Sebastián Bahamonde

Curriculum Vitae

PERSONAL DETAILS

Nationalities	Chilean, Spanish.
Place of birth	Puerto Varas, X Region, Lake District, Chile.
City	Daejeon, South Korea.
Email	sbahamondebeltran@gmail.com
Website	`http://sebastianbahamonde.com`
Profiles	Google Scholar; INSPIRE-HEP
Languages	Spanish (native), English, Japanese ($\sim$ N4).

ACADEMIC PROFILE

I am a theoretical physicist working on gravitation, cosmology and relativistic astrophysics, with a PhD in Applied Mathematics from University College London and previous degrees in Physics and Astronomy from Universidad de Concepción. My research focuses on geometric extensions of general relativity and their applications to cosmology, astrophysics and gravitational-wave signatures. My academic trajectory includes research positions in the United Kingdom, Estonia, Japan and South Korea, competitive fellowships from ANID, JSPS and the Estonian Research Council, and university teaching experience in Chile and Europe.

EDUCATION

- **PhD in Mathematics (Applied Mathematics) (24/08/2018)**

University College London, Department of Mathematics, London, United Kingdom.

- **MSc in Physics (31/05/2013)**

Universidad de Concepción, Physics Department, Concepción, Chile (First-Class Honours).

- **Professional degree in Astronomy (03/06/2013)**

Universidad de Concepción, Physics Department, Concepción, Chile (First-Class Honours).

- **BSc. in Physical Science (06/01/2011)**

Universidad de Concepción, Physics Department, Concepción, Chile (First-Class Honours).

WORK EXPERIENCE

Academic and Research Positions

- **Senior Research Fellow - Faculty position** (Oct 2025 – Present)
  Institute for Basic Science, Daejeon, South Korea.
- **Project Researcher - Postdoctoral Researcher** (Oct 2023 – Sep 2025)
  Kavli IPMU, University of Tokyo, Japan.
- **Research Consultant** (Feb 2025 – Sep 2025)
  Institute for Basic Science, Daejeon, South Korea.
- **JSPS Postdoctoral Fellow** (Dec 2021 – Sep 2023)
  Tokyo Institute of Technology, Japan.
- **Visiting Researcher** (Dec 2021 – Dec 2022)
  University of Tartu, Estonia.
- **Mobilitas Pluss Postdoctoral Research Fellow** (Jan 2019 – Dec 2021)
  University of Tartu, Estonia.
- **Associate Researcher** (Apr 2020 – Jul 2021)
  Tomsk State University of Control Systems and Radioelectronics, Tomsk, Russia.
- **Visiting Researcher** (Oct 2018 – Mar 2020)
  University College London, UK.

University Teaching and Outreach Experience

- **Teaching Fellow** (Jan 2021 – Jul 2021)
  University of Tartu, Estonia. PhD course: "Selected Topics in the Theories of Gravity".
- **Ogden–Isaac Physics Fellow** (Aug 2018 – Jan 2019)
  University of Lincoln & University of Cambridge, UK.
  Position focused on Physics outreach and teaching.
- **Demonstrator** (2014 – 2019)
  University College London, UK. Marking for Mathematics coursework.
- **Teaching Fellow** (2013 – 2014)
  Universidad de Los Lagos, Puerto Montt, Chile.
  Taught a total of 11 undergraduate Physics and Mathematics courses for Engineering students over three semesters, with a teaching load of up to 24 contact hours per week. Courses included *Mechanical Physics, General Physics, Optics and Electromagnetism, Waves and Modern Physics, Multivariable Calculus, and Foundations of Mathematics and Physics I–II.*
- **Teaching Fellow** (2013)
  Universidad Santo Tomás, Puerto Montt, Chile. Physics course for Dentistry students.

Other Teaching Experience

- **Physics Teacher** (2012 – 2013)
  San Ignacio School, Concepción, Chile (part-time).
- **Mathematics Teacher** (2010)
  Social Pre-University for vulnerable students, Hualpén, Chile (voluntary).

Research mentoring and visiting students

- **Matteo de Toma** (2026) – MSc student, Université Paris-Saclay, France. MSc research internship at the Institute for Basic Science, South Korea (3 months). Role: research host and mentor during the visit.
- **Alicia Sancho Martinez** (2026) – MSc student, Université Paris-Saclay, France. MSc research internship at the Institute for Basic Science, South Korea (3 months). Role: research host and mentor during the visit.
- **Jorge Maggiolo** (2025) – PhD student, Universidad Católica de Valparaíso and Universidad Técnica Federico Santa María, Chile. Research visit in Japan funded by ANID (Jan–Oct 2025, 10 months). Role: research host and mentor during the visit; co-author of one research paper.
- **Joosep Lember** (2022) – BSc student, University of Tartu, Estonia. Research mentoring during his BSc thesis project; co-author of one research paper.

CONFERENCES AND MEETINGS

Invited Talks and Courses

- "International Symposium on Cosmology & Particle Astrophysics 2026 and 13th Australasian Conference on General Relativity & Gravitation", University of Canterbury, Christchurch, New Zealand (July 2026).
- "Chongqing University and IBS CTPU-CGA Joint Workshop on the Frontiers of Theoretical Cosmology", Chongqing University, Chongqing, China (May 2026).
- "The Third IBS CTPU-CGA Winter Camp 2026", General Relativity course (Jan 2026).
- "IBS CTPU–CGA 2025 Summer School and Workshop", Jeonju, South Korea (Aug 2025).
- "International Symposium on Cosmology and Particle Astrophysics", *Institute for Basic Science*, Daejeon, South Korea (Jul 2025).
- "CAS–IBS CTPU–CGA–Tokyo Tech Workshop", Toyohashi, Japan (Oct 2024).
- "IBS CTPU–CGA, Tokyo Tech, USTC Summer School", Tateyama, Japan (Sep 2024).
- "ICRAC 2024", *COMSATS University Islamabad*, Pakistan (Feb 2024, Online).
- "3rd Workshop on Current Challenges in Cosmology", *Universidad Industrial de Santander (UIS)*, Bucaramanga, Colombia (Oct 2023).
- "Recent Research in Gravity", *Zhejiang Normal University*, China (Nov 2022, Online).
- "CAS–JSPS Summer Workshop in Cosmology", Oshima, Japan (Aug 2022).
- "Holography and its Applications", Iran (Mar 2022, Online).
- "Recent Advances in Theoretical Cosmology and Astrophysics", Greece (Dec 2021, Online).

- "Impact of Mathematica in Modern Era", Bahawalpur, Pakistan (Feb 2021, Online).
- "1st PUICGC", *University of the Punjab*, Lahore, Pakistan (Jan 2019).
- "Third CANTATA Meeting", *University of Valencia*, Spain (Oct 2018).
- "IMPRS on Gravitational Wave Astronomy", *Max Planck Society*, Hannover, Germany (Mar 2018).

Invited Seminars

- "Intercontinental Seminars on Gravity and Cosmology" (Oct 2024, Online).
- Seminar, *Institute for Basic Science*, Daejeon, South Korea (Aug 2023).
- Seminar, *Canadian Quantum Research Center* (Feb 2023, Online).
- Cosmology Seminar, *University of Helsinki*, Finland (Feb 2023, Online).
- "Proca Seminars", Romania (Sep 2022, Online).
- Seminar, *Waseda University*, Japan (Mar 2022, Online).
- Seminar, *Tokyo Institute of Technology*, Japan (Dec 2021 and Jan 2021, Online).
- Seminar, *University of Tartu*, Estonia (Feb 2017).

Conference, Seminar and Workshop Talks

- "KIAA Seminar", *Peking University*, Beijing, China (May 2026).
- "USTC Seminar", *University of Science and Technology of China*, Hefei, China (May 2026).
- "KPS Spring meeting", *Daejeon Convention Center*, Korea (April 2026).
- "JGRG 34", *YITP, Kyoto University*, Kyoto, Japan (Jan 2026).
- "IBS-RIKEN Workshop", *Institute for Basic Science*, Daejeon, South Korea (Dec 2025).
- "ICG Seminar", *University of Portsmouth*, Portsmouth, UK (Dec 2025).
- "Nottingham Physics Seminar", *University of Nottingham*, Nottingham, UK (Dec 2025).
- "UCL Physics Seminar", *University College London*, London, UK (Dec 2025).
- "Contemporary Perspectives on Cosmology and Gravity", *Institut Pascal*, Paris, France (Nov 2025).
- "W(I)PMU", *Kavli IPMU, University of Tokyo*, Kashiwa, Japan (Jul 2025).
- "LeCosPA Meets IPMU", *LeCosPA National Taiwan University*, Taipei, Taiwan (Apr 2025).
- "Dawn of Field Theoretic Approach", *YITP, Kyoto University*, Kyoto, Japan (Jul 2023).
- "31st Workshop on General Relativity and Gravitation", *University of Tokyo*, Tokyo, Japan (Oct 2022).
- "Gravity: Current Challenges in Black Hole Physics and Cosmology", *YITP, Kyoto University*, Kyoto, Japan (Jun 2022).
- Seminar, *Nagoya University*, Nagoya, Japan (Jun 2022).
- "Winter Korea–Japan NRF–JSPS Workshop" (Feb 2022, Online).
- Seminar, *Osaka City University*, Osaka, Japan (Feb 2022).
- "YITP International Seminar on Gravity", *Kyoto University*, Japan (Feb 2022).
- "30th Workshop on General Relativity and Gravitation in Japan" (Dec 2021, Online).
- Virtual Conference of the "Polish Society on Relativity", Poland (Sep 2020, Online).
- "CoCo Cosmology", Colombia (Sep 2020, Online).
- "4th Zeldovich Meeting", *ICRANet & Belarus* (Aug 2020, Online).

- "14th Int. Conf. on Gravitation, Astrophysics and Cosmology", Taiwan (Aug 2020, Online).
- "2019 YITP Asian–Pacific Winter School", *Kyoto University*, Japan (Feb 2019).
- "Marcel Grossmann MG15", *University of Rome*, Rome, Italy (Jul 2018).
- "Teleparallel Gravity Workshop", *University of Tartu*, Estonia (Jun 2018).
- "ComplexiLate", *London Institute for Mathematical Sciences*, UK (May 2018).
- "BritGrav 2018", *University of Portsmouth*, Portsmouth, UK (Apr 2018).
- "Gravity and Cosmology 2018", *YITP, Kyoto University*, Kyoto, Japan (Mar 2018).
- "Revising Foundations of Physics Workshop", *UCL*, London, UK (Dec 2017).
- Particle and Fields Seminar, *Ben-Gurion University*, Beersheba, Israel (Dec 2017).
- "UK Cosmology Meeting", *University of Portsmouth*, Portsmouth, UK (Apr 2017).
- Seminar, *University of Naples Federico II*, Naples, Italy (Mar 2017).
- "Quantum Structure of Spacetime and Gravity", *University of Belgrade*, Belgrade, Serbia (Aug 2016).
- "21st Int. Summer School on Global Analysis and Applications", Poprad, Slovakia (Aug 2016).
- Postgraduate Mathematics Seminar, *University College London*, London, UK (Nov 2015).

Organising Committees

- The Corfu - IBS Workshop "Gravity and Cosmology by the Sea". Corfu, Greece (2026).
- Gravity2026: New Frontiers in Cosmology, *Institute for Basic Science*, Daejeon, South Korea (2026).
- Geometric Foundations of Gravity: 2019, 2021, 2023, 2025, 2026 (*University of Tartu*, Tartu, Estonia).
- Metric-Affine Frameworks for Gravity: 2022, 2024 (*University of Tartu*, Tartu, Estonia).
- Teleparallel Workshop 2020 (*University of Tartu*, Tartu, Estonia).

GRANTS, SCHOLARSHIPS AND AWARDS

Research Grants and Fellowships

- **ANID Postdoctoral Chilean Fellowship "Becas Chile"** (Oct 2023 – Sep 2025).
- **JSPS Postdoctoral Fellowship for Research in Japan – Standard Program** (2021 – 2023).
- **JSPS Postdoctoral Fellowship for Research in Japan – Short Term Program** (2021 – awarded, declined)
- **NSFC International Young Scientists Grant**, China (Apr 2021 – Apr 2023, awarded, not taken due to COVID-19).
- **International Postdoctoral Exchange Fellowship Program**, China (Apr 2021 – Apr 2023, awarded, not taken due to COVID-19).
- **Mobilitas Pluss Postdoctoral Researcher Grant**, Estonian Research Council (Jan 2019 – Dec 2020).
- **CONICYT PhD Chilean Scholarship "Becas Chile"** (Sep 2014 – Aug 2018).

- **Scholarship Undergraduate–Postgraduate for Master Studies**, *Universidad de Concepción*, Chile (2011 – 2013).

Awards and Honours

- **"2026 Pauchy Award for Early Career Researchers"** given by Asia-Pacific CosPA organisation.
- **Gravity Research Foundation Essay Awards** – Honourable Mention (2019, 2020).
- **JJ Sylvester Scholarship**, *University College London* (2015, 2017, 2018).
- **David Warren Scholarship**, *University College London* (2017).
- **Abbott (Corte) Studentship**, *University College London* (2017).
- **Monica Hulse Scholarship**, *University College London* (2014).

Conference and Workshop Grants

- **ITC Conference Grant – CANTATA** for attending **YITP Asian-Pacific Winter School and Workshop on Gravitation and Cosmology**, *Kyoto University*, Japan (2019).
- **COST Action STSM Grants (GWVerse and CANTATA, 2017–2019)**: four funded research stays at *Instituto de Astrofísica e Ciências do Espaço*, Lisbon, Portugal; *Università degli Studi di Napoli "Federico II"*, Naples, Italy; *Ben-Gurion University of the Negev*, Beer-Sheva, Israel; and *University of Malta*, Msida, Malta.
- **COST MP1405 Training School QSpace**, Belgrade, Serbia (2016).
- **LACES**, *Galileo Galilei Institute*, Florence, Italy (2016).
- **"100 Years of General Relativity: From Theory to Experiment and Back"**, *Institute for Advanced Studies*, Jerusalem, Israel (2014).

ACADEMIC SERVICE AND PROFESSIONAL ACTIVITIES

Reviewer for Funding Agencies

- Referee, *Natural Sciences and Engineering Research Council of Canada (NSERC) Discovery Grant* (call 2026)
- Referee, *Polish National Science Centre* (2024 call).
- Referee, *ANID–FONDECYT, Chile*: Initiation into Research (2018, 2023, 2024).
- Referee, *ANID–FONDECYT, Chile*: Regular Programme (2024, 2026).
- Referee, *NRDI Office, Hungary* (2022).

Reviewer for Journals

- Distinguished Referee, *European Physical Journal* (2022).
- Referee for more than 20 international journals and editorials, including *Physical Review Letters (PRL)*, *Physical Review D (PRD)*, *Journal of Cosmology and Astroparticle*

Physics (JCAP), *Monthly Notices of the Royal Astronomical Society (MNRAS)*, *Classical and Quantum Gravity (CQG)*, *European Physical Journal C (EPJC)*, *Universe*, and book reviews for *Springer*, among others.

Editorial Roles

- Topical Editor, *Symmetry*.
- Guest Editor, Special Issue on "Teleparallel Gravity: Foundations and Observational Constraints", *Universe* (2020).
- Guest Editor, Special Issue on "Relativistic Aspects of Stellar Structures and Modified Theories of Gravity", *Advances in Astronomy* (2020).
- Guest Editor, Special Issue on "Noether's Symmetry in Physics", *Symmetry* (2019).

Outreach Activities

- Organiser, Physics Challenge 2018/2019, *University of Lincoln*, UK.
- Organiser, Isaac Physics events for school children (2018, 2019), *University of Lincoln & University of Cambridge*, UK. `https://isaacphysics.org`
- Organiser, "The Physicist of the Year" (2018/2019), *Ogden Trust, University of Lincoln*, UK.

LIST OF PUBLICATIONS

91 published papers+2 book contributions. Google Scholar: h-index 41, i10-index 74, approximately 7200 citations.

1. S. Bahamonde, "Geometrically Regular Black Holes with Hedgehog Scalar Hair," [arXiv:2604.15758 [gr-qc]]. To appear in PRD.
2. S. Bahamonde, J. Gigante Valcarcel and J. M. M. Senovilla, "Gravitational waves in Cubic Metric-Affine Gravity," [arXiv:2511.03574 [gr-qc]]. To appear in PRD.
3. S. Bahamonde and J. Gigante Valcarcel, "A gravitational spin-orbit interaction in Poincaré gauge theory," Phys. Lett. B **873** (2026), 140126, [arXiv:2508.20035 [gr-qc]].
4. S. Bahamonde, J. Maggiolo and C. Pfeifer, "Coupling electromagnetism to torsion: Black holes and spin-charge interactions," Phys. Rev. D **113** (2026) no.4, 4, [arXiv:2507.02362 [gr-qc]].
5. S. Bahamonde, R. Briffa, K. Dialektopoulos, D. Iosifidis and J. Levi Said, "Cosmology of cubic Poincaré gauge gravity," Phys. Dark Univ. **52** (2026), 102249, [arXiv:2506.17017 [gr-qc]].
6. S. Bahamonde and M. Bañados, "An exact five dimensional Weyl-geometry Gauss-Bonnet black hole," Phys. Lett. B **869** (2025), 139869, [arXiv:2504.02230 [gr-qc]].
7. E. Di Valentino *et al.* [CosmoVerse Network], "The CosmoVerse White Paper: Addressing observational tensions in cosmology with systematics and fundamental physics," Phys. Dark Univ. **49** (2025), 101965, [arXiv:2504.01669 [astro-ph.CO]] (review paper).
8. S. Bahamonde and J. Gigante Valcarcel, "Stability in cubic metric-affine gravity," Phys. Rev. D **111** (2025) no.8, 084058, [arXiv:2411.12954 [gr-qc]].

9. S. Bahamonde, A. Hell, D. Blixt and K. F. Dialektopoulos, "Revisiting stability in new general relativity," Phys. Rev. D **111** (2025) no.6, 064080, [arXiv:2404.02972 [gr-qc]].

10. S. Bahamonde, Y. Miyashita and M. Yamaguchi, "Trace anomaly in metric-affine gravity," Phys. Rev. D **111** (2025) no.4, 044065, [arXiv:2409.05499 [gr-qc]].

11. S. Bahamonde, J. Gigante Valcarcel and J. M. M. Senovilla, "Algebraic classification of the gravitational field in general metric-affine geometries," Phys. Rev. D **110** (2024) no.12, 12, [arXiv:2409.07153 [gr-qc]].

12. K. Aoki, S. Bahamonde, J. Gigante Valcarcel and M. A. Gorji, "Cosmological perturbation theory in metric-affine gravity," Phys. Rev. D **110** (2024) no.2, 2, [arXiv:2310.16007 [gr-qc]].

13. S. Bahamonde and J. Gigante Valcarcel, "Stability of Poincaré gauge theory with cubic order invariants," Phys. Rev. D **109** (2024) no.10, 10, [arXiv:2402.08937 [gr-qc]].

14. H. Asuḱula, M. Hohmann, V. Karanasou, S. Bahamonde, C. Pfeifer and J. L. Rosa, "Spherically symmetric vacuum solutions in one-parameter new general relativity and their phenomenology," Phys. Rev. D **109** (2024) no.6, 064027, [arXiv:2311.17999 [gr-qc]].

15. K. Tomonari and S. Bahamonde, "Dirac-Bergmann analysis and degrees of freedom of coincident f(Q)-gravity," Eur. Phys. J. C **84** (2024) no.4, 349, [arXiv:2308.06469 [gr-qc]].

16. K. Jafarzade, S. H. Hendi, M. Jamil and S. Bahamonde, "Kerr–Newman black holes in Weyl–Cartan theory: Shadows and EHT constraints," Phys. Dark Univ. **45** (2024), 101497, [arXiv:2309.02454 [gr-qc]].

17. S. Bahamonde, D. D. Doneva, L. Ducobu, C. Pfeifer and S. S. Yazadjiev, "Distinctive features of hairy black holes in teleparallel Gauss-Bonnet gravity," Phys. Rev. D **108** (2023) no.6, 064044 [arXiv:2307.14720 [gr-qc]].

18. J. M. Armaleo, S. Bahamonde, G. Trenkler and L. G. Trombetta, "Symmetric teleparallel Gauss-Bonnet gravity and its extensions," Phys. Rev. D **108** (2023) no.10, 104019 doi:10.1103/PhysRevD.108.104019 [arXiv:2308.07299 [gr-qc]].

19. S. Bahamonde and J. Gigante Valcarcel, "Algebraic classification of the gravitational field in Weyl-Cartan spacetimes," Phys. Rev. D **108** (2023) no.4, 044037 [arXiv:2305.05501 [gr-qc]].

20. S. Bahamonde, G. Trenkler, L. G. Trombetta and M. Yamaguchi, "Symmetric teleparallel Horndeski gravity," Phys. Rev. D **107** (2023) no.10, 104024, [arXiv:2212.08005 [gr-qc]].

21. S. Bahamonde, D. D. Doneva, L. Ducobu, C. Pfeifer and S. S. Yazadjiev, "Spontaneous scalarization of black holes in Gauss-Bonnet teleparallel gravity," Phys. Rev. D **107** (2023) no.10, 104013, [arXiv:2212.07653 [gr-qc]].

22. S. Bahamonde, J. Chevrier and J. Gigante Valcarcel, "New black hole solutions with a dynamical traceless nonmetricity tensor in Metric-Affine Gravity," JCAP **02** (2023), 018, [arXiv:2210.05998 [gr-qc]].

23. S. Bahamonde, K. F. Dialektopoulos, M. Hohmann, J. Levi Said, C. Pfeifer and E. N. Saridakis, "Perturbations in non-flat cosmology for f(T) gravity," Eur. Phys. J. C **83** (2023) no.3, 193, [arXiv:2203.00619 [gr-qc]].

24. S. Bahamonde, K. F. Dialektopoulos, C. Escamilla-Rivera, G. Farrugia, V. Gakis, M. Hendry, M. Hohmann, J. Levi Said, J. Mifsud and E. Di Valentino, "Teleparallel gravity: from theory to cosmology," Rept. Prog. Phys. **86** (2023) no.2, 026901, [arXiv:2106.13793 [gr-qc]]. (review paper)

25. S. Bahamonde and L. J́arv, "Coincident gauge for static spherical field configurations in symmetric teleparallel gravity," Eur. Phys. J. C **82** (2022) no.10, 963, [arXiv:2208.01872 [gr-qc]].

26. S. Bahamonde, S. Faraji, E. Hackmann and C. Pfeifer, "Thick accretion disk configurations in the Born-Infeld teleparallel gravity," Phys. Rev. D **106** (2022) no.8, 084046, [arXiv:2209.00020 [gr-qc]].

27. K. Jusufi, S. Capozziello, S. Bahamonde and M. Jamil, "Testing Born–Infeld f(T) teleparallel gravity through Sgr A* observations," Eur. Phys. J. C **82** (2022) no.11, 1018, [arXiv:2205.07629 [gr-qc]].

28. Quach, James Q; Faizal, Mir; Norte, Richard A; Bahamonde, Sebastian, book "Breakdown of Einstein's Equivalence Principle,", World Scientific, chapter "An Information Theoretic Approach to the Weak Equivalence Principle," , pp. 99-118 (2022). (Book)

29. S. Bahamonde, J. Gigante Valcarcel, L. J́arv and J. Lember, "Black hole solutions in scalar-tensor symmetric teleparallel gravity," JCAP **08** (2022), 082, [arXiv:2206.02725 [gr-qc]].

30. S. Bahamonde, L. Ducobu and C. Pfeifer, "Scalarized black holes in teleparallel gravity," JCAP **04** (2022) no.04, 018, [arXiv:2201.11445 [gr-qc]].

31. S. Bahamonde, J. G. Valcarcel and L. J́arv, "Plebański-Demiański solutions with dynamical torsion and nonmetricity fields," JCAP **04** (2022) no.04, 011, [arXiv:2201.10532 [gr-qc]].

32. S. S. Wani, J. Q. Quach, M. Faizal, S. Bahamonde and B. Pourhassan, "A Quantum Informational Approach to the Problem of Time," Found. Phys. **52** (2022) no.1, 25, [arXiv:2112.00918 [gr-qc]].

33. A. Addazi, J. Alvarez-Muniz, R. A. Batista, G. Amelino-Camelia, V. Antonelli, M. Arzano, M. Asorey, J. L. Atteia, S. Bahamonde and F. Bajardi, *et al.* "Quantum gravity phenomenology at the dawn of the multi-messenger era – A review," Prog. Part. Nucl. Phys. **103948**, 2022 [arXiv:2111.05659 [hep-ph]] (review paper).

34. S. Bahamonde, A. Golovnev, M. J. Guzmán, J. L. Said and C. Pfeifer, "Black holes in f(T,B) gravity: exact and perturbed solutions," JCAP **01** (2022) no.01, 037, [arXiv:2110.04087 [gr-qc]].

35. S. Bahamonde and J. G. Valcarcel, "Rotating Kerr-Newman space-times in metric-affine gravity," JCAP **01** (2022) no.01, 011, [arXiv:2108.12414 [gr-qc]].

36. S. Bahamonde and J. L. Said, "Teleparallel Gravity: Foundations and Observational Constraints—Editorial," Universe **7** (2021) no.8, 269.

37. S. Bahamonde, M. Caruana, K. F. Dialektopoulos, V. Gakis, M. Hohmann, J. Levi Said, E. N. Saridakis and J. Sultana, "Gravitational-wave propagation and polarizations in the teleparallel analog of Horndeski gravity," Phys. Rev. D **104** (2021) no.8, 084082, [arXiv:2105.13243 [gr-qc]].

38. E. N. Saridakis *et al.* [CANTATA], "Modified Gravity and Cosmology: An Update by the CANTATA Network," [arXiv:2105.12582 [gr-qc]]. Springer (2021). doi.org/10.1007/978-3-030-83715-0. (Book)

39. S. Bahamonde and J. Gigante Valcarcel, "Observational constraints in metric-affine gravity," Eur. Phys. J. C **81** (2021) no.6, 495, [arXiv:2103.12036 [gr-qc]].

40. S. Bahamonde, V. Gakis, S. Kiorpelidi, T. Koivisto, J. Levi Said and E. N. Saridakis, "Cosmological perturbations in modified teleparallel gravity models: Boundary term extension," Eur. Phys. J. C **81** (2021) no.1, 53 [arXiv:2009.02168 [gr-qc]].

41. S. Bahamonde, J. G. Valcarcel, L. J́arv and C. Pfeifer, "Exploring Axial Symmetry in Modified Teleparallel Gravity," Phys. Rev. D **103** (2021) no.4, 044058 [arXiv:2012.09193 [gr-qc]].

42. S. Bahamonde and C. Pfeifer, "General teleparallel modifications of Schwarzschild geometry," Int. J. Geom. Meth. Mod. Phys. **18** (2021) no.supp 01, 2140001 [arXiv:2010.02161 [gr-qc]].

43. H. Sheikhahmadi, M. Faizal, A. Aghamohammadi, S. Soroushfar and S. Bahamonde, "Inflation in String Field Theory," Nucl. Phys. B **961** (2020), 115252, [arXiv:2005.07956 [hep-th]].

44. S. Bahamonde, M. Faizal, J. Q. Quach and R. A. Norte, "Quantum Weak Equivalence Principle and the Gravitational Casimir Effect in Superconductors," Int. J. Mod. Phys. D **29** (2020), 14, [arXiv:2005.06640 [gr-qc]]. Essay received an honorable mention for the Gravity Research Foundation 2020 Awards for Essays on Gravitation

45. S. Bahamonde, M. Marciu, S. D. Odintsov and P. Rudra, "String-inspired Teleparallel cosmology," Nucl. Phys. B **962** (2021), 115238, [arXiv:2003.13434 [gr-qc]].

46. S. Bahamonde, K. F. Dialektopoulos, M. Hohmann and J. Levi Said, "Post-Newtonian limit of Teleparallel Horndeski gravity," Class. Quant. Grav. **38** (2020) no.2, 025006, doi:10.1088/1361-6382/abc441 [arXiv:2003.11554 [gr-qc]].

47. S. Bahamonde, J. Levi Said and M. Zubair, "Solar system tests in modified teleparallel gravity," JCAP **10** (2020), 024, [arXiv:2006.06750 [gr-qc]].

48. S. Bahamonde and J. G. Valcarcel, "New models with independent dynamical torsion and nonmetricity fields," JCAP **09** (2020), 057, [arXiv:2006.06749 [gr-qc]].

49. S. Bahamonde, K. Dialektopoulos and U. Camci, "Exact Spherically Symmetric Solutions in Modified Gauss–Bonnet Gravity from Noether Symmetry Approach," Symmetry **12** (2020) no.1, 68 [arXiv:1912.12922 [gr-qc]].

50. H. Abedi, A. M. Abbassi and S. Bahamonde, "Hubble inflation in Randall–Sundrum type II model," Int. J. Mod. Phys. D **29** (2020) no.06, 2050037.

51. S. Bahamonde and U. Camci, "Exact Spherically Symmetric Solutions in Modified Teleparallel gravity," Symmetry **11** (2019) no.12, 1462 [arXiv:1911.03965 [gr-qc]].

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53. S. Bahamonde, K. F. Dialektopoulos, V. Gakis and J. Levi Said, "Reviving Horndeski theory using teleparallel gravity after GW170817," Phys. Rev. D **101** (2020) no.8, 084060 [arXiv:1907.10057 [gr-qc]].

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