

Lista de lucrari stiintifice

1. Binary mergers in bootstrapped Newtonian gravity: Mass gap and black hole area law; R. Casadio, I. Kuntz, O. Micu; Phys.Lett.B 834 (2022) 137455; e-Print: 2206.13588 [gr-qc];
2. Newtonian approximation in $(1 + 1)$ dimensions; R. Casadio, O. Micu, J. Mureika; Phys.Scripta 97 (2022) 12, 125304; e-Print: 2205.12229 [gr-qc];
3. Approximating compact objects in bootstrapped Newtonian gravity: use of the canonical potential; Casadio, I. Kuntz, O. Micu; Eur.Phys.J.C 82 (2022) 7, 609; e-Print: 2205.04926 [gr-qc];
4. Compact sources and cosmological horizons in lower dimensional bootstrapped Newtonian gravity; R. Casadio, O. Micu, J. Mureika; Class.Quant.Grav. 38 (2021) 6, 065020; e-Print: 2008.13465 [gr-qc];
5. Polytropic stars in bootstrapped Newtonian gravity; R. Casadio and O. Micu; Phys.Rev.D 102 (2020) 10, 104058; e-Print: 2005.09378 [gr-qc];
6. On the mass of bootstrapped Newtonian sources; R. Casadio, O. Micu and J. Mureika; Mod.Phys.Lett.A 35 (2020) 21, 2050172; e-Print: 1910.03243 [gr-qc];
7. Bootstrapped Newtonian stars and black holes; R. Casadio, M. Lenzi and O. Micu; Eur. Phys. J. C 79, no. 11, 894 (2019); e-Print: 1904.06752 [gr-qc];
8. Bootstrapping Newtonian gravity; R. Casadio, M. Lenzi and O. Micu; Phys. Rev. D 98, no. 10, 104016 (2018); e-Print: 1806.07639 [gr-qc];
9. Horizon Quantum Mechanics of collapsing shells; R. Casadio and O. Micu; Eur. Phys. J. C 78, no. 10, 852 (2018); e-Print: 1806.05944 [gr-qc];
10. Horizon Quantum mechanics: spherically symmetric and rotating sources; R. Casadio, A. Giugno, A. Giusti and O. Micu; Found. Phys. 48, no. 10, 1204 (2018); e-Print: 1712.02376 [gr-qc];
11. Cosmic ray oriented performance studies for the JEM-EUSO first level trigger; G. Abdellaoui et al.; Nucl. Instrum. Meth. A 866, 150 (2017);

12. Horizon Quantum Mechanics of Rotating Black Holes; R. Casadio, A. Giugno, A. Giusti and O. Micu; *Eur.Phys.J.C* 77 (2017) 5, 322; e-Print: 1701.05778 [gr-qc];
13. Horizon wave-function: from particles to black holes; R. Casadio, O. Micu and F. Scardigli; *Rom. Rep. Phys.* 68, no. 3, 923 (2016);
14. Quantum production of black holes at colliders; N. Arsene, R. Casadio and O. Micu; *Eur.Phys.J.C* 76 (2016) 7, 384; e-Print: 1606.07323 [hep-ph];
15. Horizon quantum mechanics: A hitchhiker' s guide to quantum black holes; R. Casadio, A. Giugno and O. Micu; *Int.J.Mod.Phys.D* 25 (2016) 02, 1630006; e-Print: 1512.04071 [hep-th];
16. Thermal BEC black holes; R. Casadio, A. Giugno, O. Micu and A. Orlandi; *Entropy* 17 (2015) 6893-6924; e-Print: 1511.01279 [gr-qc];
17. Horizon Wave-Function and the Quantum Cosmic Censorship; R. Casadio, O. Micu and D. Stojkovic; *Phys.Lett.B* 747 (2015) 68-72; e-Print: 1503.02858 [gr-qc];
18. Inner horizon of the quantum Reissner-Nordström black holes; R. Casadio, O. Micu and D. Stojkovic; *JHEP* 05 (2015) 096; e-Print: 1503.01888 [gr-qc];
19. Black holes as self-sustained quantum states, and Hawking radiation; R. Casadio, A. Giugno, O. Micu and A. Orlandi; *Phys.Rev.D* 90 (2014) 8, 084040; e-Print: 1405.4192 [hep-th];
20. Quantum hoop conjecture: Black hole formation by particle collisions; R. Casadio, O. Micu and F. Scardigli; *Phys.Lett.B* 732 (2014) 105-109; e-Print: 1311.5698 [hep-th];
21. Quantum Black Holes Effects on the Shape of Extensive Air Showers; N. Arsene, L. I. Caramete, P. B. Denton and O. Micu; *Rom.Rep.Phys.* 69 (2017) 105; e-Print: 1310.2205 [hep-ph];
22. Back-to-Back Black Holes decay Signature at Neutrino Observatories; N. Arsene, X. Calmet, L. I. Caramete and O. Micu.; *Astropart.Phys.* 54 (2014) 132-138; e-Print: 1303.4603 [hep-ph];
23. Charged Black Hole Remnants at the LHC; G. L. Alberghi, L. Bellagamba, X. Calmet, R. Casadio and O. Micu; *Eur.Phys.J.C* 73 (2013) 6, 2448; e-Print: 1303.3150 [hep-ph];

24. Minimum black hole mass from colliding Gaussian packets; R. Casadio, O. Micu and A. Orlandi; *Eur.Phys.J.C* 72 (2012) 2146; e-Print: 1205.6303 [hep-th];
25. Quantum Black Holes from Cosmic Rays; X. Calmet, L. I. Caramete and O. Micu; *JHEP* 11 (2012) 104; e-Print: 1204.2520 [hep-ph];
26. Lepton number violating effects in neutrino oscillations; S. Hollenberg, O. Micu and P. B. Pal; *Phys.Rev.D* 85 (2012) 053004; e-Print: 1112.1523 [hep-ph];
27. Brane-world black holes and the scale of gravity; G. L. Alberghi, R. Casadio, O. Micu and A. Orlandi; *JHEP* 09 (2011) 023; e-Print: 1104.3043 [hep-th];
28. Effect of brane thickness on microscopic tidal-charged black holes; R. Casadio, B. Harms and O. Micu; *Phys.Rev.D* 82 (2010) 044026; e-Print: 1003.2572 [hep-ph];
29. Exploring the bulk of tidal charged micro-black holes; R. Casadio and O. Micu; *Phys.Rev.D* 81 (2010) 104024; e-Print: 1002.1219 [hep-th];
30. Theoretical survey of tidal-charged black holes at the LHC; R. Casadio, S. Fabi, B. Harms and O. Micu; *JHEP* 02 (2010) 079; e-Print: 0911.1884 [hep-th];
31. Explaining LSND and MiniBooNE using altered neutrino dispersion relations; S. Hollenberg, O. Micu and H. Päs; *Prog.Part.Nucl.Phys.* 64 (2010) 193-195; e-Print: 0911.1018 [hep-ph];
32. Neutrino-antineutrino oscillations as a possible solution for the LSND and MiniBooNE anomalies?; S. Hollenberg, O. Micu and H. Päs; *Phys.Rev.D* 80 (2009) 053010; e-Print: 0906.5072 [hep-ph];
33. Baseline-dependent neutrino oscillations with extra-dimensional shortcuts; S. Hollenberg, O. Micu, H. Päs and T. J. Weiler; *Phys.Rev.D* 80 (2009) 093005; e-Print: 0906.0150 [hep-ph];
34. Boundaries and the Casimir effect in non-commutative space-time; R. Casadio, A. Gruppuso, B. Harms and O. Micu; *Phys.Rev.D* 76 (2007) 025016; e-Print: 0704.2251 [hep-th]
35. Noncommutative quantum Hall effect and Aharonov-Bohm effect; B. Harms and O. Micu; *J.Phys.A* 40 (2007) 10337-10348; e-Print: hep-th/0610081 [hep-th];

36. Moving mirrors and black hole evaporation in non-commutative space-times; R. Casadio, P. H. Cox, B. Harms and O. Micu; Phys.Rev.D 73 (2006) 044019; e-Print: gr-qc/0510115 [gr-qc];
37. Microscopic black holes as a source of ultrahigh-energy gamma-rays; R. Casadio, B. Harms, O. Micu; AIP Conf.Proc. 624 (2002) 1, 132-140; e-Print: astro-ph/0202513.

Semnatura,

