

COSIMO BAMBI

Date and Place of Birth: 21 September 1980, Florence (Italy) Citizenship: Italian
Current Position Xie Xide Junior Chair Professor of Physics (Fudan University, China)
Contact details Department of Physics, Fudan University, 2005 Songhu Road, Shanghai 200438, China
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Education

2007 Ph.D. in Physics. Ferrara University (Italy). Supervisor: Prof. Alexander D. Dolgov.
2003 Laurea in Physics *summa cum laude*. Florence University (Italy).

Positions

2016 – Present Xie Xide Junior Chair Professor of Physics. Fudan University (China)
2015 – 2018 Humboldt Fellow (visiting position). University of Tübingen (Germany)
2013 – 2015 Full Professor. Fudan University (China).
2012 – 2013 Associate Professor (with tenure). 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)

Honors and Awards

2018 Magnolia Silver Award (Outstanding Contributions to Shanghai's Development), China
2018 Xu Guangqi Prize (Best Italian Scholar in China), Italy
2016 JSPS Invitation Fellowship for Research in Japan, Japan
2016 Named Xie Xide Junior Chair Professor of Physics at Fudan University, China
2015 Named Humboldt Fellow (Experienced Researcher), Germany
2012 Thousand Young Talents Award (Qingnian Qianren), China
2004 Ph.D. Fellowship of Ferrara University, Italy

Publication Summary

Books: 3 (as author), 1 (as editor)
Papers in refereed journals: 131
Total number of citations: 3,419 (INSPIRE), 3,372 (Google Scholar)
h-index: 36 (INSPIRE), 35 (Google Scholar)
INSPIRE Profile: <http://inspirehep.net/author/profile/C.Bambi.1>
Google Scholar Profile: <https://scholar.google.com/citations?user=W9EMTqIAAAAJ&hl=en>

Among the 131 papers in refereed journals:

1 Reviews of Modern Physics (single author)

2 Physical Review Letters

9 ApJ, 7 CQG, 17 EPJC, 22 JCAP, 2 JHEP, 2 MNRAS, 2 NPB, 11 PLB, 44 PRD

Representative publications (* is to indicate the corresponding author)

1. 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).
2. **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).
3. **C. Bambi**, *Testing black hole candidates with electromagnetic radiation*, Rev. Mod. Phys. **89**, 025001 (2017).
4. **C. Bambi**, D. Malafarina and L. Modesto, *Terminating black holes in asymptotically free quantum gravity*, Eur. Phys. J. C **74**, 2767 (2014).
5. **C. Bambi**, *Testing the space-time geometry around black hole candidates with the analysis of the broad $K\alpha$ iron line*, Phys. Rev. D **87**, 023007 (2013).
6. **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).
7. **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)].
8. **C. Bambi** and K. Freese, *Apparent shape of super-spinning black holes*, Phys. Rev. D **79**, 043002 (2009).

Service

Referee	Advances in High Energy Physics Astronomy & Astrophysics Astroparticle Physics Chinese Physics C Classical and Quantum Gravity Europhysics Letters General Relativity and Gravitation International Journal of Modern Physics D JCAP JHEP	MNRAS Nuclear Physics B Physical Review D Physical Review Letters Physics Letters B Publications of the Astron. Soc. of Japan Science China Scientific Reports The Astrophysical Journal The European Physical Journal C
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Proposal Reviewer	Chang Jiang Scholars Program (China) Czech Science Foundation (Czech Republic) German Research Foundation (Germany) National Research Foundation (South Africa)
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Editor	iScience (2018 – Present) Journal of Gravity (2013 – 2017)
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Professional Affiliations

Member	American Physical Society (2017 – Present) Association of Italian Scholars in China (2015 – Present) XTP/eXTP Science Team (2014 – Present) Chinese Physical Society (2013 – Present) International Society on General Relativity and Gravitation (2013 – Present)
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LIST OF PUBLICATIONS

In the list below, * is to indicate the corresponding author [in the Chinese academic system, the corresponding author is the group leader responsible for the project, and is often the last author or, at least, his/her name is after those of the students of the group].

Books

1. **C. Bambi**, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* (Springer Singapore, 2018). Softcover ISBN: 978-981-13-1089-8. eBook ISBN: 978-981-13-1090-4.
C. Bambi, *Introduction to General Relativity: A Course for Undergraduate Students of Physics* [in Chinese] (Fudan University Press, in press, expected in 2019).
2. **C. Bambi**, *Black Holes: A Laboratory for Testing Strong Gravity* (Springer Singapore, 2017). Hardcover ISBN: 978-981-10-4523-3. eBook ISBN: 978-981-10-4524-0.
3. **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: 978-3-662-48077-9. eBook ISBN: 978-3-662-48078-6.
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). ISBN: 978-7-309-12794-2.

Books (as editor)

1. **C. Bambi** (Editor), *Tutorial Guide to X-ray and Gamma-ray Astronomy: Data Reduction and Analysis* (Springer Singapore, accepted for publication, expected in 2019).
Chapter author of chapters 1 and 2:
– Chapter 1: **C. Bambi*** and S. Nampalliwar, *Fundamental Concepts*.
– Chapter 2: **C. Bambi*** and S. Nampalliwar, *Accreting Black Holes*.
2. **C. Bambi** (Editor), *Astrophysics of Black Holes: From Fundamental Aspects to Latest Developments* (Springer-Verlag Heidelberg Berlin, 2016). Hardcover ISBN: 978-3-662-52857-0. eBook ISBN: 978-3-662-52859-4.

Publications pending

1. 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*, submitted to *Astrophys. J.* [arXiv:1809.06669 [gr-qc]].
2. 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*, submitted to *Phys. Rev. D*.
3. J. Wang-Ji, 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*, submitted to *Phys. Rev. D* [arXiv:1806.00126 [gr-qc]].
4. B. Turimov, B. Ahmedov, A. Abdujabbarov and **C. Bambi**, *Gravitational lensing by magnetized compact object in the presence of plasma*, submitted to *Eur. Phys. J. C* [arXiv:1802.03293 [gr-qc]].

Papers in refereed journals

1. 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).
2. 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) [arXiv:1808.05112 [astro-ph.HE]].
3. 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) [arXiv:1807.10243 [gr-qc]].
4. 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) [arXiv:1806.06240 [gr-qc]].
5. 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) [arXiv:1805.00640 [gr-qc]].
6. 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) [arXiv:1805.00005 [gr-qc]].
7. 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) [arXiv:1804.10380 [gr-qc]].
8. 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) [arXiv:1804.09434 [gr-qc]].
9. Y. Zhang, M. Zhou and **C. Bambi***, *Iron line spectroscopy of black holes in asymptotically safe gravity*, *Eur. Phys. J. C* **78**, 376 (2018) [arXiv:1804.07955 [gr-qc]].
10. H. Chakrabarty, A.B. Abdikamalov, A.A. Abdujabbarov and **C. Bambi***, *Gravitational lensing: quasi-Kerr object immersed in plasma*, *Phys. Rev. D* **98**, 024022 (2018) [arXiv:1804.00461 [gr-qc]].
11. 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) [arXiv:1803.10819 [gr-qc]].
12. 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) [arXiv:1803.07849 [gr-qc]].
13. H. Liu, M. Zhou and **C. Bambi***, *Distinguishing black holes and naked singularities with iron line spectroscopy*, *JCAP* **08** (2018) 044 [arXiv:1801.00867 [gr-qc]].
14. J. Wang-Ji, J.A. Garcia*, J.F. Steiner, J.A. Tomsick, F.A. Harrison, **C. Bambi**, *et al.*, *The evolution of GX 339-4 in the low-hard state as seen by NuSTAR and Swift*, *Astrophys. J.* **855**, 61 (2018) [arXiv:1712.02571 [astro-ph.HE]].
15. **C. Bambi**, *Astrophysical Black Holes: A Compact Pedagogical Review*, *Ann. Phys. (Berlin)* **530**, 1700430 (2018) [arXiv:1711.10256 [gr-qc]].
16. H. Chakrabarty, C.A. Benavides-Gallego, **C. Bambi*** and L. Modesto, *Unattainable extended spacetime regions in conformal gravity*, *JHEP* **03** (2018) 013 [arXiv:1711.07198 [gr-qc]].
17. **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) [arXiv:1711.04575 [gr-qc]].
18. 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) [arXiv:1711.02416 [astro-ph.HE]].

19. A. De Angelis et al., *Science with e-ASTROGAM: A space mission for MeV-GeV gamma-ray astrophysics*, J. High Energy Astrophys. (in press) [arXiv:1711.01265 [astro-ph.HE]].
20. 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) [arXiv:1709.00219 [gr-qc]].
21. 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) [arXiv:1705.03654 [gr-qc]].
22. 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) [arXiv:1704.04426 [gr-qc]].
23. 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) [arXiv:1704.03716 [astro-ph.HE]].
24. M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron $K\alpha$ line of Kerr black holes with Proca hair*, Phys. Rev. D **95**, 104035 (2017) [arXiv:1703.06836 [gr-qc]].
25. 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) [arXiv:1702.06855 [gr-qc]].
26. **C. Bambi**, Z. Cao and L. Modesto, *Testing conformal gravity with astrophysical black holes*, Phys. Rev. D **95**, 064006 (2017) [arXiv:1701.00226 [gr-qc]].
27. T. Shen, M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron $K\alpha$ line of Proca stars*, JCAP 08 (2017) 014 [arXiv:1701.00192 [gr-qc]].
28. **C. Bambi**, L. Modesto, S. Porey and L. Rachwal, *Black hole evaporation in conformal gravity*, JCAP 09 (2017) 033 [arXiv:1611.05582 [gr-qc]].
29. B. Ilyas, J. Yang, D. Malafarina and **C. Bambi**, *Observational properties of rigidly rotating dust configurations*, Eur. Phys. J. C **77**, 461 (2017) [arXiv:1611.03972 [gr-qc]].
30. **C. Bambi**, L. Modesto and Y. Wang, *Lee-Wick Black Holes*, Phys. Lett. B **764**, 306-309 (2017) [arXiv:1611.03650 [gr-qc]].
31. **C. Bambi**, L. Modesto and L. Rachwal, *Spacetime completeness of non-singular black holes in conformal gravity*, JCAP 05 (2017) 003 [arXiv:1611.00865 [gr-qc]].
32. M. Ghasemi-Nodehi and **C. Bambi***, *Constraining the Kerr parameters via X-ray reflection spectroscopy*, Phys. Rev. D **94**, 104062 (2016) [arXiv:1610.08791 [gr-qc]].
33. Z. Cao, A. Cardenas-Avendano, M. Zhou, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron $K\alpha$ line of boson stars*, JCAP 10 (2016) 003 [arXiv:1609.00901 [gr-qc]].
34. **C. Bambi**, D. Rubiera-Garcia and Y. Wang, *Black hole solutions in functional extensions of Born-Infeld gravity*, Phys. Rev. D **94**, 064002 (2016) [arXiv:1608.04873 [gr-qc]].
35. Y. Ni, J. Jiang and **C. Bambi***, *Testing the Kerr metric with the iron line and the KRZ parametrization*, JCAP 09 (2016) 014 [arXiv:1607.04893 [gr-qc]].
36. **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) [arXiv:1607.00596 [gr-qc]].
37. Y. Ni, M. Zhou, A. Cardenas-Avendano, **C. Bambi***, C.A.R. Herdeiro and E. Radu, *Iron $K\alpha$ line of Kerr black holes with scalar hair*, JCAP 07 (2016) 049 [arXiv:1606.04654 [gr-qc]].

38. 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) [arXiv:1606.04643 [gr-qc]].
39. M. Ghasemi-Nodehi and **C. Bambi***, *Note on a new parametrization for testing the Kerr metric*, Eur. Phys. J. C **76**, 290 (2016) [arXiv:1604.07032 [gr-qc]].
40. **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) [arXiv:1604.02643 [gr-qc]].
41. **C. Bambi**, D. Malafarina and L. Modesto, *Black supernovae and black holes in non-local gravity*, JHEP 04 (2016) 147 [arXiv:1603.09592 [gr-qc]].
42. 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) [arXiv:1603.07448 [gr-qc]].
43. 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) [arXiv:1603.04720 [gr-qc]].
44. A. Cardenas-Avendano, J. Jiang and **C. Bambi***, *A study for testing the Kerr metric with AGN iron line eclipses*, JCAP 04 (2016) 054 [arXiv:1603.04115 [gr-qc]].
45. 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) [arXiv:1601.00838 [gr-qc]].
46. 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) [arXiv:1512.00724 [gr-qc]].
47. **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) [arXiv:1511.07587 [gr-qc]]. **Invited review paper.**
48. **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) [arXiv:1511.03755 [gr-qc]].
49. **C. Bambi**, *Testing black hole candidates with electromagnetic radiation*, Rev. Mod. Phys. **89**, 025001 (2017) [arXiv:1509.03884 [gr-qc]]. **Invited review paper.**
50. G. Pei and **C. Bambi***, *Scattering of particles by deformed non-rotating black holes*, Eur. Phys. J. C **75**, 560 (2015) [arXiv:1508.00344 [gr-qc]].
51. **C. Bambi**, M. Ghasemi-Nodehi and D. Rubiera-Garcia, *Modified gravity in three dimensional metric-affine scenarios*, Phys. Rev. D **92**, 044016 (2015) [arXiv:1507.08453 [gr-qc]].
52. 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) [arXiv:1506.02627 [gr-qc]].
53. N. Lin, Z. Li, J. Arthur, R. Asquith and **C. Bambi***, *Testing SgrA* with the spectrum of its accretion structure*, JCAP 09 (2015) 038 [arXiv:1505.05329 [gr-qc]].
54. D. Liu, Z. Li, Y. Cheng and **C. Bambi***, *X-ray spectropolarimetric measurements of the Kerr metric*, Eur. Phys. J. C **75**, 383 (2015) [arXiv:1504.06788 [gr-qc]].
55. 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) [arXiv:1505.01562 [gr-qc]].
56. 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) [arXiv:1504.01970 [gr-qc]].
57. **C. Bambi**, G.J. Olmo and D. Rubiera-Garcia, *Melvin Universe in Born-Infeld gravity*, Phys. Rev. D **91**, 104010 (2015) [arXiv:1504.01827 [gr-qc]].

58. N. Tsukamoto and **C. Bambi***, *Collisional Penrose Process in Rotating Wormhole Spacetime*, Phys. Rev. D **91**, 104040 (2015) [arXiv:1503.06386 [gr-qc]].
59. **C. Bambi**, *Attempt to explain black hole spin in X-ray binaries with new physics*, Eur. Phys. J. C **75**, 22 (2015) [arXiv:1412.4987 [gr-qc]].
60. N. Tsukamoto and **C. Bambi***, *High energy collision of two particles in wormhole spacetimes*, Phys. Rev. D **91**, 084013 (2015) [arXiv:1411.5778 [gr-qc]].
61. D. Liu, Z. Li and **C. Bambi***, *Testing a class of non-Kerr metrics with hot spots orbiting SgrA**, JCAP **01** (2015) 020 [arXiv:1411.2329 [gr-qc]].
62. **C. Bambi**, *Constraining the Cardoso-Pani-Rico metric with future observations of SgrA**, Class. Quantum Grav. **32**, 065005 (2015) [arXiv:1409.0310 [gr-qc]].
63. **C. Bambi**, *Note on the Cardoso-Pani-Rico parametrization to test the Kerr black hole hypothesis*, Phys. Rev. D **90**, 047503 (2014) [arXiv:1408.0690 [gr-qc]].
64. 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 [arXiv:1406.5677 [gr-qc]].
65. **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) [arXiv:1406.2181 [gr-qc]].
66. Y. Liu, D. Malafarina, L. Modesto and **C. Bambi***, *Singularity avoidance in quantum-inspired inhomogeneous dust collapse*, Phys. Rev. D **90**, 044040 (2014) [arXiv:1405.7249 [gr-qc]].
67. 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) [arXiv:1405.1508 [gr-qc]].
68. Z. Li and **C. Bambi***, *Distinguishing black holes and wormholes with orbiting hot spots*, Phys. Rev. D **90**, 024071 (2014) [arXiv:1405.1883 [gr-qc]].
69. 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) [arXiv:1404.4770 [gr-qc]].
70. N. Tsukamoto, Z. Li and **C. Bambi***, *Constraining the spin and the deformations parameters from the black hole shadow*, JCAP **06** (2014) 043 [arXiv:1403.0371 [gr-qc]].
71. S. Alexander, **C. Bambi**, A. Marciano and L. Modesto, *Fermi-bounce Cosmology and scale invariant power-spectrum*, Phys. Rev. D **90**, 123510 (2014) [arXiv:1402.5880 [gr-qc]].
72. **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) [arXiv:1402.5719 [gr-qc]].
73. **C. Bambi**, *Testing the Bardeen metric with the black hole candidate in Cygnus X-1*, Phys. Lett. B **730**, 59-62 (2014) [arXiv:1401.4640 [gr-qc]].
74. 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) [arXiv:1401.1282 [gr-qc]].
75. **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) [arXiv:1312.2228 [gr-qc]].
76. L. Kong, D. Malafarina and **C. Bambi***, *Can we observationally test the weak cosmic censorship conjecture?*, Eur. Phys. J. C **74**, 2983 (2014) [arXiv:1310.8376 [gr-qc]].
77. L. Kong, D. Malafarina and **C. Bambi***, *Gravitational blueshift from a collapsing object*, Phys. Lett. B **741**, 82-86 (2015) [arXiv:1310.1320 [gr-qc]].
78. Z. Li and **C. Bambi***, *Measuring the Kerr spin parameter of regular black holes from their shadow*, JCAP **01** (2014) 041 [arXiv:1309.1606 [gr-qc]].

79. **C. Bambi**, *Constraining possible variations of the fine structure constant in strong gravitational fields with the $K\alpha$ iron line*, JCAP 03 (2014) 034 [arXiv:1308.2470 [gr-qc]].
80. **C. Bambi** and D. Malafarina, *$K\alpha$ iron line profile from accretion disks around regular and singular exotic compact objects*, Phys. Rev. D **88**, 064022 (2013) [arXiv:1307.2106 [gr-qc]].
81. **C. Bambi**, D. Malafarina and L. Modesto, *Terminating black holes in asymptotically free quantum gravity*, Eur. Phys. J. C **74**, 2767 (2014) [arXiv:1306.1668 [gr-qc]].
82. **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 [arXiv:1305.5409 [gr-qc]].
83. **C. Bambi**, D. Malafarina and L. Modesto, *Non-singular quantum-inspired gravitational collapse*, Phys. Rev. D **88**, 044009 (2013) [arXiv:1305.4790 [gr-qc]].
84. Z. Li and **C. Bambi**^{*}, *Destroying the event horizon of regular black holes*, Phys. Rev. D **87**, 124022 (2013) [arXiv:1304.6592 [gr-qc]].
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