

# Rapport d'activité LPNHE 2020–2021

## Liste de publications du groupe CTA

11 novembre 2021

### Articles

1. S. E. Motta, J. Rodriguez, E. Jourdain et al. « The INTEGRAL view on black hole X-ray binaries ». *New A Rev.* 93, 101618 (déc. 2021), p. 101618. DOI : [10.1016/j.newar.2021.101618](https://doi.org/10.1016/j.newar.2021.101618). arXiv : [2105.05547](https://arxiv.org/abs/2105.05547) [astro-ph.HE]
2. A. Tsiaghina, P. Jean, J. -F. Olive et al. « Measurement of performance of the NectarCAM photodetectors ». *Nuclear Instruments and Methods in Physics Research A* 1007, 165413 (août 2021), p. 165413. DOI : [10.1016/j.nima.2021.165413](https://doi.org/10.1016/j.nima.2021.165413). arXiv : [2110.06030](https://arxiv.org/abs/2110.06030) [astro-ph.IM]
3. P. Goldoni, S. Pita, C. Boisson et al. « Optical spectroscopy of blazars for the Cherenkov Telescope Array ». *A&A* 650, A106 (juin 2021), A106. DOI : [10.1051/0004-6361/202040090](https://doi.org/10.1051/0004-6361/202040090). arXiv : [2012.05176](https://arxiv.org/abs/2012.05176) [astro-ph.HE]
4. F. Cangemi, T. Beuchert, T. Siebert et al. « Potential origin of the state-dependent high-energy tail in the black hole microquasar Cygnus X-1 as seen with INTEGRAL ». *A&A* 650, A93 (juin 2021), A93. DOI : [10.1051/0004-6361/202038604](https://doi.org/10.1051/0004-6361/202038604). arXiv : [2102.04773](https://arxiv.org/abs/2102.04773) [astro-ph.HE]
5. F. Iocco, M. Meyer, M. Doro et al. « Probing Dark Matter and Fundamental Physics with the Cherenkov Telescope Array ». *arXiv e-prints*, arXiv :2106.03582 (juin 2021), arXiv :2106.03582. arXiv : [2106.03582](https://arxiv.org/abs/2106.03582) [astro-ph.HE] (ASTRONET white paper)
6. A. Araudo, G. Morlino, B. Olmi et al. « Origin and role of relativistic cosmic particles ». *arXiv e-prints*, arXiv :2106.03599 (juin 2021), arXiv :2106.03599. arXiv : [2106.03599](https://arxiv.org/abs/2106.03599) [astro-ph.HE] (ASTRONET white paper)
7. C. Boisson, A. M. Brown, A. Burtovoi et al. « Probing extreme environments with the Cherenkov Telescope Array ». *arXiv e-prints*, arXiv :2106.05971 (juin 2021), arXiv :2106.05971. arXiv : [2106.05971](https://arxiv.org/abs/2106.05971) [astro-ph.IM] (ASTRONET white paper)
8. Ž. Bošnjak, A. M. Brown, A. Carosi et al. « Multi-messenger and transient astrophysics with the Cherenkov Telescope Array ». *arXiv e-prints*, arXiv :2106.03621 (juin 2021), arXiv :2106.03621. arXiv : [2106.03621](https://arxiv.org/abs/2106.03621) [astro-ph.HE] (ASTRONET white paper)

9. M. Cerruti, A. Zech, C. Boisson et al. « Erratum : Lepto-hadronic single-zone models for the electromagnetic and neutrino emission of TXS 0506+056 ». *MNRAS* 502.1 (mar. 2021), p. L21-L22. DOI : [10.1093/mnrasl/slaa188](https://doi.org/10.1093/mnrasl/slaa188)
10. H. Abdalla, H. Abe, F. Acero et al. « Sensitivity of the Cherenkov Telescope Array for probing cosmology and fundamental physics with gamma-ray propagation ». *J. Cosmology Astropart. Phys.* 2021.2, 048 (fév. 2021), p. 048. DOI : [10.1088/1475-7516/2021/02/048](https://doi.org/10.1088/1475-7516/2021/02/048). arXiv : [2010.01349](https://arxiv.org/abs/2010.01349) [[astro-ph.HE](#)]
11. A. Acharyya, R. Adam, C. Adams et al. « Sensitivity of the Cherenkov Telescope Array to a dark matter signal from the Galactic centre ». *J. Cosmology Astropart. Phys.* 2021.1, 057 (jan. 2021), p. 057. DOI : [10.1088/1475-7516/2021/01/057](https://doi.org/10.1088/1475-7516/2021/01/057). arXiv : [2007.16129](https://arxiv.org/abs/2007.16129) [[astro-ph.HE](#)]
12. Barbara Biasuzzi, Kevin Pressard, Jonathan Biteau et al. « Design and characterization of a single photoelectron calibration system for the NectarCAM camera of the medium-sized telescopes of the Cherenkov Telescope Array ». *Nuclear Instruments and Methods in Physics Research A* 950, 162949 (jan. 2020), p. 162949. DOI : [10.1016/j.nima.2019.162949](https://doi.org/10.1016/j.nima.2019.162949). arXiv : [1910.07446](https://arxiv.org/abs/1910.07446) [[astro-ph.IM](#)]

## Actes de conférences

1. Thomas Armstrong, Heide Costantini, Jean-François Glicenstein et al. « Monte Carlo Simulations and Validation of NectarCAM, a Medium Sized Telescope Camera for CTA ». *arXiv e-prints*, arXiv :2108.00426 (août 2021), arXiv :2108.00426. arXiv : [2108.00426](https://arxiv.org/abs/2108.00426) [[astro-ph.IM](#)]
2. E. Kasai, P. Goldoni, M. Backes et al. « Southern African Large Telescope Spectroscopy of BL Lacs for the CTA project ». *arXiv e-prints*, arXiv :2108.04917 (août 2021), arXiv :2108.04917. arXiv : [2108.04917](https://arxiv.org/abs/2108.04917) [[astro-ph.HE](#)]
3. Michael Zacharias, Jonathan Heil, Markus Boettcher et al. « The ablation of gas clouds by blazar jets and the long-lasting flare in CTA 102 ». *arXiv e-prints*, arXiv :2107.11108 (juil. 2021), arXiv :2107.11108. arXiv : [2107.11108](https://arxiv.org/abs/2107.11108) [[astro-ph.HE](#)]
4. Anthony Brown, Atreya Acharyya, Alberto Dominguez et al. « Active Galactic Nuclei population studies with the Cherenkov Telescope Array ». *Proceedings of 37th International Cosmic Ray Conference — PoS(ICRC2021)*. T. 395. 2021, p. 887. DOI : [10.22323/1.395.0887](https://doi.org/10.22323/1.395.0887)