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 Position

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 Tübingen (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)

Editorial Positions

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: 4.6

Honors and Awards (selected)

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 from NSFC, China
2019 Team Leader of an International ISSI Team, Switzerland
2019 Extraordinary 2025 Elite Award from Fudan University, China
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 Named Humboldt Fellow (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, 6 edited books, 1 popular science book
Total number of SCI papers: 227 SCI papers as first/corresponding author: 203
Total number of citations: 12,002 (Google Scholar) h-index: 58 (Google Scholar)
Google Scholar Profile

Among the 203 SCI papers as first/corresponding author:
1 Reviews of Modern Physics (single author)
2 Physical Review Letters
68 PRD, 33 ApJ, 27 JCAP, 26 EPJC, 10 MNRAS, 10 PLB, 7 CQG, 2 JHEP, 1 SSRv

Representative publications (* is to indicate the corresponding author)

1. **C. Bambi***, L.W. Brenneman, T. Dauser, J.A. Garcia, V. Grinberg, et al., *Towards precision measurements of accreting black holes using X-ray reflection spectroscopy*, Space Sci. Rev. **217**, 65 (2021).
2. 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).
3. 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).
4. **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).
5. **C. Bambi**, *Testing black hole candidates with electromagnetic radiation*, Rev. Mod. Phys. **89**, 025001 (2017).
6. **C. Bambi**, D. Malafarina and L. Modesto, *Non-singular quantum-inspired gravitational collapse*, Phys. Rev. D **88**, 044009 (2013).
7. **C. Bambi** and L. Modesto, *Rotating regular black holes*, Phys. Lett. B **721**, 329-334 (2013).
8. **C. Bambi** and K. Freese, *Apparent shape of super–spinning black holes*, Phys. Rev. D **79**, 043002 (2009).

Student Supervision Summary

Supervised 64 theses (37 Bachelor theses, 11 Master theses, and 16 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 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)

2. 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)

3. 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)

4. 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)

5. 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)

6. 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)

7. Alexander von Humboldt Foundation (Germany). Humboldt Fellowship for Experienced Researchers
   Budget: 43k EUR. Period: 2015-2018 (12 months)

8. 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)

9. 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)

10. State Council of PRC (China). Thousand Young Talents Program (Qingnian Qianren Jihua)
    Budget: 1.5M CNY (180k EUR). Period: 2012-2015 (3 years)

11. 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. 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

2. 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). Excellence 2025 Grant. Grant No. JIH1512604
   Budget: 300k CNY (40k EUR). Period: 2020-2023 (3 years)

2. 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)

3. Department of Physics, Fudan University (China). Seed Funding
   Astrophysical implications of quantum gravity
   Budget: 100k CNY (12k EUR). Period: 2013-2014 (1 year)

4. Department of Physics, Fudan University (China). Start-Up Research Grant
   Grant No. EZH1512600/010
   Budget: 400k CNY (50k EUR). Period: 2012-

5. Fudan University (China). Start-Up Research Grant
   Testing the Kerr Black Hole Hypothesis, Grant No. EZH1512514
   Budget: 800k CNY (100k EUR). Period: 2012-

6. 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 *China-India-Thailand Workshop on High Energy Astrophysics*
November 2025, Nakhon Ratchasima, Thailand

SOC Member *5th China-India Workshop on High Energy Astrophysics*
November 2024, Kathmandu, Nepal

Chair *Mini-Workshop on Machine Learning Techniques for High Energy Astrophysics*
October 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*
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 *Recent Progress on Gravity Tests*
16–18 February 2022, online meeting. INSPIRE ID: C22-02-16

Chair *2nd China-India Workshop on High Energy Astrophysics*
6–10 December 2021, online meeting

SOC Member *International Workshop on Relativistic Astrophysics and Gravitation*
12–14 May 2021, online meeting

Chair *China-India Workshop on High Energy Astrophysics*
6–8 November 2020, online meeting. INSPIRE ID: C20-11-06

Chair *Accretion 2020 @ Fudan*
21–23 October 2020, online meeting. INSPIRE ID: C20-07-01

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

MAIN RESEARCH ACHIEVEMENTS

My main research achievements are in the area of tests of General Relativity (GR) in the strong field regime with black hole observations and in theoretical studies of gravitational collapse and black hole interior in models beyond GR. Recently I am interested in the development of theoretical models with machine learning techniques for the analysis of black hole X-ray data.

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; 300+ citations). For several years, I studied 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, with electromagnetic data. Thanks to my contributions in the field, in 2015 I was invited to write a review article on Reviews of Modern Physics, eventually published as Bambi, Rev. Mod. Phys. 89, 025001, 2017.

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

A breakthrough in testing GR 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 spacetime geometry around accreting black holes from the study of the relativistically blurred reflection features in their X-ray spectra. With my students at Fudan, 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 from the LIGO-Virgo-KAGRA Collaboration and significantly stronger than the current tests with black hole imaging data from the Event Horizon Telescope 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 and the analysis of data from the next generation of X-ray missions (*eXTP*, *Athena*, *HEX-P*, etc.) will necessary require more sophisticated synthetic spectra than those available today. With my students at Fudan, 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).

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. Depending on how we want to modify/violate GR, the singularity may be replaced by a bounce (e.g., Bambi et al. PRD 88, 044009, 2013), which can lead either to the creation of a baby universe inside the black hole or to the evaporation of the black hole itself, or we can have the formation of a frozen matter core inside an event horizon (Bambi et al. JHEP 04, 147, 2016). We have also proposed a scenario in which the fundamental theory of gravity would be invariant under conformal transformations but conformal symmetry would be broken in the Universe today: in such a framework, the spacetime singularities in the solutions of the Einstein Equations would not be physical and could be removed by a conformal transformation (Bambi et al. 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, in press).
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, XXX+2,970 pages.
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.
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.

Popular Science Books

1. **C. Bambi**, *Niente é impossibili: 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. A. Akil and **C. Bambi** (Editors), *The Black Hole Information Paradox* (Springer Singapore, in preparation, expected in 2025).
2. **C. Bambi**, Y. Mizuno, S. Shashank and F. Yuan (Editors), *New Frontiers in GRMHD Simulations* (Springer Singapore, 2024). Hardcover ISBN: 9789819785216. eBook ISBN: 9789819785223.
3. **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.
4. **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.
5. **C. Bambi** (Editor), *Regular Black Holes: Towards a New Paradigm of Gravitational Collapse* (Springer Singapore, 2023). Hardcover ISBN: 9789819915958. eBook ISBN: 9789819915965.
6. **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.
7. **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

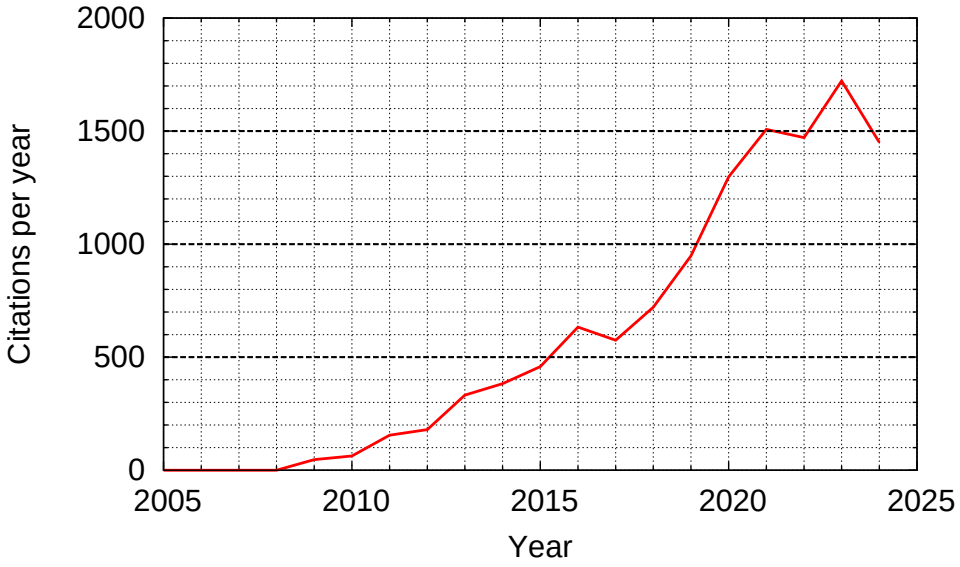
1. **C. Bambi**, *Astrophysical Black Holes* (Springer, 2022). Online ISBN: 9783031179167.

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=W9EMTqIAAAAJ&hl=en
Citations of this year in the table and in the plot are updated to September 1, 2024.

	All years	Since 2019
Citations	12,002	8,399
h-index	58	47
i10-index	205	176



Papers in refereed journals

1. B. Narzilloev, A. Abdujabbarov, B. Ahmedov and **C. Bambi***, *Observed jet power and radiative efficiency of black hole candidates in Kerr + PFDM model*, EPJC (in press).
2. 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).
3. 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).
4. 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).

5. 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).
6. 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).
7. 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).
8. 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).
9. 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).
10. 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).
11. 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).
12. 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).
13. 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).
14. 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).
15. 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).
16. **C. Bambi***, *X-Ray Tests of General Relativity with Black Holes*, Symmetry **15**, 1277 (2023).
17. 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).
18. 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).
19. 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).
20. 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).
21. 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).
22. 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.
23. 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).

24. 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).
25. 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).
26. 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).
27. 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).
28. 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).
29. 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).
30. 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).
31. 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).
32. 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.
33. 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).
34. B. Narzilloev, I. Hussain, A. Abdujabbarov, B Ahmedov and **C. Bambi**⋆, *Dynamics and Fundamental Frequencies of Test Particles Orbiting Kerr-Newman-NUT-Kiselev Blacks Hole in Rastall Gravity*, Eur. Phys. J. Plus **136**, 1032 (2021).
35. 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).
36. 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).
37. 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).
38. 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).
39. 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).
40. 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).

41. **C. Bambi***, L.W. Brenneman, T. Dauser, J.A. Garcia, V. Grinberg, A. Ingram, J. Jiang, H. Liu, A.M. Lohfink, A. Marinucci, G. Mastroserio, 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).
42. 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.
43. S. Shaymatov, B. Narzilloev, A. Abdujabbarov and **C. Bambi**, *Charged particle motion around magnetized Reissner-Nordström black hole*, Phys. Rev. D **103**, 124066 (2021).
44. 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).
45. 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).
46. 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).
47. **C. Bambi*** and D. Stojkovic, *Astrophysical Wormholes*, Universe **7**, 136 (2021).
48. 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).
49. 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).
50. 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).
51. 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).
52. 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.
53. 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).
54. 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).
55. 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).
56. 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).
57. 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).
58. 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).
59. 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).

60. 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).
61. 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).
62. 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).
63. 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).
64. 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).
65. 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).
66. 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).
67. 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).
68. 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).
69. S. Riaz, D. Ayzenberg, **C. Bambi*** and S. Nampalliwar, *Modeling bias in supermassive black hole spin measurements*, Astrophys. J. **895**, 61 (2020).
70. 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.
71. 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).
72. 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).
73. S. Vagnozzi, **C. Bambi** and L. Visinelli, *Concerns regarding the use of black hole shadows as standard rulers*, Class. Quantum Grav. **37**, 087001 (2020).
74. 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).
75. 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).
76. 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).
77. 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).
78. S. Riaz, D. Ayzenberg, **C. Bambi*** and S. Nampalliwar, *Reflection spectra of thick accretion disks*, MNRAS **491**, 417-426 (2020).

79. B. Turimov, B. Ahmedov, A. Abdujabbarov and **C. Bambi**, *Gravitational lensing by magnetized compact object in the presence of plasma*, IJMPD 2040013, 1 (2020).
80. 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).
81. 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).
82. **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).
83. 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).
84. 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).
85. 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).
86. 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).
87. 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).
88. 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).
89. 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).
90. 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).
91. 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).
92. 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).
93. 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).
94. 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).
95. 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).
96. 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).
97. 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).

98. 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).
99. H. Liu, M. Zhou and **C. Bambi***, *Distinguishing black holes and naked singularities with iron line spectroscopy*, JCAP 08 (2018) 044.
100. 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).
101. 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).
102. 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).
103. 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).
104. 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).
105. 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).
106. 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).
107. 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).
108. Y. Zhang, M. Zhou and **C. Bambi***, *Iron line spectroscopy of black holes in asymptotically safe gravity*, Eur. Phys. J. C **78**, 376 (2018).
109. **C. Bambi**, *Astrophysical Black Holes: A Compact Pedagogical Review*, Ann. Phys. (Berlin) **530**, 1700430 (2018).
110. 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).
111. 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).
112. 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).
113. H. Chakrabarty, C.A. Benavides-Gallego, **C. Bambi*** and L. Modesto, *Unattainable extended spacetime regions in conformal gravity*, JHEP 03 (2018) 013.
114. **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).
115. 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).
116. 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).
117. **C. Bambi**, L. Modesto, S. Porey and L. Rachwal, *Black hole evaporation in conformal gravity*, JCAP 09 (2017) 033.
118. 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).

119. 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).
120. T. Shen, M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron Kα line of Proca stars*, JCAP 08 (2017) 014.
121. B. Ilyas, J. Yang, D. Malafarina and **C. Bambi**, *Observational properties of rigidly rotating dust configurations*, Eur. Phys. J. C **77**, 461 (2017).
122. **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).
123. 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).
124. M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron Kα line of Kerr black holes with Proca hair*, Phys. Rev. D **95**, 104035 (2017).
125. **C. Bambi**, L. Modesto and L. Rachwal, *Spacetime completeness of non-singular black holes in conformal gravity*, JCAP 05 (2017) 003.
126. **C. Bambi**, *Testing black hole candidates with electromagnetic radiation*, Rev. Mod. Phys. **89**, 025001 (2017).
127. **C. Bambi**, Z. Cao and L. Modesto, *Testing conformal gravity with astrophysical black holes*, Phys. Rev. D **95**, 064006 (2017).
128. **C. Bambi**, L. Modesto and Y. Wang, *Lee-Wick Black Holes*, Phys. Lett. B **764**, 306-309 (2017).
129. **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).
130. M. Ghasemi-Nodehi and **C. Bambi***, *Constraining the Kerr parameters via X-ray reflection spectroscopy*, Phys. Rev. D **94**, 104062 (2016).
131. Z. Cao, A. Cardenas-Avendano, M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron Kα line of boson stars*, JCAP 10 (2016) 003.
132. 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).
133. Y. Ni, J. Jiang and **C. Bambi***, *Testing the Kerr metric with the iron line and the KRZ parametrization*, JCAP 09 (2016) 014.
134. **C. Bambi**, D. Rubiera-Garcia and Y. Wang, *Black hole solutions in functional extensions of Born-Infeld gravity*, Phys. Rev. D **94**, 064002 (2016).
135. Y. Ni, M. Zhou, A. Cardenas-Avendano, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron Kα line of Kerr black holes with scalar hair*, JCAP 07 (2016) 049.
136. 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).
137. 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).
138. 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).
139. M. Ghasemi-Nodehi and **C. Bambi***, *Note on a new parametrization for testing the Kerr metric*, Eur. Phys. J. C **76**, 290 (2016).
140. 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).

141. A. Cardenas-Avendano, J. Jiang and **C. Bambi***, *A study for testing the Kerr metric with AGN iron line eclipses*, JCAP 04 (2016) 054.
142. **C. Bambi**, D. Malafarina and L. Modesto, *Black supernovae and black holes in non-local gravity*, JHEP 04 (2016) 147.
143. **C. Bambi**, A. Cardenas-Avendano, G.J. Olmo and D. Rubiera-Garcia, *Wormholes and nonsingular spacetimes in Palatini $f(R)$ gravity*, Phys. Rev. D **93**, 064016 (2016).
144. **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).
145. 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).
146. G. Pei and **C. Bambi***, *Scattering of particles by deformed non-rotating black holes*, Eur. Phys. J. C **75**, 560 (2015).
147. 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).
148. N. Lin, Z. Li, J. Arthur, R. Asquith and **C. Bambi***, *Testing SgrA* with the spectrum of its accretion structure*, JCAP 09 (2015) 038.
149. D. Liu, Z. Li, Y. Cheng and **C. Bambi***, *X-ray spectropolarimetric measurements of the Kerr metric*, Eur. Phys. J. C **75**, 383 (2015).
150. **C. Bambi**, M. Ghasemi-Nodehi and D. Rubiera-Garcia, *Modified gravity in three dimensional metric-affine scenarios*, Phys. Rev. D **92**, 044016 (2015).
151. 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).
152. N. Tsukamoto and **C. Bambi***, *Collisional Penrose Process in Rotating Wormhole Spacetime*, Phys. Rev. D **91**, 104040 (2015).
153. 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.
154. **C. Bambi**, G.J. Olmo and D. Rubiera-Garcia, *Melvin Universe in Born-Infeld gravity*, Phys. Rev. D **91**, 104010 (2015).
155. **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).
156. N. Tsukamoto and **C. Bambi***, *High energy collision of two particles in wormhole spacetimes*, Phys. Rev. D **91**, 084013 (2015).
157. 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).
158. **C. Bambi**, *Constraining the Cardoso-Pani-Rico metric with future observations of SgrA**, Class. Quantum Grav. **32**, 065005 (2015).
159. **C. Bambi**, *Attempt to explain black hole spin in X-ray binaries with new physics*, Eur. Phys. J. C **75**, 22 (2015).
160. D. Liu, Z. Li and **C. Bambi***, *Testing a class of non-Kerr metrics with hot spots orbiting SgrA**, JCAP 01 (2015) 020.
161. L. Kong, D. Malafarina and **C. Bambi***, *Gravitational blueshift from a collapsing object*, Phys. Lett. B **741**, 82-86 (2015).

162. S. Alexander, **C. Bambi**, A. Marciano and L. Modesto, *Fermi-bounce Cosmology and scale invariant power-spectrum*, Phys. Rev. D **90**, 123510 (2014).

163. 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).

164. **C. Bambi**, *Note on the Cardoso-Pani-Rico parametrization to test the Kerr black hole hypothesis*, Phys. Rev. D **90**, 047503 (2014).

165. Y. Liu, D. Malafarina, L. Modesto and **C. Bambi***, *Singularity avoidance in quantum-inspired inhomogeneous dust collapse*, Phys. Rev. D **90**, 044040 (2014).

166. L. Kong, D. Malafarina and **C. Bambi***, *Can we observationally test the weak cosmic censorship conjecture?*, Eur. Phys. J. C **74**, 2983 (2014).

167. Z. Li and **C. Bambi***, *Distinguishing black holes and wormholes with orbiting hot spots*, Phys. Rev. D **90**, 024071 (2014).

168. **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).

169. N. Tsukamoto, Z. Li and **C. Bambi***, *Constraining the spin and the deformations parameters from the black hole shadow*, JCAP 06 (2014) 043.

170. 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).

171. **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).

172. **C. Bambi**, *Constraining possible variations of the fine structure constant in strong gravitational fields with the Kα iron line*, JCAP 03 (2014) 034.

173. **C. Bambi**, D. Malafarina and L. Modesto, *Terminating black holes in asymptotically free quantum gravity*, Eur. Phys. J. C **74**, 2767 (2014).

174. Z. Li and **C. Bambi***, *Measuring the Kerr spin parameter of regular black holes from their shadow*, JCAP 01 (2014) 041.

175. **C. Bambi**, *Testing the Bardeen metric with the black hole candidate in Cygnus X-1*, Phys. Lett. B **730**, 59-62 (2014).

176. **C. Bambi** and D. Malafarina, *Kα iron line profile from accretion disks around regular and singular exotic compact objects*, Phys. Rev. D **88**, 064022 (2013).

177. **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.

178. **C. Bambi**, D. Malafarina and L. Modesto, *Non-singular quantum-inspired gravitational collapse*, Phys. Rev. D **88**, 044009 (2013).

179. Z. Li and **C. Bambi***, *Destroying the event horizon of regular black holes*, Phys. Rev. D **87**, 124022 (2013).

180. **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).

181. **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).

182. **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).

183. **C. Bambi**, *Broad Kα iron line from accretion disks around traversable wormholes*, Phys. Rev. D **87**, 084039 (2013).

184. Z. Li and **C. Bambi***, *Super-spinning compact objects generated by thick accretion disks*, JCAP 03 (2013) 031.

185. **C. Bambi** and L. Modesto, *Rotating regular black holes*, Phys. Lett. B **721**, 329-334 (2013).

186. **C. Bambi**, *Testing the space-time geometry around black hole candidates with the analysis of the broad Kα iron line*, Phys. Rev. D **87**, 023007 (2013).

187. **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).

188. **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).

189. **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).

190. **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.

191. **C. Bambi**, F. Caravelli and L. Modesto, *Direct imaging rapidly-rotating non-Kerr black holes*, Phys. Lett. B **711**, 10-14 (2012).

192. **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).

193. **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).

194. **C. Bambi** and L. Modesto, *Can an astrophysical black hole have a topologically non-trivial event horizon?*, Phys. Lett. B **706**, 13-18 (2011).

195. **C. Bambi**, *Testing the Kerr black hole hypothesis*, Mod. Phys. Lett. A **26**, 2453-2468 (2011).

196. **C. Bambi** and E. Barausse, *The final stages of accretion onto non-Kerr compact objects*, Phys. Rev. D **84**, 084034 (2011).

197. **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).

198. **C. Bambi**, *Spinning super-massive objects in galactic nuclei up to $a_* > 1$*, Europhys. Lett. **94**, 50002 (2011).

199. **C. Bambi**, *Evolution of the spin parameter of accreting compact objects with non-Kerr quadrupole moment*, JCAP 05 (2011) 009.

200. **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).

201. **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)].

202. **C. Bambi** and N. Yoshida, *Thick disk accretion in Kerr space-time with arbitrary spin parameter*, Phys. Rev. D **82**, 124037 (2010).

203. **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).

204. **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).

205. **C. Bambi**, T. Harada, R. Takahashi and N. Yoshida, *Outflows from accreting superspinars*, Phys. Rev. D **81**, 104004 (2010).

206. **C. Bambi**, K. Freese, T. Harada, R. Takahashi and N. Yoshida, *Accretion process onto super-spinning objects*, Phys. Rev. D **80**, 104023 (2009).

207. **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).

208. **C. Bambi**, A.D. Dolgov and A.A. Petrov, *Black holes as antimatter factories*, JCAP 09 (2009) 013.

209. **C. Bambi**, M. Kawasaki and F.R. Urban, *Axion braneworld cosmology*, Phys. Rev. D **80**, 023533 (2009).

210. **C. Bambi**, *A note on the black hole information paradox in de Sitter spacetimes*, Commun. Theor. Phys. **52**, 78-80 (2009).

211. **C. Bambi** and K. Freese, *Apparent shape of super–spinning black holes*, Phys. Rev. D **79**, 043002 (2009).

212. **C. Bambi** and F.R. Urban, *Gravitational production of KK states*, Phys. Rev. D **78**, 103515 (2008).

213. **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)].

214. **C. Bambi**, *Gravitomagnetism in superconductors and compact stars*, IJMPD **17**, 327-336 (2008).

215. **C. Bambi** and K. Freese, *Dangerous implications of a minimum length in quantum gravity*, Class. Quantum Grav. **25**, 195013 (2008).

216. **C. Bambi**, *A revision of the Generalized Uncertainty Principle*, Class. Quantum Grav. **25**, 105003 (2008).

217. **C. Bambi** and F.R. Urban, *Natural extension of the Generalised Uncertainty Principle*, Class. Quantum Grav. **25**, 095006 (2008).

218. **C. Bambi** and A. Drago, *Constraints on temporal variation of fundamental constants from GRBs*, Astropart. Phys. **29**, 223-227 (2008).

219. **C. Bambi** and F.R. Urban, *Gravitational particle production in braneworld cosmology*, Phys. Rev. Lett. **99**, 191302 (2007).

220. **C. Bambi** and F.R. Urban, *Brane cosmology and KK gravitinos*, JCAP 09 (2007) 018.

221. **C. Bambi** and A.D. Dolgov, *Antimatter in the Milky Way*, Nucl. Phys. B **784**, 132-150 (2007).

222. **C. Bambi**, *Strange stars and the cosmological constant problem*, JCAP 06 (2007) 006.

223. **C. Bambi**, *Dark energy and the mass of galaxy clusters*, Phys. Rev. D **75**, 083003 (2007).

224. **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.

225. **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).

226. **C. Bambi**, M. Giannotti and F.L. Villante, *Response of primordial abundances to a general modification of $G_{\rm N}$ and/or of the early universe expansion rate*, Phys. Rev. D **71**, 123524 (2005).

Conference proceedings (refereed and non-refereed articles)

1. 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).
2. **C. Bambi**, *Testing General Relativity with black hole X-ray data*, Physics of Particles and Nuclei **55**, 1418-1423 (2024).
3. **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`, PoS MULTIF2023 (2024) 016.
4. **C. Bambi**, *Testing General Relativity with black hole X-ray data: a progress report*, Arab. J. Math **11**, 81-90 (2022). https://doi.org/10.1007/s40065-021-00336-y
5. **C. Bambi**, *Testing General Relativity with black hole X-ray data: recent progress and future developments*, in *2021 Gravitation*, edited by E. Augé et al. (ARISF, 2021), pp. 69-72.
6. **C. Bambi**, *Testing General Relativity with Black Hole X-ray Data*, Astronomy Reports **65**, 902-905 (2021).
7. P. Uttley, R. den Hartog, **C. Bambi**, et al., *An x-ray interferometry concept for the ESA Voyage 2050 programme*, Proc. SPIE **11444**, 114441E (2020).
8. A.B. Abdikamalov, D. Ayzenberg, **C. Bambi** and S. Nampalliwar, RELXILL_NK*: A Black Hole Relativistic Reflection Model for Testing General Relativity*, Proceedings **17**, 7 (2019).
9. **C. Bambi**, *Astrophysical Black Holes: A Review*, PoS MULTIF2019 (2020) 028.
10. A.B. Abdikamalov, D. Ayzenberg, **C. Bambi***, et al., *Testing general relativity with supermassive black holes using X-ray reflection spectroscopy*, Proceedings **17**, 2 (2019).
11. **C. Bambi***, et al., RELXILL_NK*: a relativistic reflection model for testing Einstein's gravity*, Universe **4**, 79 (2018).
12. **C. Bambi**, *Testing the Kerr black hole hypothesis with* RELXILL_NK, J. Phys. Conf. Ser. **942**, 012004 (2017).
13. S.N. Zhang, et al., *eXTP – enhanced X-ray Timing and Polarimetry Mission*, Proc. SPIE **9905**, 99051Q (2016).
14. **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.
15. **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.
16. I. Mandel, et al., *Relativistic astrophysics at GR20*, Gen. Rel. Grav. **46**, 1688 (2014).
17. **C. Bambi**, *Testing the nature of astrophysical black hole candidates*, Springer Proc. Phys. **145**, 81-87 (2014).
18. **C. Bambi**, *Compact objects with spin parameter* $a_* > 1$, in *2011 Gravitational Waves and Experimental Gravity*, edited by E. Augé et al. (The Gioi Publishers, Ha Noi, Vietnam, 2011), pp. 89-92.
19. **C. Bambi**, *Violation of the Carter-Israel conjecture and its astrophysical implications*, J. Phys. Conf. Ser. **283**, 012005 (2011).
20. **C. Bambi**, *Numerical simulations of the accretion process in Kerr spacetimes with arbitrary value of the Kerr parameter*, in *Proceedings of the Nineteenth Workshop on General Relativity and Gravitation*, edited by M. Saijo et al., pp. 109-112 (2010).
21. **C. Bambi**, *Testing the black hole paradigm with future observations of SgrA**, ASP Conf. Ser. **439**, 340-343 (2011).

22. **C. Bambi**, K. Freese and R. Takahashi, *Is the Carter-Israel conjecture correct?*, in *Windows on the Universe*, edited by L. Celnikier et al. (The Gioi Publishers, Ha Noi, Vietnam, 2010), pp. 575-578.
23. **C. Bambi**, *Primordial antimatter in the contemporary universe*, 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. P. Uttley, R. den Hartog, **C. Bambi**, et al., *The high energy universe at ultra-high resolution: the power and promise of X-ray interferometry*, ESA's Voyage 2050 White Paper [arXiv:1908.03144 [astro-ph.HE]].
2. J. McEnery, et al., *All-sky Medium Energy Gamma-ray Observatory: Exploring the Extreme Multimessenger Universe*, Astro2020 APC White Paper [arXiv:1907.07558 [astro-ph.IM]].

TEACHING EXPERIENCE

Introduction to Astrophysics
Course for undergraduate and graduate students of Physics, Fudan University (China)
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 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

PRESS COVERAGE (SELECTED)

1. *How doomed matter reveals the inner secrets of black holes*
   Astronomy (20 October 2021)

2. *Scientist is in for the long run*
   China Daily (14 September 2018)

3. *Foreign scientists in Shanghai: the Italian astronomer Bambi* (in Chinese)
   The Paper (4 July 2018)

4. *Why an Italian astrophysicist decided to move to Shanghai*
   Nature Jobs Career Guide (17 January 2018); Nature **553**, S31 (2018)

5. *Nel cuore della Via Lattea c'é un tunnel spazio-temporale* (in Italian)
   Rai News (31 May 2014)

6. *Sagittarius A*: buco nero o wormhole* (in Italian)
   Media INAF (29 May 2014)

7. *Il buco nero al centro della galassia é un sentiero per un altro universo?* (in Italian)
   Il Corriere della Sera (21 May 2014)

8. *Black hole binge could test general relativity*
   New Scientists (3 May 2013)

9. *Burrowing black holes devoured first stars from within*
   New Scientists (19 December 2008)

10. *Milky Way's antimatter linked to exotic black holes*
    New Scientists (22 January 2008)