

Pereira, Jonas Pedro



Current position:

Postdoctoral student at UFABC (Santo André – SP)
fellowship: FAPESP

Previous positions:

Postdoctoral student at Towson University (Maryland, USA) from June 2015 to May 2016; fellowship: CNPq's Program "Science without borders" of the Brazilian government.

IRAP PhD – Erasmus Mundus
Second Cycle, 2011-2014

Publications:

-) De Lorenci, V. A., Faúndez-Abans, M. , Pereira, J. P.; Testing The Newton Second Law in the Regime of Small Accelerations, *Astron. Astrophys.* 503, L1 (2009). IF: 5.185

-) De Lorenci, Vitorio A., Pereira, Jonas P.; Trirefringence in nonlinear metamaterials, *Phys. Rev. A* 86, 013801 (2012). IF: 2.765.

-) De Lorenci, Vitorio A., Klippert, R., Pereira, Jonas P., Shi-Yuan, Li; Multirefringence phenomena in nonlinear electrodynamics, *Phys. Rev. D* 88, 065015 (2013). IF: 4.506

-) De Lorenci, Vitorio A., Pereira, Jonas P.; One way propagation of light in Born- Infeld-like metamaterials, *Phys. Rev. A* 89, 043822 (2014). IF: 2.765.

-) Pereira, Jonas P., Mosquera Cuesta, Herman J., Rueda, Jorge A., Ruffini, R.; On the black hole mass decomposition in nonlinear electrodynamics, *Phys. Lett. B* 734, 396 (2014). IF: 3.718.
<http://adsabs.harvard.edu/abs/2014PhLB..734..396P>

-) Pereira, Jonas P., Rueda, Jorge A., Coelho, Jaziel G.; Stability of thin-shell interfaces inside compact stars, *Phys. Rev. D.* 90, 123011 (2014). <http://adsabs.harvard.edu/abs/2014PhRvD..90I3011P>; IF: 4.506

-) Pereira, Jonas P., Rueda, Jorge A.; Radial stability in stratified stars, *Astrophys. J.* 801, 19 (2015).
<http://adsabs.harvard.edu/abs/2015ApJ...801...19P>; IF: 5.909

-) Pereira, Jonas P., Rueda, Jorge A.; Energy decomposition within Einstein-Born- Infeld black holes, *Phys. Rev. D.* 91, 064048 (2015). <http://adsabs.harvard.edu/abs/2015PhRvD..91f4048P>; IF: 4.506

-) Coelho, Jaziel G., Pereira, Jonas P., and de Araújo, José C.N.; The influence of quantum vacuum friction on pulsars, *ApJ.* 823, 97 (2016), <http://adsabs.harvard.edu/abs/2016ApJ...823...97C>; IF: 5.909

-) Bittencourt, Eduardo, Pereira, Jonas P., Smolyaninov, Igor I., and Smolyaninova, Vera N.; The flexibility of optical metrics, *Class. Quantum Grav.* 33, 165008 (2016), <http://adsabs.harvard.edu/abs/2016CQGra..33p5008B>; IF: 2.837
-) Pereira, Jonas P., Overduin, James M., and Poyneer, Alexander J.; Sattelite test of the equivalence principle as a probe of Modified Newtonian Dynamics, *Phys. Rev. Lett.* 117, 071103 (2016), <http://adsabs.harvard.edu/abs/2016PhRvL.117g1103P>; IF: 7.645
-) Pereira, Jonas P., Smolyaninov, Igor I., and Smolyaninova, Vera N.; Magnetic liquids under high electric fields as broadband optical diodes, *Phys. Rev. A* 94, 043852 (2016), <http://adsabs.harvard.edu/abs/2016PhRvA..94d3852P>; IF: 2.765
-) Mosquera Cuesta, Herman J., Lambiase, Gaetano, and Pereira, Jonas P.; Probing nonlinear electrodynamics in slowly rotating spacetimes through neutrino astrophysics, in press in *Phys. Rev. D* (2017), <http://adsabs.harvard.edu/abs/2017arXiv170100431M>; IF: 4.506

Meetings, conferences, seminars, schools:

- XIV Brazilian School of Cosmology and Gravitation. Congress. Description: Participation, Mangaratiba, Brazil, on Gravitation and Cosmology. September 2010.
- EMJD School- Nice, France- 5-27 September 2011
- IRAP PhD EMJD Workshop- Les Houches, France- 2-6 October 2011
- EMJD School- Nice, France- 5-8 June 2012
- EMJD School- Nice, France- 3-19 September 2012
- EMJD School- Nice, France- 15-31 May 2013
- EMJD School- Nice, France- 2-20 September 2013
- Scientific interactions and studies in Nice- 3 April- 26 June 2014
- XIII Marcel Grossman Congress. Description: Participation, Stockholm, Sweden, on General Relativity. July 2012
- 27th Texas Symposium. Description: Talk given: Black hole mass decomposition in nonlinear electrodynamics and applications, Texas, USA, on Relativistic Astrophysics. December 2013.

- Zel'dovich - 100 Meeting. Description: Talk given: Black hole mass decomposition in nonlinear electrodynamics and some of its consequences, Minsk, Belarus, in honor of the 100th anniversary of Yakov Borisovich Zel'dovich. March 2014.
- Black Holes: the largest energy sources in the universe. Description: Talk given: Black hole mass decomposition in nonlinear electrodynamics and some of its consequences, Yerevan, Armenia, on the occasion of the 1st Scientific ICRANet, Meeting in Armenia. July 2014.
- 2nd César Lattes Meeting "Supernovae, Neutron Stars, Black Holes" Niteroi. Talk given: Radial Stability in Stratified Stars, Niteroi, Brazil. April 2015, "Physical insights into the radial stability in stratified stars"
- 7th IWARA-Gramado, Brazil, 9-13 October 2016; Talk given: STEP as a decisive test of MOND on Earth.