

# Pereira Lobo, Iarley



## *Current Position:*

Postdoctoral researcher at Federal University of Paraíba (UFPB), Brazil.

## *Previous position:*

Capes Ph.D. Student

International Center for Relativistic Astrophysics Network – ICRANet

University “Sapienza” of Rome

## *Outcome Institution:*

Universidade Federal da Paraíba – UFPB

## *Publications:*

- ) V. B. Bezerra, I. P. Lobo, H. F. Mota and C. R. Muniz, Landau Levels in the Presence of a Cosmic String in Rainbow Gravity, accepted for publication in Annals of Physics, doi:10.1016/j.aop.2019.01.004
- ) I. P. Lobo and M. Ronco, Rainbow-like Black Hole metric from Loop Quantum Gravity, Universe 4, 139 (2018) doi:10.3390/universe4120139.
- ) S. Ghaffari, H. Moradpour, J. P. Morais Graça, V. B. Bezerra and I. P. Lobo, Tsallis holographic dark energy in the brane cosmology, Phys. Dark Univ. 23, 100246 (2019) doi:10.1016/j.dark.2018.11.007
- ) H. Moradpour, S. A. Moosavi, I. P. Lobo, J. P. Morais Graça, A. Jawad and I. G. Salako, Thermodynamic approach to holographic dark energy and the Rényi entropy, Eur. Phys. J. C 78, no. 10, 829 (2018) doi:10.1140/epjc/s10052-018-6309-8.
- ) J. P. Morais Graça, I. P. Lobo, V. B. Bezerra & H. Moradpour, Effects of a string cloud on the criticality and efficiency of AdS black holes as heat engines, Eur. Phys. J. C 78, no. 10, 823 (2018) doi:10.1140/epjc/s10052-018-6277-z.
- ) S. Ghaffari, H. Moradpour, I. P. Lobo, J. P. Morais Graça & V. B. Bezerra, Tsallis holographic dark energy in the Brans-Dicke cosmology, Eur. Phys. J. C 78 706 (2018), doi:10.1140/epjc/s10052-018-6198-x.
- ) I. P. Lobo & C. Romero, Experimental constraints on the second clock effect, Phys. Lett. B 783 306 (2018), doi:10.1016/j.physletb.2018.07.019.
- ) J. P. Morais Graça & I. P. Lobo, Scalar QNMs for higher dimensional black holes surrounded by quintessence in Rastall gravity, Eur. Phys. J. C 78 101 (2018), doi:10.1140/epjc/s10052-018-5598-2.

- ) A. S. Jahromi, S. A. Moosavi, H. Moradpour, J. P. Morais Graça, I. P. Lobo, I. G. Salako & A. Jawad, Generalized entropy formalism and a new holographic dark energy model, *Phys. Lett. B* 780 21 (2018), doi:10.1016/j.physletb.2018.02.052.
- ) I. P. Lobo, H. Moradpour, J. P. Morais Graça & I. G. Salako, Thermodynamics of black holes in Rastall gravity, *Int. J. Mod. Phys. D* 27 1850069 (2018), doi:10.1142/S0218271818500694.
- ) I. P. Lobo, On the physical interpretation of non-metricity in Brans-Dicke gravity, *Int. J. G. Methods Mod. Phys.* 15 1850138 (2018), doi:10.1142/S0219887818501384.
- ) J. P. Morais Graça, I. P. Lobo & I. G. Salako, Cloud of strings in  $f(R)$  gravity, *Chin. Phys.* C42 063105 (2018), doi:10.1088/1674-1137/42/6/063105.
- ) R. Avalos, I. P. Lobo, T. Sanomiya & C. Romero, On the Cauchy problem for Weyl-geometric scalar-tensor theories of gravity, *J. Math. Physics* 59 062502 (2018), doi:10.1063/1.5017848.
- ) H. Moradpour, J. P. Morais Graça, I. P. Lobo & I. G. Salako, Energy Definition and Dark Energy: A Thermodynamic Analysis, *Adv. High Energy Phys.* 2018, 7124730 (2018), doi:10.1155/2018/7124730.
- ) I. P. Lobo, N. Loret & F. Nettel, Rainbows without unicorns: metric structures in theories with modified dispersion relations, *Eur. Phys. J. C* 77 451 (2017), doi:10.1140/epjc/s10052-017-5017-0.
- ) I. P. Lobo, N. Loret & F. Nettel, Investigation on Finsler geometry as a generalization to curved spacetime of Planck-scale-deformed relativity in the de Sitter case, *Phys. Rev. D* 95 046015 (2017), doi:10.1103/PhysRevD.95.046015.
- ) G. G. Carvalho, I. P. Lobo & E. Bittencourt, Extended disformal approach in the scenario of Rainbow Gravity, *Phys. Rev. D* 93 044005 (2016), doi:10.1103/PhysRevD.93.044005.
- ) E. Bittencourt, I. P. Lobo & G. G. Carvalho, On the disformal invariance of the Dirac equation, *Class. Quantum Grav.* 32 185016 (2015), doi:10.1088/0264-9381/32/18/185016.
- ) I. P. Lobo, A. B. Barreto & C. Romero, Space-time singularities in Weyl manifolds, *Eur. Phys. J. C* 75 448 (2015), doi:10.1140/epjc/s10052-015-3671-7.
- ) I. P. Lobo & G. Palmisano, Geometric interpretation of Planck-scale-deformed co-products, *Int. J. Mod. Phys. Conf. Ser.* 41 1660126 (2016), doi:10.1142/S2010194516601265 (Proceedings)
- ) I. P. Lobo & G. Palmisano, Geometric picture of DSR-relativistic theories with de Sitter and anti-de Sitter momentum spaces. In: *Proceedings of the MG14 Meeting on General Relativity, 2017, University of Rome La Sapienza. The Fourteenth Marcel Grossmann Meeting.* p. 4005, doi:10.1142/9789813226609\_0533
- ) G. G. Carvalho, E. Bittencourt & I. P. Lobo, On the disformal invariance of the massless Dirac equation. In: *Proceedings of the MG14 Meeting on General Relativity, 2017, University of Rome La Sapienza. The Fourteenth Marcel Grossmann Meeting.* p. 2648, doi:10.1142/9789813226609\_0322
- ) I. P. Lobo & G. G. Carvalho, The geometry of null-like disformal transformations, arXiv:1707.01784 (preprint)

*Meetings, conferences, seminars, schools:*

Third Bego Rencontres - IRAP Ph.D. Erasmus Mundus school - September 8<sup>th</sup>-19<sup>th</sup> 2014

Yerevan, Armenia - 1<sup>st</sup> Scientific ICRANet Meeting in Armenia: Black Holes: the largest energy sources in the Universe - 30 June - 4 July 2014

IRAP Ph.D. Erasmus Mundus Workshop - Supernovae, Gamma-ray bursts and the induced gravitational collapse May 11-16, 2014 - Les Houches (France)

9th Alexander Friedmann International Seminar - June 21th-27th 2015. Talk: "Peculiar Properties of 3D gravity, the Magueijo-Smolin model and other DSR-relativistic pictures with anti-de Sitter momentum space"

XIV Marcel Grossmann Meeting on Recent Developments in Theoretical and Experimental General Relativity, Gravitation, and Relativistic Field Theory, 2015, July 12-18, Rome, Italy. Talk: "Geometric picture of DSR-relativistic theories with de Sitter and anti-de Sitter momentum spaces"

Quantum Gravity Meeting - July 20th-23rd 2015. Talk: "Geometric picture of DSR-relativistic theories with de Sitter and anti-de Sitter momentum spaces"

16th British Gravity Meeting, University of Nottingham, UK

Fourth Bego Rencontres, IRAP Ph.D. Erasmus Mundus school, May 30 - June 3, 2016, Villa Ratti, Nice

Experimental Search for Quantum Gravity, Frankfurt, Sep 19-23, 2016, Frankfurt Institute for Advanced Studies (FIAS), Frankfurt, Germany.