CURRICULUM VITAE

Justin Christopher Feng

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Personal Data:

Nationality: United States of America *Born*: 26 April 1986, Monterey Park, CA, USA

Education:

Ph.D Physics	The University of Texas at Austin	08/2009—12/2017
B.S. Physics	University of California, Irvine	09/2004—06/2009

Appointments:

02/2019—Current	Postdoctoral researcher, CENTRA, Instituto Superior Técnico - U. Lisbon
12/2017—01/2019	Research Affiliate Postdoctoral Fellow, The University of Texas at Austin
08/2018—12/2018	Adjunct Faculty, St. Edward's University (Joint)
06/2016—08/2017	Graduate Research Assistant, The University of Texas at Austin
09/2011—05/2017	Assistant Instructor, The University of Texas at Austin
09/2009—08/2011	Teaching Assistant, The University of Texas at Austin
06/2007—08/2008	Undergraduate Research Assistant, University of California, Irvine

Grants:

Co-PI for 2022.01390.PTDC, Fundação para a Ciência e a Tecnologia (Portugal)

Collaborations:

Associate member: LISA Consortium, fundamental physics WG

Memberships:

International Society on General Relativity and Gravitation (ISGRG)
Sociedade Portuguesa de Relatividade e Gravitação (SPRG)
International Society for Quantum Gravity (ISQG)

Other activities:

Session Chair	ENAA 2022, Sep 6, 2022, Lisbon, Portugal
Chair	CENTRA seminar chair & organizer, 2019-2021, Lisbon, Portugal
Organizer	XIII Black Holes Workshop, Dec 2020, Lisbon, Portugal
Speaker	Contributed 10 seminar talks, 8 conference/workshop talks, 8 pedagogical talks
Examiner	Served on 1 PhD and 1 Masters examination committee at IST
Reviewer	Class. Quantum Gravity, Phys. Lett. B, Int. J Mod. Phys. A, Math. Rev., etc.

Research stays:

31/10/2022 - 30/12/2022	Yukawa Institute for Theoretical Physics, Kyoto, Japan
12/08/2022 - 02/09/2022	Niels Bohr Institute, Copenhagen, Denmark
09/04/2022 - 23/04/2022	The University of Texas at Austin, Austin, Texas, USA
20/10/2021 - 01/11/2021	University of Genoa, Genoa, Italy
01/03/2020 - 12/03/2020	The University of Texas at Austin, Austin, Texas, USA
30/11/2019 - 11/12/2019	Yukawa Institute for Theoretical Physics, Kyoto, Japan
12/11/2017 - 15/11/2017	Okinawa Institute for Science and Technology, Okinawa, Japan

Technical skills:

Software:	Mathematica (xAct), SciML libraries (sciml.ai), Linux
Languages:	Julia, Fortran, C, bash, LaTeX, html

PEER-REVIEWED PUBLICATIONS

[1] Miguel Duarte, Justin Christopher Feng, Edgar Gasperín, and David Hilditch. Regularizing Dual-Frame Generalized Harmonic Gauge at Null Infinity. To appear in Class. Quantum Grav. DOI: 10.1088/1361-6382/aca383, 2022

[2] Miguel Duarte, Justin Christopher Feng, Edgar Gasperín, and David Hilditch. Peeling in Generalized Harmonic Gauge. Class. Quantum Grav. 39 215003, Oct 2022.

[3] Justin C. Feng, Filip Hejda, and Sante Carloni. Relativistic location algorithm in curved spacetime. Phys. Rev. D 106, 044034, Aug 2022.

[4] Justin C. Feng, Shinji Mukohyama, and Sante Carloni. Junction conditions and sharp gradients in generalized coupling theories. Phys. Rev. D, 105, 104036, May 2022.

[5] Justin C. Feng and Sumanta Chakraborty. Weiss variation for general boundaries. Gen. Relativ. Gravit. 54, 67, 1, Jul 2022.

[6] Justin C. Feng, José P. S. Lemos, and Richard A. Matzner. Self-collision of a portal wormhole. Phys. Rev. D, 103, 124037, Jun 2021.

[7] Miguel Duarte, Justin Feng, Edgar Gasperín, and David Hilditch. High order asymptotic expansions of a good–bad–ugly wave equation. Class. Quantum Gravity, 38, 14, 145015, Jun 2021.

[8] Justin C. Feng, Shinji Mukohyama, and Sante Carloni. Minimal exponential measure model in the post-Newtonian limit. Phys. Rev. D, 103, 084055, Apr 2021.

[9] Sumanta Chakraborty and Justin C. Feng. Perturbations of the almost Killing equation and their implications. Phys. Rev. D, 103, 084020, Apr 2021.

[10] Chinmoy Bhattacharjee and Justin C. Feng. On Beltrami states near black hole event horizon. Phys. Plasmas, 27, 7, 072901, Jul 2020.

[11] Justin C. Feng and Sante Carloni. New class of generalized coupling theories. Phys. Rev. D, 101, 064002, Mar 2020.

[12] Justin C. Feng, Edgar Gasperín, and Jarrod L. Williams. Almost-Killing equation: Stability, hyperbolicity, and black hole Gauss law. Phys. Rev. D, 100 ,124034, Dec 2019.

[13] Chinmoy Bhattacharjee, Justin C. Feng, and S. M. Mahajan. Black hole in a superconducting plasma. Phys. Rev. D, 99, 024027, Jan 2019.

[14] Justin C. Feng. Some globally conserved currents from generalized Killing vectors and scalar test fields. Phys. Rev. D, 98, 104035, Nov 2018.

[15] Chinmoy Bhattacharjee, Justin C Feng, and David J Stark. Surveying the implications of generalized vortical dynamics in curved spacetime. Mon. Notices Royal Astron. Soc., 481, 1, 206, Aug 2018.

[16] Ignazio Ciufolini, Richard A. Matzner, Justin C. Feng, Antonio Paolozzi, David P. Rubincam, Erricos C. Pavlis, John C. Ries, Giampiero Sindoni, and Claudio Paris. A new laser-ranged satellite for General Relativity and space geodesy: IV. Thermal drag and the LARES 2 space experiment. Eur. Phys. J. Plus, 133, 8, 333, Aug 2018.

[17] Justin C. Feng. Volume average regularization for the Wheeler-DeWitt equation. Phys. Rev. D, 98, 026024, Jul 2018.

[18] Justin Feng, Mark Baumann, Bryton Hall, Joel Doss, Lucas Spencer, and Richard Matzner. PoMiN: A Post-Minkowskian N-body Solver. Astrophys. J., 859, 2, 130, Jun 2018.

[19] Justin C. Feng and Richard A. Matzner. The Weiss variation of the gravitational action. Gen. Relativ. Gravit., 50, 8, 99, Jul 2018.

[20] Justin C. Feng and Richard A. Matzner. From path integrals to the Wheeler-DeWitt equation: Time evolution in spacetimes with a spatial boundary. Phys. Rev. D, 96, 106005, Nov 2017.