015)].
226. **C. Bambi** and N. Yoshida, *Thick disk accretion in Kerr space-time with arbitrary spin parameter*, Phys. Rev. D **82**, 124037 (2010).
227. **C. Bambi** and N. Yoshida, *Shape and position of the shadow in the $\delta = 2$ Tomimatsu-Sato space-time*, Class. Quantum Grav. **27**, 205006 (2010).
228. **C. Bambi** and N. Yoshida, *3D simulations of the accretion process in Kerr space-time with arbitrary value of the spin parameter*, Phys. Rev. D **82**, 064002 (2010).

229. **C. Bambi**, T. Harada, R. Takahashi and N. Yoshida, *Outflows from accreting superspinars*, Phys. Rev. D **81**, 104004 (2010).
230. **C. Bambi**, K. Freese, T. Harada, R. Takahashi and N. Yoshida, *Accretion process onto super-spinning objects*, Phys. Rev. D **80**, 104023 (2009).
231. **C. Bambi**, D. Spolyar, A.D. Dolgov, K. Freese and M. Volonteri, *Implications of primordial black holes on the first stars and origin of the super-massive black holes*, MNRAS **399**, 1347-1356 (2009).
232. **C. Bambi**, A.D. Dolgov and A.A. Petrov, *Black holes as antimatter factories*, JCAP 09 (2009) 013.
233. **C. Bambi**, M. Kawasaki and F.R. Urban, *Axion braneworld cosmology*, Phys. Rev. D **80**, 023533 (2009).
234. **C. Bambi**, *A note on the black hole information paradox in de Sitter spacetimes*, Commun. Theor. Phys. **52**, 78-80 (2009).
235. **C. Bambi** and K. Freese, *Apparent shape of super-spinning black holes*, Phys. Rev. D **79**, 043002 (2009).
236. **C. Bambi** and F.R. Urban, *Gravitational production of KK states*, Phys. Rev. D **78**, 103515 (2008).
237. **C. Bambi**, A.D. Dolgov and A.A. Petrov, *Primordial black holes and the observed Galactic 511 keV line*, Phys. Lett. B **670**, 174-178 (2008) [Erratum-ibid. **681**, 504 (2009)].
238. **C. Bambi**, *Gravitomagnetism in superconductors and compact stars*, IJMPD **17**, 327-336 (2008).
239. **C. Bambi** and K. Freese, *Dangerous implications of a minimum length in quantum gravity*, Class. Quantum Grav. **25**, 195013 (2008).
240. **C. Bambi**, *A revision of the Generalized Uncertainty Principle*, Class. Quantum Grav. **25**, 105003 (2008).
241. **C. Bambi** and F.R. Urban, *Natural extension of the Generalised Uncertainty Principle*, Class. Quantum Grav. **25**, 095006 (2008).
242. **C. Bambi** and A. Drago, *Constraints on temporal variation of fundamental constants from GRBs*, Astropart. Phys. **29**, 223-227 (2008).
243. **C. Bambi** and F.R. Urban, *Gravitational particle production in braneworld cosmology*, Phys. Rev. Lett. **99**, 191302 (2007).
244. **C. Bambi** and F.R. Urban, *Brane cosmology and KK gravitinos*, JCAP 09 (2007) 018.
245. **C. Bambi** and A.D. Dolgov, *Antimatter in the Milky Way*, Nucl. Phys. B **784**, 132-150 (2007).
246. **C. Bambi**, *Strange stars and the cosmological constant problem*, JCAP 06 (2007) 006.
247. **C. Bambi**, *Dark energy and the mass of galaxy clusters*, Phys. Rev. D **75**, 083003 (2007).
248. **C. Bambi**, A.D. Dolgov and K. Freese, *Baryogenesis from gravitational decay of TeV-particles in theories with low scale gravity*, JCAP 04 (2007) 005.
249. **C. Bambi**, A.D. Dolgov and K. Freese, *A black hole conjecture and rare decays in theories with low scale gravity*, Nucl. Phys. B **763**, 91-114 (2007).
250. **C. Bambi**, M. Giannotti and F.L. Villante, *Response of primordial abundances to a general modification of G_N and/or of the early universe expansion rate*, Phys. Rev. D **71**, 123524 (2005).

Conference proceedings (refereed and non-refereed articles)

1. **C. Bambi**, *An interstellar mission to the closest black hole?*, talk given at “22nd Lomonosov Conference on Elementary Particle Physics” (21-27 August 2025, Moscow, Russia), arXiv:2509.11222 [gr-qc].
2. **C. Bambi**, *Testing General Relativity with Black Holes*, talk given at “International Conference on Theoretical Physics and Astrophysics” (ICTPA-2025) (24-28 March 2025, Tashkent, Uzbekistan), arXiv:2508.12269 [gr-qc].

3. **C. Bambi**, R. Brustein, V. Cardoso, A. Chael, U. Danielsson, et al., *Black hole mimickers: from theory to observation*, Proceedings of “Black Hole Mimickers: From Theory to Observation” (3-5 March 2025, Princeton, NJ, USA), arXiv:2505.09014 [gr-qc].
4. **C. Bambi**, *Frontier Research in Astrophysics – IV: Concluding Remarks I*, talk given at “Frontier Research in Astrophysics – IV” (9-14 September 2024, Palermo, Italy), PoS FRAPWS2024 (2025) 077.
5. **C. Bambi**, *Towards a new generation of reflection models for precision measurements of accreting black holes*, talk given at “Frontier Research in Astrophysics – IV” (9-14 September 2024, Palermo, Italy), PoS FRAPWS2024 (2025) 024.
6. S. Shashank, **C. Bambi** and R. Roy, *Testing the Kerr nature with binary black hole inspirals*, talk given at the “7th International Workshop on the TianQin Science Mission” (25-26 April 2024, Hong Kong, China), Springer Proc. Phys. **428**, 57-64 (2025).
7. **C. Bambi**, *Testing General Relativity with black hole X-ray data*, talk given at the “XXXV International Workshop on High Energy Physics” (28 November-1 December 2023, Protvino, Russia), Physics of Particles and Nuclei **55**, 1420-1425 (2024).
8. **C. Bambi***, A.B. Abdikamalov, H. Liu, S. Riaz, S. Shashank and M. Zhou, *Testing General Relativity with Black Hole X-Ray Data and ABHModels*, talk given at “Frascati Workshop 2023: Multifrequency Behaviour of High Energy Cosmic Sources – XIV” (12-17 June 2023, Palermo, Italy), PoS MULTIF2023 (2024) 016.
9. **C. Bambi**, *Testing General Relativity with black hole X-ray data: a progress report*, talk given at the “International Workshop on Relativistic Astrophysics and Gravitation” (IWRAG-2021) (12-14 May 2021, online), Arab. J. Math **11**, 81-90 (2022).
10. **C. Bambi**, *Testing General Relativity with black hole X-ray data: recent progress and future developments*, talk given at the “55th Rencontres de Moriond” (9-11 March 2021, online), in *2021 Gravitation*, edited by E. Augé et al. (ARISF, 2021), pp. 69-72.
11. **C. Bambi**, *Testing General Relativity with Black Hole X-ray Data*, talk given at the “4th Zeldovich Meeting” (7-11 September 2020, Minsk, Belarus), Astronomy Reports **65**, 902-905 (2021).
12. P. Uttley, R. den Hartog, **C. Bambi**, D. Barret, S. Bianchi, et al., *An x-ray interferometry concept for the ESA Voyage 2050 programme*, Proc. SPIE **11444**, 114441E (2020).
13. A.B. Abdikamalov, D. Ayzenberg, **C. Bambi** and S. Nampalliwar, *RELXILL_NK: A Black Hole Relativistic Reflection Model for Testing General Relativity*, talk given at “Recent Progress in Relativistic Astrophysics” (6-8 May 2019, Shanghai, China), Proceedings **17**, 7 (2019).
14. **C. Bambi**, *Astrophysical Black Holes: A Review*, talk given at “Frascati Workshop 2019: Multifrequency Behaviour of High Energy Cosmic Sources – XIII” (3-8 June 2019, Palermo, Italy), PoS MULTIF2019 (2020) 028.
15. A.B. Abdikamalov, D. Ayzenberg, **C. Bambi***, et al., *Testing general relativity with supermassive black holes using X-ray reflection spectroscopy*, talk given at the meeting “Recent Progress in Relativistic Astrophysics” (6-8 May 2019, Shanghai, China), Proceedings **17**, 2 (2019).
16. **C. Bambi***, A.B. Abdikamalov, D. Ayzenberg, Z. Cao, H. Liu, et al., *RELXILL_NK: a relativistic reflection model for testing Einstein’s gravity*, talk give at the “International Conference on Quantum Gravity” (26-28 March 2018, Shenzhen, China), Universe **4**, 79 (2018).
17. **C. Bambi**, *Testing the Kerr black hole hypothesis with RELXILL_NK*, J. Phys. Conf. Ser. **942**, 012004 (2017).
18. S.N. Zhang, M. Feroci, A. Santangelo, Y.W. Dong, H. Feng, et al., *eXTP – enhanced X-ray Timing and Polarimetry Mission*, Proc. SPIE **9905**, 99051Q (2016).

19. **C. Bambi**, *Testing the Kerr Paradigm with X-ray Observations*, in *Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity*, edited by M. Bianchi, R.T. Jantzen and R. Ruffini, (World Scientific, Singapore, 2017), pp. 1546-1551.
20. **C. Bambi**, *Testing the Kerr Paradigm with the Black Hole Shadow*, in *Proceedings of the Fourteenth Marcel Grossmann Meeting on General Relativity*, edited by M. Bianchi, R.T. Jantzen and R. Ruffini, (World Scientific, Singapore, 2017), pp. 3494-3499.
21. I. Mandel, M. Coleman Miller, B.J. Ahmedov, **C. Bambi**, C.P.L. Berry, et al., *Relativistic astrophysics at GR20*, Gen. Rel. Grav. **46**, 1688 (2014).
22. **C. Bambi**, *Testing the nature of astrophysical black hole candidates*, Springer Proc. Phys. **145**, 81-87 (2014).
23. **C. Bambi**, *Compact objects with spin parameter $a_* > 1$* , talk given at “46th Rencontres de Moriond” (20-27 March 2011, La Thuile, Aosta, Italy), in *2011 Gravitational Waves and Experimental Gravity*, edited by E. Augé et al. (The Gioi Publishers, Ha Noi, Vietnam, 2011), pp. 89-92.
24. **C. Bambi**, *Violation of the Carter-Israel conjecture and its astrophysical implications*, talk given at “NEB 14: Recent Developments in Gravity” (8-11 June 2010, Ioannina, Greece), J. Phys. Conf. Ser. **283**, 012005 (2011).
25. **C. Bambi**, *Numerical simulations of the accretion process in Kerr spacetimes with arbitrary value of the Kerr parameter*, talk given at “JGRG19” (30 November-4 December 2009, Tokyo, Japan), in *Proceedings of the Nineteenth Workshop on General Relativity and Gravitation*, edited by M. Sajjo et al., pp. 109-112 (2010).
26. **C. Bambi**, *Testing the black hole paradigm with future observations of SgrA**, talk given at “Galactic Center Workshop 2009” (19-23 October 2009, Shanghai, China), ASP Conf. Ser. **439**, 340-343 (2011).
27. **C. Bambi**, K. Freese and R. Takahashi, *Is the Carter-Israel conjecture correct?*, talk given at the “XXI Rencontres de Blois: Windows on the Universe” (21-26 June 2009, Blois, France), in *Windows on the Universe*, edited by L. Celnikier et al. (The Gioi Publishers, Ha Noi, Vietnam, 2010), pp. 575-578.
28. **C. Bambi**, *Primordial antimatter in the contemporary universe*, talk given at “SciNeGHE07” (18-20 June 2007, Frascati, Rome, Italy), Frascati Phys. Ser. **45**, 129-136 (2007).

Conference proceedings (as editor)

1. **C. Bambi** and S. Nampalliwar (Editors), *Recent Progress in Relativistic Astrophysics*, Proceedings, Volume 17 (2019), proceedings of “Recent Progress in Relativistic Astrophysics” (6-8 May 2019, Shanghai, China).
2. G. Calcagni, **C. Bambi** and L. Modesto (Editors), *Gravity, Black Holes and Cosmology XXI*, special issue of Universe (2018), proceedings of “International Conference on Quantum Gravity” (26-28 March 2018, Shenzhen, China).

White Papers

1. J. McEnery, J.A. Barrio, I. Agudo, M. Ajello, J.-M. Álvarez, et al., *All-sky Medium Energy Gamma-ray Observatory: Exploring the Extreme Multimessenger Universe*, Astro2020 APC White Paper [arXiv:1907.07558 [astro-ph.IM]].

SUPERVISION OF STUDENTS AND POSTDOCS

Undergraduate Students (followed by the position found after the Bachelor)

1. Yuheng Cao (B.S. in Physics *expected in 2026*, Fudan University)
2. Yi Fan (B.S. in Physics *expected in 2026*, Soochow University) → Fudan University (Ph.D. student)
3. Bingbing Hu (B.S. in Physics *expected in 2026*, Nanchang University) → Fudan University (Ph.D. student)
4. Ningyue Fan (B.S. in Physics 2025, Fudan University) → Stanford University (Ph.D. student)
5. Xirlai Liu (B.S. in Physics 2025, Fudan University) → Industry
6. Chuiyang Kong (B.S. in Physics 2024, Fudan University) → Brown University (M.S. student)
7. Yuanbing Yang (B.S. in Physics 2024, Fudan University) → Industry
8. Rui Zhan (B.S. in Physics 2024, Fudan University) → Heidelberg University (M.S. student)
9. Jing Zhou (B.S. in Physics 2024, Fudan University) → Fudan University (M.S. student)
10. Qunfeng Jiang (B.S. in Physics 2023, Fudan University) → The University of Hong Kong (M.S. student)
11. Jiale Gu (B.S. in Physics 2022, Liaoning University) → Fudan University (M.S. student)
12. Kexin Huang (B.S. in Physics 2022, Fudan University) → Fudan University (M.S. student)
13. Qichun Liu (B.S. in Physics 2022, Fudan University) → Tsinghua University (Ph.D. student)
14. Haiyang Wang (B.S. in Physics 2022, Fudan University) → Cambridge University (M.S. student)
15. Zichao Wang (B.S. in Physics 2022, Fudan University) → Fudan University (M.S. student)
16. Zhibo Yu (B.S. in Physics 2022, Fudan University) → Penn State University (Ph.D. student)
17. Yao Zhang (B.S. in Physics 2022, Fudan University) → Tsinghua University (Ph.D. student)
18. Shuaifeng Zhao (B.S. in Physics 2022, SAU) → Fudan University (Ph.D. student)
19. Nan Li (B.S. in Physics 2021, Fudan University) → Fudan University (M.S. student)
20. Feiyang Liu (B.S. in Physics 2021, Fudan University) → Fudan University (Ph.D. student)
21. Dongnuo Lv (B.S. in Physics 2021, Fudan University) → Duke University (M.S. student)
22. Ziyu Ding (B.S. in Physics 2020, Fudan University) → LMU Munich (M.S. student)
23. Yuhui Lu (B.S. in Physics 2020, Fudan University) → University of Edinburgh (M.S. student)
24. Jelen Wong (B.S. in Physics 2020, Fudan University) → University of Chicago (M.S. student)
25. Honghui Liu (B.S. in Physics 2019, Fudan University) → Fudan University (Ph.D. student)
26. Jinli Yan (B.S. in Physics 2019, Fudan University) → Georgia Tech (M.S. student)
27. Yunfeng Yan (B.S. in Physics 2019, Fudan University) → Columbia University (M.S. student)
28. Yuchan Yang (B.S. in Physics 2019, Fudan University) → Northwestern University (M.S. student)
29. Yu Yao (B.S. in Physics 2019, Fudan University) → University of Edinburgh (M.S. student)
30. Yuexin Zhang (B.S. in Physics 2019, Fudan University) → University of Groningen (Ph.D. student)
31. Zheng Cao (B.S. in Physics 2018, Fudan University) → University of Amsterdam (M.S. student)
32. Chenyang Qian (B.S. in Physics 2018, Fudan University) → Industry
33. Jingyi Wang (B.S. in Physics 2018, Fudan University) → MIT (Ph.D. student)
34. Jinye Yang (B.S. in Physics 2018, Fudan University) → University of Florida Gainesville (Ph.D. student)
35. Yueying Ni (B.S. in Physics 2017, Fudan University) → Carnegie Mellon University (Ph.D. student)

36. Fangzheng Shi (B.S. in Physics 2017, Fudan University) → Nanjing University (Ph.D. student)
37. Menglei Zhou (B.S. in Physics 2017, Fudan University) → Fudan University (M.S. student)
38. Jiachen Jiang (B.S. in Physics 2016, Fudan University) → Cambridge University (Ph.D. student)
39. Qingling Ni (B.S. in Physics 2016, Fudan University) → Penn State University (Ph.D. student)
40. Muyun Liu (B.S. in Optical Information Science and Technology 2015, Fudan University) → Industry
41. Yue Liu (B.S. in Physics 2014, Fudan University) → Boston University (Ph.D. student)
42. Yiyang Zhang (B.S. in Physics 2014, Fudan University) → Washington University St. Louis (Ph.D. student)

Master Students (followed by the position found after the Master)

1. Lin Gao (M.S. in Physics *expected in 2028*, Fudan University)
2. Yuxuan Dai (M.S. in Physics *expected in 2027*, Fudan University)
3. Yan Huang (M.S. in Physics *expected in 2027*, Fudan University)
4. Jiale Gu (M.S. in Physics *expected in 2026*, Fudan University)
5. Yimin Huang (M.S. in Physics *expected in 2026*, Fudan University)
6. Kexin Huang (M.S. in Physics 2025, Fudan University) → Industry
7. Olzhas Mukazhanov (M.S. in Physics 2024, Fudan University) → Industry
8. Rittick Roy (M.S. in Physics 2023, Fudan University) → University of Amsterdam (Ph.D. student)
9. Jiahao Tao (M.S. in Physics 2023, Fudan University) → Industry
10. Jiachen Zhu (M.S. in Physics 2021, Fudan University) → Industry
11. Menglei Zhou (M.S. in Physics 2020, Fudan University) → University of Tuebingen (Ph.D. student)
12. Alex Charlesworth* (M.S. in Physics 2018, Nottingham University) → Industry
13. Marcus Garnham* (M.S. in Physics 2018, Nottingham University) → Industry
14. Yifan Cheng (M.S. in Physics 2016, Fudan University) → Industry
15. Jake Arthur* (M.S. in Physics 2015, Nottingham University) → Nottingham University (Ph.D. student)
16. Rachel Asquith* (M.S. in Physics 2015, Nottingham University) → Nottingham University (Ph.D. student)
17. Dan Liu (M.S. in Physics 2015, Fudan University) → Industry

* Co-supervision within the exchange program Fudan-Nottingham

Doctoral Students (followed by the position found after the Ph.D.)

1. Yi Fan (from September 2026; Ph.D. in Physics *expected in 2031*, Fudan University)
2. Bingbing Hu (from September 2026; Ph.D. in Physics *expected in 2031*, Fudan University)
3. Odilbek Yunusov (Ph.D. in Physics *expected in 2028*, Fudan University)
4. Tehreem Zahra (Ph.D. in Physics *expected in 2028*, Fudan University)
5. Abdurakhmon Nosirov (Ph.D. in Physics *expected in 2027*, Fudan University)
6. Hassam Umer (Ph.D. in Physics *expected in 2027*, Fudan University)
7. Shuaitongze Zhao (Ph.D. in Physics *expected in 2027*, Fudan University)

8. Zhe Zhao (Ph.D. in Physics *expected in 2027*, Fudan University)
9. Debroy Das (Ph.D. in Physics *expected in 2026*, Fudan University)
10. Songcheng Li (Ph.D. in Physics *expected in 2026*, Fudan University) → Industry
11. Temurbek Mirzaev (Ph.D. in Physics 2025, Fudan University) → Fudan University (postdoc)
12. Honghui Liu (Ph.D. in Physics 2024, Fudan University) → University of Tuebingen (assistant to the Chair)
13. Gitika Mall (Ph.D. in Physics 2024, Fudan University) → Industry
14. Zuobin Zhang (Ph.D. in Physics 2024, Fudan University) → Oxford University (postdoc)
15. Swarnim Shashank (Ph.D. in Physics 2023, Fudan University) → Fudan University (postdoc)
16. Biao Zhou (Ph.D. in Physics 2022, Fudan University) → High school (teacher)
17. Bakhtiyor Narzilloev (Ph.D. in Physics 2021, Fudan University) → UBAI Tashkent (researcher)
18. Shafqat Riaz (Ph.D. in Physics 2021, Fudan University) → Fudan University (postdoc)
19. Askar Abdikamalov (Ph.D. in Physics 2020, Fudan University) → Fudan University (postdoc)
20. Carlos A. Benavides-Gallego (Ph.D. in Physics 2020, Fudan University) → SHAO/CAS (postdoc)
21. Hrishikesh Chakrabarty (Ph.D. in Physics 2020, Fudan University) → UCAS Beijing (postdoc)
22. Kishalay Choudhury (Ph.D. in Physics 2019, Fudan University) → IUCAA Pune (visiting researcher)
23. Ashutosh Tripathi (Ph.D. in Physics 2019, Fudan University) → Fudan University (postdoc)
24. Masoumeh Ghasemi-Nodehi (Ph.D. in Physics 2017, Fudan University) → NAOC/CAS (postdoc)
25. Guancheng Pei (Ph.D. in Physics 2016, Fudan University) → Industry
26. Zilong Li (Ph.D. in Physics 2015, Fudan University) → Industry
27. Lingyao Kong (Ph.D. in Physics 2014, Fudan University) → Institute of Fluid Physics/CAEP (faculty)

Postdoctoral Research Fellows (followed by the position found after the end of the contract)

1. Temurbek Mirzaev (2025 – Present, Fudan University) → New Uzbekistan University (faculty)
2. Leda Gao (2025 – Present, Fudan University)
3. Swarnim Shashank (2023 – Present, Fudan University) → University of Tuebingen (postdoc)
4. Shafqat Riaz (2021 – 2023, Fudan University) → University of Tuebingen (postdoc)
5. Askar Abdikamalov (2020 – 2024, Fudan University) → New Uzbekistan University (faculty)
6. Ashutosh Tripathi (2019 – 2022, Fudan University) → XAO/CAS (faculty)
7. Dmitry Ayzenberg (2017 – 2020, Fudan University) → University of Tuebingen (postdoc)
8. Ahmadjon Abdujabbarov (2017 – 2019, Fudan University) → National University of Uzbekistan (faculty)
9. Sourabh Nampalliwar (2015 – 2017, Fudan University) → University of Tuebingen (postdoc)
10. Shangyu Sun (2015 – 2017, Fudan University) → SHAO/CAS (postdoc)
11. Yu Wang (2015 – 2017, Fudan University) → Shanghai Normal University (faculty)
12. Diego Rubiera-Garcia (2014 – 2015, Fudan University) → Lisbon University (postdoc)
13. Naoki Tsukamoto (2013 – 2015, Fudan University) → HUST Wuhan (postdoc)
14. Daniele Malafarina (2013 – 2014, Fudan University) → Nazarbayev University (faculty)

TEACHING EXPERIENCE

Introduction to Astrophysics

Course for undergraduate and graduate students of Physics, Fudan University (China)
Fall 2025, Fall 2024, Fall 2023, Fall 2022, Spring 2021, Spring 2020, Spring 2019, Spring 2016

General Relativity

Course for undergraduate and graduate students of Physics, Fudan University (China)
Spring 2025, Spring 2024, Spring 2023, Spring 2022, Spring 2020, Spring 2013

Introduction to Cosmology

Course for undergraduate and graduate students of Physics, Fudan University (China)
Fall 2021, Spring 2018, Spring 2017, Spring 2016, Spring 2015, Spring 2014

Black Holes: A Laboratory for Testing Strong Gravity

Mini-course for students and researchers at Konrad Lorenz University (Colombia)
Fall 2019

Big Bang Nucleosynthesis as assistant of Prof. G. Fiorentini

Course for undergraduate and graduate students of Physics, Ferrara University (Italy)
Spring 2008, Spring 2007, Spring 2006

Classical Mechanics as assistant of Prof. F.L. Villante

Course for undergraduate students of Computer Science, Ferrara University (Italy)
Spring 2007, Spring 2006

LIST OF TALKS

Talks at international meetings

* invited plenary speaker

1. *An Interstellar Mission to the Closest Black Hole?**,
“China-India-Thailand Workshop on High Energy Astrophysics”
(3-5.12.2025, Nakhon Ratchasima, Thailand).
2. *An Interstellar Mission to the Closest Black Hole?**,
“22nd Lomonosov Conference on Elementary Particle Physics” (21-27.08.2025, Moscow, Russia).
3. *Testing General Relativity with Black Hole X-ray Data**,
“Testing General Relativity with Black Holes” (26.04.2025, Shanghai, China).
4. *Testing General Relativity with Black Hole X-ray Data**,
“ICTPA-2025” (24-28.03.2025, Tashkent, Uzbekistan).
5. *Testing General Relativity with Black Hole X-ray Data**,
“Black Hole Mimickers: From Theory to Observation” (03-05.03.2025, Princeton, New Jersey, USA).
6. *Testing General Relativity with Black Hole X-ray Data**,
“Relativistic Black Holes” (30.12.2024, Jinhua, China).
7. *Towards a new generation of reflection models for precision measurements of accreting black holes**,
“Frontier Research in Astrophysics - IV” (09-14.09.2024, Palermo, Italy).
8. *Towards a new generation of reflection models for precision measurements of accreting black holes**,
“42nd SPP Physics Conference” (03-06.07.2024, Batangas City, Philippines).
9. *Towards a new generation of reflection models for precision measurements of accreting black holes**,
“Latin American Conference on Astrophysics and Relativity” (LACAR) (24-27.06.2024, Bogota, Colombia).
10. *Towards a new generation of reflection models for precision measurements of accreting black holes**,
“International Conference on Theoretical Physics and Astrophysics” (13-18.05.2024, Tashkent, Uzbekistan).
11. *Towards a new generation of reflection models for precision measurements of accreting black holes*,
“32nd Texas Symposium on Relativistic Astrophysics” (11-15.12.2023, Shanghai, China).
12. *Testing General Relativity with Black Hole X-ray Data**,
“XXXV International Workshop on High Energy Physics” (28.11-01.12.2023, Protvino, Russia).
13. *Towards a new generation of reflection models for precision measurements of accreting black holes**,
“4th China-India Workshop on High Energy Astrophysics” (21-23.10.2023, Shanghai, China).
14. *Testing General Relativity with Black Hole X-ray Data**,
“Multifrequency Behaviour of High Energy Cosmic Sources - XIV” (12-17.06.2023, Palermo, Italy).
15. *Testing General Relativity with Black Hole X-ray Data: A Progress Report*,
“APS April Meeting” (15-18.04.2023, Minneapolis, Minnesota, USA).
16. *Testing Lorentz-Violating Models with Black Hole X-ray Data**,
“Second IUCSS Workshop on Gravitational Aspects of Lorentz Violation” (13-14.03.2023, online).

17. *Testing General Relativity with Black Hole X-ray Data**,
“Recent Research in Gravity” (30.11.2022, online).
18. *Testing General Relativity with Black Hole X-ray Data*,
“Exploring the Hot and Energetic Universe” (7-10.11.2022, Barcelona, Spain).
19. *Testing Fundamental Physics with Black Holes**,
“TianQin Astrophysics Workshop” (22-25.08.2022, online).
20. *Testing General Relativity with Black Hole X-ray Data*,
“23rd International Conference on General Relativity and Gravitation” (GR23) (3-8.07.2022, online).
21. *Testing GR with NuSTAR observations of Galactic black holes*,
“Ten Years of the High-Energy Universe in Focus: NuSTAR 2022” (20-22.06.2022, Cagliari, Italy).
22. *Towards Precision Measurements of Accreting Black Holes Using X-Ray Reflection Spectroscopy**,
“The 60th Anniversary of X-Ray Astronomy” (15-18.06.2022, online).
23. *Testing the Weak Equivalence Principle near black holes*,
“APS April Meeting” (9-12.04.2022, New York, New York, USA).
24. *Testing General Relativity with black hole X-ray data**,
“Recent Progress on Gravity Tests” (16-18.02.2022, online).
25. *Testing regular black hole metrics with X-ray data**,
“Regular black holes in quantum gravity and beyond: from theory to shadow observations”
(18-21.10.2021, online).
26. *Testing fundamental physics with black hole X-ray data**,
“Timing X-ray Binaries” (7-8.10.2021, online).
27. *Testing General Relativity with black hole X-ray data: a progress report**,
“Supermassive Black Hole and Fundamental Physics” (26.09.2021, Beijing, China).
28. *Testing General Relativity with black hole X-ray data: recent progress and future developments**,
“International Workshop on Relativistic Astrophysics and Gravitation” (12-14.05.2021, online).
29. *Testing General Relativity with Black Hole X-ray Data*,
“APS April Meeting” (17-20.04.2021, online).
30. *Testing General Relativity with Black Hole X-ray Data**,
“China-India Workshop on High Energy Astrophysics” (6-8.11.2020, Shanghai, China – online).
31. *Testing general relativity using black holes with X-ray observations*,
“4th Zeldovich Virtual Meeting” (7-11.09.2020, Minsk, Belarus – online).
32. *Testing general relativity using black holes with X-ray observations*,
“14th International Conference on Gravitation, Astrophysics and Cosmology”
(17-21.08.2020, Jhongli, Taiwan – online).
33. *Astrophysical Black Holes: A Review**,
“Multifrequency Behaviour of High Energy Cosmic Sources - XIII” (03-08.06.2019, Palermo, Italy).

34. *Testing general relativity using X-ray reflection spectroscopy**,
“1st International Symposium on Precision Measurement Physics” (28.04-01.05.2019, Wuhan, China).
35. *Testing black holes using X-ray reflection spectroscopy*,
“2019 CCNU-USTC Junior Cosmology Symposium” (26-29.04.2019, Wuhan, China).
36. *Testing strong gravity using X-ray reflection spectroscopy*,
“Accretion in strong gravity” (4-8.2.2019, Bad Honnef, Germany).
37. *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy**,
“8th FERO Meeting” (23-25.5.2018, Heraklion, Greece).
38. *Testing astrophysical black holes using X-ray reflection spectroscopy*,
“APS April Meeting” (14-17.04.2018, Columbus, Ohio, USA).
39. *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy**,
“International Conference on Quantum Gravity” (26-28.03.2018, Shenzhen, China).
40. *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy*,
“BRICS AGAC 2017” (26-28.09.2017, Yangzhou, China).
41. *Testing the Kerr metric using X-ray reflection spectroscopy*,
“3rd Karl Schwarzschild Meeting” (24-28.07.2017, Frankfurt, Germany).
42. *Testing the Kerr black hole hypothesis using X-ray reflection spectroscopy*,
“The 5th Galileo-Xu Guangqi Meeting” (25-28.06.2017, Chengdu, China).
43. *Testing the Kerr metric using X-ray reflection spectroscopy**,
“Symposium of High Energy Astrophysics” (21-23.10.2016, Guangzhou, China).
44. *Testing the Kerr metric via X-ray reflection spectroscopy**,
“Phenomenology of Strong Gravity” (14-16.09.2016, Astana, Kazakhstan).
45. *Constraining capability of GWs, iron line, and QPOs to test the Kerr metric**,
“White Paper eXTP Meeting” (14-15.04.2016, Shanghai, China).
46. *Testing astrophysical black holes**,
“Black Holes and Friends 2” (11-13.04.2016, Shanghai, China).
47. *Testing black hole candidates**,
“eXTP workshop” (26-27.10.2015, Beijing, China).
48. *GR or alternatives?**,
“Black Hole and Strong Gravity Field workshop of eXTP” (23-24.10.2015, Beijing, China).
49. *Testing the Kerr Paradigm with the Black Hole Shadow*,
“14th Marcel Grossmann Meeting” (12-18.7.2015, Rome, Italy).
50. *Testing the Kerr Paradigm with X-ray Observations*,
“14th Marcel Grossmann Meeting” (12-18.7.2015, Rome, Italy).
51. *Testing astrophysical black holes**,
“Compact Stars & Black Holes” (7-9.7.2015, Tuebingen, Germany).

52. *Testing astrophysical black holes: state of the art and opportunities with XTP**, “XTP Meeting” (22.1.2015, Beijing, China).
53. *Testing the nature of astrophysical black hole candidates**, “7th FERO Meeting” (28-30.8.2014, Krakow, Poland).
54. *Testing the nature of astrophysical black hole candidates*, “558th WE-Heraeus-Seminar: The Strong Gravity Regime of Black Holes and Neutron Stars” (31.3-4.4.2014, Bad Honnef, Germany).
55. *Testing the nature of astrophysical black hole candidates**, “Prague Synergy 2013: Accreting Relativistic Compact Objects and their Environment” (22.11-1.12.2013, Prague, Czech Republic).
56. *Terminating black holes in quantum gravity*, “PASCOS 2013” (20-26.11.2013, Taipei, Taiwan).
57. *Testing the nature of astrophysical black hole candidates**, “Workshop on Collapsing Objects” (21-24.10.2013, Shanghai, China).
58. *Looking for a signature of quantum gravity in the gravitational collapse of an astrophysical object*, “20th International Conference on General Relativity and Gravitation” (GR20) & “Amaldi10” (8-13.07.2013, Warsaw, Poland).
59. *Testing the Kerr-nature of black hole candidates*, “20th International Conference on General Relativity and Gravitation” (GR20) & “Amaldi10” (8-13.07.2013, Warsaw, Poland).
60. *Testing the Kerr-nature of black hole candidates with VLBI facilities*, “East Asia VLBI Workshop 2013” (17-19.06.2013, Jeju Island, South Korea).
61. *Testing the Kerr-nature of black hole candidates**, “6th FERO Meeting” (30-31.08.2012, Prague, Czech Republic).
62. *Testing the Kerr black hole hypothesis with the continuum-fitting method**, “Testing Gravity with Astrophysical and Cosmological Observations” (23.01-3.02.2012, Kashiwa, Japan).
63. *Testing the nature of astrophysical black hole candidates*, “12th International Symposium: Frontiers of Fundamental Physics” (21-23.11.2011, Udine, Italy).
64. *Testing the Kerr black hole paradigm with electromagnetic radiation*, “Stellar and Intermediate Mass Black Holes” (5-26.06.2011, Aspen, Colorado, USA).
65. *Compact objects with spin parameter $a_* > 1$* , “46th Rencontres de Moriond” (20-27.03.2011, La Thuile, Italy).
66. *Probing the space-time around astrophysical black hole candidates with future VLBI experiments*, “Summer Institute 2010” (4-14.08.2010, Fuji-Yoshida, Japan).
67. *Searching for quantum gravity effects in astrophysical black hole candidates*, “Experimental Search for Quantum Gravity” (12-16.07.2010, Stockholm, Sweden).

68. *Violation of the Carter-Israel conjecture and its astrophysical implications*,
“19th International Conference on General Relativity and Gravitation” (GR19)
(5-9.07.2010, Mexico City, Mexico).
69. *Violation of the Carter-Israel conjecture and its astrophysical implications*,
“NEB 14: Recent Developments in Gravity” (8-11.06.2010, Ioannina, Greece).
70. *Numerical simulations of the accretion process in Kerr spacetimes with arbitrary value of the Kerr parameter*,
“JGRG19” (30.11-4.12.2009, Tokyo, Japan).
71. *Testing the black hole paradigm with future observations of SgrA**,
“Galactic Center Workshop 2009” (19-23.10.2009, Shanghai, China).
72. *Is the Carter-Israel conjecture correct?*,
“XXI Rencontres de Blois: Windows on the Universe” (21-26.06.2009, Blois, France).
73. *Super-spinning black holes: motivations and observational signatures*,
“Workshop on Tests of Gravity and Gravitational Physics” (19-21.05.2009, Cleveland, Ohio, USA).
74. *Strange Stars: a laboratory to investigate the problem of the cosmological constant*,
“New Horizon for Modern Cosmology” (19.01-13.03.2009, Florence, Italy).
75. *Brane cosmology and weakly interacting particles**,
“SW2: Hot Topics in Modern Cosmology” (12-17.05.2008, Cargese, France).
76. *Rare decays in theories with LGS*,
“Search for Baryon and Lepton Number Violation” (20-22.09.2007, Berkeley, California, USA).
77. *Primordial antimatter in the contemporary universe*,
“SciNeGHE07” (18-20.06.2007, Frascati, Italy).

Colloquia and research seminars

2025

Shanghai Institute for Mathematics and Interdisciplinary Sciences (Shanghai, China), 14 November 2025
Eberhard Karls Universität Tübingen (Tuebingen, Germany), 3 November 2025
ESTEC, European Space Agency (Noordwijk, The Netherlands), 28 October 2025
University College London (London, UK), 20 October 2025
Oxford University (Oxford, UK), 15 October 2025
La Sapienza University (Rome, Italy), 22 July 2025
Goethe-Universität Frankfurt am Main (Frankfurt am Main, Germany), 11 July 2025
Beijing Normal University (Beijing, China), 17 June 2025
Tsinghua University (Beijing, China), 16 June 2025
Huazhong University of Science and Technology (Wuhan, China), 4 June 2025
University of Science and Technology of China (Hefei, China), 3 June 2025
Central China Normal University (Wuhan, China), 16 May 2025
Nanyang Technological University (Singapore), 20 March 2025
University of Maryland, College Park (College Park, Maryland, USA), 7 March 2025

2024

Radboud University (Nijmegen, The Netherlands), 7 November 2024
University of Groningen (Groningen, The Netherlands), 6 November 2024
SRON Netherlands Institute for Space Research (Leiden, The Netherlands), 5 November 2024
ESTEC, European Space Agency (Noordwijk, The Netherlands), 5 November 2024
Niels Bohr Institute, University of Copenhagen (Copenhagen, Denmark), 1 November 2024
University of Warwick (Coventry, UK), 30 October 2024
University of Southampton (Southampton, UK), 29 October 2024
COMSATS University Islamabad, Lahore Campus (Lahore, Pakistan), 4 October 2024
Abdus Salam School of Mathematical Sciences, GCU (Lahore, Pakistan), 3 October 2024
University of the Punjab (Lahore, Pakistan), 2 October 2024
University of the Punjab (Lahore, Pakistan), 1 October 2024
INAF-IASF Palermo (Palermo, Italy), 11 September 2024
Astronomical Institute/CAS (Prague, Czech Republic), 18 July 2024
University of Cambridge (Cambridge, UK), 11 June 2024
Newcastle University (Newcastle, UK), 11 June 2024
University of Bristol (Bristol, UK), 7 June 2024
Suranaree University of Technology (Nakhon Ratchasima, Thailand), 15 May 2024
Tsukuba University (Tsukuba, Japan), 8 May 2024
Kavli IPMU/The University of Tokyo (Kashiwa, Japan), 7 May 2024
Rikkyo University (Tokyo, Japan), 6 May 2024
National University of Science & Technology (Islamabad, Pakistan), 18 April 2024
Quaid-i-Azam University (Islamabad, Pakistan), 17 April 2024
Yangzhou University (Yangzhou, China), 9 April 2024
Sun Yat-Sen University (Zhuhai, China), 28 March 2024
TDLI/Shanghai Jiao Tong University (Shanghai, China), 28 February 2024
MIT Kavli Institute/MIT (Cambridge, Massachusetts, USA), 8 February 2024
Harvard-Smithsonian Center for Astrophysics (Cambridge, Massachusetts, USA), 7 February 2024

Perimeter Institute for Theoretical Physics (Waterloo, Canada), 1 February 2024
The University of Texas, Austin (Austin, Texas, USA), 31 January 2024
City University of Hong Kong (Hong Kong, China), 18 January 2024
The University of Hong Kong (Hong Kong, China), 17 January 2024
National Taiwan University (Taipei, Taiwan), 10 January 2024

2023

Institute of Fundamental and Applied Research (Tashkent, Uzbekistan), 7 December 2023
New Uzbekistan University (Tashkent, Uzbekistan), 6 December 2023
KIAA/Peking University (Beijing, China), 30 November 2023
Nanjing University (Nanjing, China), 2 November 2023
National Astronomical Observatories of China/CAS (Beijing, China), 18 October 2023
SISSA (Trieste, Italy), 15 June 2023
University of Illinois Urbana-Champaign (Urbana, Illinois, USA), 26 April 2023
Black Hole Initiative/Harvard University (Cambridge, Massachusetts, USA), 24 April 2023
Princeton University (Princeton, New Jersey, USA), 20 April 2023
Caltech (Pasadena, California, USA), 14 April 2023
Guangxi University (Nanning, China), 28 March 2023
Shanghai Normal University (Shanghai, China), 16 March 2023
University of Science and Technology of China (Hefei, China), 7 March 2023
Zhejiang University of Technology (Hangzhou, China), 1 March 2023
Institute of Theoretical Physics/CAS (Beijing, China), 23 February 2023

2022

Aveiro University (Aveiro, Portugal), 28 September 2022
The University of Hong Kong (Hong Kong, China), 7 September 2022
Proca Seminars Series (online seminar series), 27 January 2022
Technion (Haifa, Israel), 26 January 2022

2021

Sichuan University (Chengdu, China), 17 June 2021
Wuhan University (Wuhan, China), 25 May 2021
Beijing Normal University (Beijing, China), 18 May 2021
Tsinghua University (Beijing, China), 18 May 2021
TDLI/Shanghai Jiao Tong University (Shanghai, China), 28 April 2021

2020

Sun Yat-Sen University (Zhuhai, China), 13 November 2020
Guangzhou University (Guangzhou, China), 11 November 2020
HEP Virtual Seminar Series (online seminar series), 19 May 2020
IISER Kolkata (Mohanpur, India), 22 January 2020
IIT Guwahati (Guwahati, India), 20 January 2020
IIT Kanpur (Kanpur, India), 17 January 2020
IIT Kharagpur (Kharagpur, India), 15 January 2020
IIT Bombay (Mumbai, India), 13 January 2020

2019

Institute of Physics/CAS (Prague, Czech Republic), 10 October 2019
Nicolaus Copernicus Astronomical Center (Warsaw, Poland), 9 October 2019
Silesian University in Opava (Opava, Czech Republic), 4 October 2019
Astronomical Institute/CAS (Prague, Czech Republic), 30 September 2019
Universidad de Antioquia (Medellín, Colombia), 19 September 2019
National Astronomical Observatory of Colombia (Bogota, Colombia), 17 September 2019
La Sapienza University (Rome, Italy), 22 July 2019
Xinjiang Astronomical Observatory/CAS (Urumqi, China), 9 July 2019
SWIFAR/Yunnan University (Kunming, China), 26 June 2019
University of Amsterdam (Amsterdam, Netherlands), 14 June 2019
Zhejiang University of Technology (Hangzhou, China), 20 May 2019
SWIFAR/Yunnan University (Kunming, China), 18 April 2019
Institute of High Energy Physics/CAS (Beijing, China), 9 April 2019
Shanghai Astronomical Observatory/CAS (Shanghai, China), 4 April 2019
KIAA/Peking University (Beijing, China), 29 March 2019
Huazhong University of Science and Technology (Wuhan, China), 12 March 2019
Roma Tre University (Rome, Italy), 15 February 2019
Arcetri Astronomical Observatory (Florence, Italy), 13 February 2019

2018

SUSTech (Shenzhen, China), 9 October 2018
Indian Institute of Technology Hyderabad (Sangareddy, India), 4 October 2018
Observatoire de Paris (Meudon, France), 20 September 2018
Lawphysics (Latin American Webinars on Physics), 18 July 2018
Dr. Karl Remeis Observatory (Bamberg, Germany), 10 July 2018
Goethe Universität Frankfurt am Main (Frankfurt, Germany), 3 July 2018
Technion (Haifa, Israel), 13 June 2018
Tsinghua University (Beijing, China), 17 May 2018
Washington University in St. Louis (St. Louis, Missouri, USA), 18 April 2018
Nanjing University (Nanjing, China), 15 March 2018
Eberhard Karls Universität Tübingen (Tuebingen, Germany), 8 February 2018
Sun Yat-Sen University (Zhuhai, China), 11 January 2018

2017

Xiamen University (Xiamen, China), 14 December 2017
SUSTech (Shenzhen, China), 7 December 2017
University of Amsterdam (Amsterdam, Netherlands), 22 September 2017
ESTEC/ESA (Noordwijk, Netherlands), 18 September 2017
University of Cambridge (Cambridge, UK), 14 July 2017
SUSTech (Shenzhen, China), 17 February 2017
Kyoto University (Kyoto, Japan), 7 February 2017
Kavli IPMU/The University of Tokyo (Kashiwa, Japan), 31 January 2017
Waseda University (Tokyo, Japan), 27 January 2017
Tokyo Institute of Technology (Tokyo, Japan), 26 January 2017
Osaka University (Osaka, Japan), 18 January 2017

Osaka City University (Osaka, Japan), 16 January 2017

2016

ISAF/INAF Bologna (Bologna, Italy), 21 September 2016
Eberhard Karls Universität Tübingen (Tuebingen, Germany), 20 July 2016
Sun Yat-Sen University (Guangzhou, China), 27 April 2016
Guangzhou University (Guangzhou, China), 26 April 2016
Guangxi University (Nanning, China), 25 April 2016
University of Science and Technology of China (Hefei, China), 29 March 2016
Sichuan University (Chengdu, China), 25 March 2016

2015

University of Science and Technology of China (Hefei, China), 29 October 2015
Institute of High Energy Physics/CAS (Beijing, China), 25 October 2015
Padua University (Padua, Italy), 5 October 2015
University of Heidelberg (Heidelberg, Germany), 21 July 2015
Harvard-Smithsonian Center for Astrophysics (Cambridge, Massachusetts, USA), 22 June 2015
National Central University (Jhongli, Taiwan), 17 April 2015
National Tsing Hua University (Hsinchu, Taiwan), 16 April 2015
University of Cambridge (Cambridge, UK), 13 February 2015
University of Nottingham (Nottingham, UK), 12 February 2015
University of Southampton (Southampton, UK), 9 February 2015

2014

Institute of High Energy Physics/CAS (Beijing, China), 10 December 2014
National Astronomical Observatories of China/CAS (Beijing, China), 9 December 2014
University of Nottingham Ningbo (Ningbo, China), 24 October 2014
Eberhard Karls Universität Tübingen (Tuebingen, Germany), 14 July 2014
Friedrich-Schiller-Universität Jena (Jena, Germany), 10 July 2014
Max Planck Institute for Astrophysics (Garching, Germany), 8 July 2014
Sichuan University (Chengdu, China), 12 June 2014
Yunnan National Astronomical Observatory/CAS (Kunming, China), 10 June 2014
Huazhong University of Science and Technology (Wuhan, China), 5 June 2014
KIAA/Peking University (Beijing, China), 19 May 2014
Lanzhou University (Lanzhou, China), 14 May 2014
Ningbo University (Ningbo, China), 24 April 2014
Xiamen University (Xiamen, China), 11 April 2014
University of Science and Technology of China (Hefei, China), 18 March 2014
Zhejiang University (Hangzhou, China), 28 February 2014

2013

Beijing Normal University (Beijing, China), 27 September 2013
National Astronomical Observatories of China/CAS (Beijing, China), 26 September 2013
Shanghai Astronomical Observatory/CAS (Shanghai, China), 12 September 2013
Institut d’Astrophysique de Paris (Paris, France), 15 July 2013
Shanghai Normal University (Shanghai, China), 5 June 2013

2012

Virtual Institute of Astroparticle physics (Paris, France), 14 December 2012
Pisa University (Pisa, Italy), 26 September 2012
Albert Einstein Institute (Potsdam, Germany), 11 September 2012
Perimeter Institute for Theoretical Physics (Waterloo, Canada), 25 July 2012
European Space Astronomy Center/ESA (Madrid, Spain), 5 June 2012
Asia Pacific Center for Theoretical Physics (Pohang, South Korea), 15 May 2012
The University of New South Wales (Sydney, Australia), 13 April 2012
Shanghai Astronomical Observatory (Shanghai, China), 30 March 2012
Fudan University (Shanghai, China), 27 March 2012
Universitäts-Sternwarte München (Munich, Germany), 21 March 2012
Florence University (Florence, Italy), 14 March 2012

2011

Eberhard Karls University of Tübingen (Tuebingen, Germany), 14 November 2011
Perimeter Institute for Theoretical Physics (Waterloo, Canada), 21 July 2011
Harvard-Smithsonian Center for Astrophysics (Cambridge, Massachusetts, USA), 22 April 2011
Pennsylvania State University (State College, Pennsylvania, USA), 18 April 2011
University of Mississippi (Oxford, Mississippi, USA), 14 April 2011
New York University (New York, New York, USA), 12 April 2011

2010

The University of Michigan, Ann Arbor (Ann Arbor, Michigan, USA), 29 November 2010
Louisiana State University (Baton Rouge, Louisiana, USA), 15 November 2010
The University of Texas, Austin (Austin, Texas, USA), 12 November 2010
Simon Fraser University (Burnaby, Canada), 9 November 2010
University of British Columbia (Vancouver, Canada), 8 November 2010
SISSA (Trieste, Italy), 24 June 2010

2009

Tsukuba University (Tsukuba, Japan), 17 June 2009
Rikkyo University (Tokyo, Japan), 9 June 2009
Osaka City University (Osaka, Japan), 15 May 2009
Osaka University (Osaka, Japan), 13 May 2009
Aoyama Gakuin University (Sagamihara, Japan), 8 May 2009
Chiba University (Chiba, Japan), 27 April 2009
National Astronomical Observatory of Japan (Tokyo, Japan), 10 April 2009

PRESS COVERAGE (SELECTED)

Bambi, An interstellar mission to test astrophysical black holes, iScience **28, 113142 (2025)**

1. *An interstellar mission to a black hole? Astrophysicist thinks it's possible*
EurekAlert! (7 August 2025)
2. *Una misión interestelar para estudiar un agujero negro desde cerca, ¿ciencia ficción o realidad?*
El País (7 August 2025), in Spanish
3. *Un cosmólogo italiano propone una misión interestelar para explorar un agujero negro: “En 20 o 30 años podríamos tener la tecnología para conseguirlo”*
El Mundo (7 August 2025), in Spanish
4. *What could go wrong? Scientists want to launch an interstellar mission to a BLACK HOLE*
Daily Mail (7 August 2025)
5. *A journey to a black hole. China believes this dream is possible*
Al Jazeera Net (8 August 2025), in Arabic
6. *Et si nous allions voir un trou noir de près?*
Le Temps (7 August 2025), in French
7. *A 2-gram weight spacecraft “ventures” into a black hole? Fudan scientists propose a trillion-dollar century-long plan to test Einstein’s theory*
National Business Daily (12 August 2025), in Chinese
8. *Cosmólogo italiano propõe enviar microssondas a buraco negro*
ANSA Brasil (8 August 2025), in Portuguese
9. *Could We Send a Superlight Spacecraft to a Theoretical Nearby Black Hole?*
Smithsonian magazine (8 August 2025)
10. *An Interstellar Mission To Visit A Black Hole Might Only Take 70 Years, Astrophysicist Says*
IFLScience (7 August 2025)
11. *100-year plan to reach a black hole? Italian scientist discusses tiny spacecraft that could achieve this feat*
The Week (18 August 2025)
12. *Daring New Plan Lays Out Mission to a Black Hole*
Gizmodo (7 August 2025)
13. *An Astrophysicist Proposes We Send a Spacecraft to Visit a Black Hole*
Science Alert (7 August 2025)
14. *How we could explore a black hole with an interstellar nanocraft*
New Scientist (7 August 2025)
15. *Nanoveicoli con destinazione un buco nero*
Media INAF (8 August 2025), in Italian
16. *Een bezoekje brengen aan een zwart gat? Dat is helemaal niet onmogelijk!*
Scientias.nl (7 August 2025), in Dutch

17. *Leap over a black hole? It's not impossible!*
ScienceNet.cn (8 August 2025), in Chinese
18. *The astrophysicist came up with a way to reach a black hole in 70 years*
Naked Science (9 August 2025), in Russian
19. *¿Viajar al interior de un agujero negro? Un astrofísico cree que es posible*
Quo (8 August 2025), in Spanish
20. *100-year-long journey: This nanocraft could reach a black hole*
India Today (9 August 2025)
21. *The ambition to launch a tiny spacecraft with paper clips to explore black holes near Earth*
Vietnam News Agency (12 August 2025), in Vietnamese
22. *Astrofisikawan Ambisius Mengirim Pesawat Sekecil Klip Kertas ke Lubang Hitam dalam Satu Abad*
Media Indonesia (11 August 2025), in Indonesian
23. *Paperclip probe could journey to nearby black hole within a century*
Space Daily (9 August 2025)
24. *What a mission to a black hole could look like*
Astronomy Magazine (19 August 2025)
25. *An interstellar mission to a black hole? Astrophysicist thinks it's possible*
Phys.org (7 August 2025)
26. *Scientists Have a Plan to Launch a Chip-Sized, Laser-Powered Spacecraft Toward a Nearby Black Hole and Wait 100 Years for It to Send a Signal Home*
ZME Science (7 August 2025)
27. *This tiny spacecraft could race to a black hole and rewrite physics*
Science Daily (10 August 2025)
28. *Ist eine Reise zu einem nahen Schwarzen Loch realistisch?*
Forschung und Wissen (12 August 2025), in German
29. *Un astrofisico vuole inviare una sonda spaziale (delle dimensioni di una graffetta) ad esplorare i buchi neri*
Wired (8 August 2025), in Italian
30. *Is black hole exploration possible within 100 years? A probe plan using ultra-small spacecraft is proposed*
XenoSpectrum (8 August 2025), in Japanese
31. *“Cela peut paraître complètement fou”: un astronome veut précipiter un trombone vers un trou noir*
Futura Sciences (7 August 2025), in French
32. *The ambition to launch a tiny spacecraft of the size of a paperclip to explore black holes near Earth*
An Giang (18 August 2025), in Vietnamese
33. *La Nuova Missione verso un Buco Nero: Sfide e Innovazioni*
Scienze Notizie (7 August 2025), in Italian
34. *Can a probe investigate a black hole? The mission would last a century*
TVP Info (8 August 2025), in Polish

35. *Is a mission to a black hole possible? Yes, but the results will be seen only by our grandchildren*
World Review (7 August 2025), in Russian

My career/profile

1. *Why an Italian astrophysicist decided to move to Shanghai*
Nature Jobs Career Guide (17 January 2018); Nature **553**, S31 (2018)
2. *Scientist is in for the long run*
China Daily (14 September 2018)
3. *Foreign scientists in Shanghai: the Italian astronomer Bambi*
The Paper (4 July 2018), in Chinese

Li & Bambi, *Distinguishing black holes and wormholes with orbiting hot spots*, PRD **90**, 024071 (2014)

1. *Nel cuore della Via Lattea c'è un tunnel spazio-temporale*
Rai News (31 May 2014), in Italian
2. *Sagittarius A*: buco nero o wormhole*
Media INAF (29 May 2014), in Italian
3. *Il buco nero al centro della galassia è un sentiero per un altro universo?*
Il Corriere della Sera (21 May 2014), in Italian

Other publications

1. *How doomed matter reveals the inner secrets of black holes*
Astronomy (20 October 2021)
2. *Black hole binge could test general relativity*
New Scientists (3 May 2013)
3. *Burrowing black holes devoured first stars from within*
New Scientists (19 December 2008)
4. *Milky Way's antimatter linked to exotic black holes*
New Scientists (22 January 2008)