

List of Publications

Rita de Cássia dos Anjos

Journal articles

- 1. R.C. Anjos**, L Anchordoqui, et al. Ultrahigh-Energy Cosmic Ray Composition from the Distribution of Arrival Directions. ArXiv:1810.04251. *Physical Review D* Vol: **98**, (123018), 2018.
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.98.123018>
- 2. R. C. Anjos**, V. de Souza, Rogerio M. de Almeida and Edivaldo M. Santos, The influence of the observatory latitude on the study of ultra high energy cosmic rays, *Journal of Cosmology and Astroparticle Physics*, Vol:2017, 1475, 2017.
<https://iopscience.iop.org/article/10.1088/1475-7516/2017/07/041>
- 3. R. C. Anjos**, C. H. Coimbra-Araújo, Central accumulation of magnetic flux in massive Seyfert galaxies as a possible engine to trigger ultrahigh energy cosmic rays, *Physical Review D*, Vol:96 (023008), 2017.
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.96.023008>
- C. H. Coimbra-Araújo and **R. C. Anjos**, Stability of perturbed geodesics in nD axisymmetric spacetimes, *Classical and Quantum Gravity*, Vol: 33(18), 185010, 2016.
<https://iopscience.iop.org/article/10.1088/0264-9381/33/18/185010>
- 5. R. C. Anjos**, C. H. Coimbra-Araújo, R. Rocha, V. de Souza, Ultra high energy cosmic rays and possible signature of black strings, *Journal of Cosmology and Astroparticle Physics*, Vol:014, 03014, 2016.
<https://iopscience.iop.org/article/10.1088/1475-7516/2016/03/014/meta>
- 6. R. C. Anjos**, G. B. Freitas, C. H. Coimbra-Araújo, Analytical Solutions of the Fokker–Planck Equation for Generalized Morse and Hulthén Potentials, *Journal of Statistical Physics*, Vol:162(2), 2016.
<https://link.springer.com/article/10.1007/s10955-015-1414-7>
- C. H. Coimbra-Araújo, **R. C. Anjos**, Luminosity of ultrahigh energy cosmic rays and bounds on magnetic luminosity of radio-loud active galactic nuclei, *Physical Review D*, Vol:92(10), 2015.
<https://journals.aps.org/prd/abstract/10.1103/PhysRevD.92.103001>
- 8. R. C. Anjos**; V. de Souza, A.D. Supanitsky. Upper limits on the total cosmic-ray luminosity of individual sources. *Journal of Cosmology and Astroparticle Physics*, v. 2014, p. 049-049, 2014.
<https://iopscience.iop.org/article/10.1088/1475-7516/2014/07/049>

As member of the Pierre Auger Collaboration

1. An Indication of Anisotropy in Arrival Directions of Ultra-high-energy Cosmic Rays through Comparison to the Flux Pattern of Extragalactic Gamma-Ray Sources. *The Astrophysical Journal*, v. 853, p. L29, 2018.
2. The Pierre Auger Collaboration; Multi-resolution anisotropy studies of ultra-high energy cosmic rays detected at the Pierre Auger Observatory. *Journal Of Cosmology And Astroparticle Physics*, v. 6, p. 026, 2017.
3. The Pierre Auger Collaboration; Spectral Calibration of the Fluorescence Telescopes of the Pierre Auger Observatory. *Astroparticle Physics* v. 95C, p. 44-56, 2017.
4. The Pierre Auger Collaboration; Observation of a Large-scale Anisotropy in the Arrival Directions of Cosmic Rays above 8×10^{18} eV. *Science* v. 357, p. 1266-1270, 2017.
<http://science.sciencemag.org/content/357/6357/1266>
5. The Pierre Auger Collaboration; Multi-messenger Observations of a Binary Neutron Star Merger. *The Astrophysical Journal Letters*, v. 848:L12, 2017.
6. The Pierre Auger Collaboration; Calibration of the Logarithmic-Periodic Dipole Antenna (LPDA) Radio Stations at the Pierre Auger Observatory using an Octocopter. *Journal of Instrumentation*, v. 12, p. T10005, 2017.
7. The Pierre Auger Collaboration; Search for High-energy Neutrinos from Binary Neutron Star Merger GW170817 with ANTARES, IceCube, and the Pierre Auger Observatory. *The Astrophysical Journal*, v. 850 no.2, L35, 2017.
8. The Pierre Auger Collaboration; Combined fit of spectrum and composition data as measured by the Pierre Auger Observatory. *Journal Of Cosmology And Astroparticle Physics*, v. 038, p. 04, 2017.
9. The Pierre Auger Collaboration; Muon counting using silicon photomultipliers in the AMIGA detector of the Pierre Auger observatory. *Journal of Instrumentation*, v. 12, p. P03002-P03002, 2017.
10. The Pierre Auger Collaboration; A Targeted Search for Point Sources of EeV Photons with the Pierre Auger Observatory. *The Astrophysical Journal*, v. 837, p. L25, 2017.
11. The Pierre Auger Collaboration; Search for photons with energies above 10^{18} eV using the hybrid detector of the Pierre Auger Observatory. *Journal Of Cosmology And Astroparticle Physics*, v. 2017, p. 009-009, 2017.

12. The Pierre Auger Collaboration; Impact of atmospheric effects on the energy reconstruction of air showers observed by the surface detectors of the Pierre Auger Observatory. *Journal of Instrumentation*, v. 12, p. P02006-P02006, 2017.
13. The Pierre Auger Collaboration; Evidence for a mixed mass composition at the ankle? in the cosmic-ray spectrum. *Physics Letters. B (Print)*, v. 762, p. 288-295, 2016.
14. The Pierre Auger Collaboration; Search for ultrarelativistic magnetic monopoles with the Pierre Auger observatory. *Physical Review D*, v. 94, p. 082002, 2016.
15. The Pierre Auger Collaboration; Testing Hadronic Interactions at Ultrahigh Energies with Air Showers Measured by the Pierre Auger Observatory. *Physical Review Letters (Print)*, v. 117, p. 2001, 2016.
16. The Pierre Auger Collaboration; Ultrahigh-energy neutrino follow-up of gravitational wave events GW150914 and GW151226 with the Pierre Auger Observatory. *Physical Review D*, v. 94, p. 2007, 2016.
17. The Pierre Auger Collaboration; Energy estimation of cosmic rays with the Engineering Radio Array of the Pierre Auger Observatory. *Physical Review D*, v. 93, p. 2005-1, 2016.
18. The Pierre Auger Collaboration; Measurement of the Radiation Energy in the Radio Signal of Extensive Air Showers as a Universal Estimator of Cosmic-Ray Energy. *Physical Review Letters (Print)*, v. 116, p. 1101-1, 2016.
19. The Pierre Auger Collaboration; Azimuthal asymmetry in the risetime of the surface detector signals of the Pierre Auger Observatory. *Physical Review D*, v. 93, p. 072006-1-072006-16, 2016.
20. The Pierre Auger Collaboration; Prototype muon detectors for the AMIGA component of the Pierre Auger Observatory. *Journal of Instrumentation*, v. 11, p. P02012-P02012, 2016.
21. The Pierre Auger Collaboration; Nanosecond-level time synchronization of autonomous radio detector stations for extensive air showers. *Journal of Instrumentation*, v. 11, p. P01018-P01018, 2016.
22. The Pierre Auger Collaboration; Search for correlations between the arrival directions of IceCube neutrino events and ultrahigh-energy cosmic rays detected by the Pierre Auger Observatory and the Telescope Array. *Journal of Cosmology and Astroparticle Physics*, v. 01, p. 037, 2016.

As member of the Cherenkov Telescope Array Collaboration

1. Science with the Cherenkov Telescope Array, arXiv:1709.07997, 2017.