Rapport d'activité LPNHE 2020–2021
Liste de publications du groupe DarkSide

2 décembre 2021

Articles

1. A. Aab, P. Abreu, M. Aglietta et al. « Design, upgrade and characterization of the silicon photomultiplier front-end for the AMIGA detector at the Pierre Auger Observatory ». *Journal of Instrumentation* 16.11, P11026 (nov. 2021), P11026. DOI : 10.1088/1748-0221/16/11/P11026. arXiv : 2110.05350 [physics.ins-det]
2. P. Agnes, I. F. M. Albuquerque, T. Alexander et al. « Calibration of the liquid argon ionization response to low energy electronic and nuclear recoils with DarkSide-50 ». *Phys. Rev. D* 104.8, 082005 (oct. 2021), p. 082005. DOI : 10.1103/PhysRevD.104.082005
3. The DarkSide-50 Collaboration, : P. Agnes et al. « A study of events with photoelectric emission in the DarkSide-50 liquid argon Time Projection Chamber ». *arXiv e-prints*, arXiv :2107.08015 (juil. 2021), arXiv :2107.08015. arXiv : 2107.08015 [physics.ins-det]
4. P. Agnes, S. Albergo, I. Albuquerque et al. « Performance of the ReD TPC, a novel double-phase LAr detector with Silicon Photomultiplier Readout ». *arXiv e-prints*, arXiv :2106.13168 (juin 2021), arXiv :2106.13168. arXiv : 2106.13168 [physics.ins-det]
5. P. Agnes, S. Albergo, I. F. M. Albuquerque et al. « Separating 3^{9}Ar from 4^{0}Ar by cryogenic distillation with Aria for dark-matter searches ». *European Physical Journal C* 81.4, 359 (avr. 2021), p. 359. DOI : 10.1140/epjc/s10052-021-09121-9
6. DarkSide-20k Collaboration, P. Agnes, S. Albergo et al. « Sensitivity of future liquid argon dark matter search experiments to core-collapse supernova neutrinos ». *J. Cosmology Astropart. Phys.* 2021.3, 043 (mar. 2021), p. 043. DOI : 10.1088/1475-7516/2021/03/043. arXiv : 2011.07819 [astro-ph.HE]
7. C. E. Aalseth, S. Abdelhakim, P. Agnes et al. « SiPM-matrix readout of two-phase argon detectors using electroluminescence in the visible and near infrared range ». *European Physical Journal C* 81.2, 153 (fév. 2021), p. 153. DOI : 10.1140/epjc/s10052-020-08801-2
8. P. Agnes, I. F. M. Albuquerque, T. Alexander et al. « Effective field theory interactions for liquid argon target in DarkSide-50 experiment ». *Phys. Rev. D* 101.6, 062002 (mar. 2020), p. 062002. DOI : 10.1103/PhysRevD.101.062002

9. C. E. Aalseth, S. Abdelhakim, F. Acerbi et al. « Design and construction of a new detector to measure ultra-low radioactive-isotope contamination of argon ». *Journal of Instrumentation* 15.2 (fév. 2020), P02024. DOI : 10.1088/1748-0221/15/02/P02024. arXiv : 2001.08106 [astro-ph.IM]