Rapport d'activité LPNHE 2022–2023
Liste de publications du groupe DAMIC

[1] Prakruth Adari et al. « EXCESS workshop : Descriptions of rising low-energy spectra ». *SciPost Phys. Proc.* 9 (2022). Sous la dir. d'A. Fuss, M. Kaznacheeva, F. Reindl et al., p. 001. DOI : 10.21468/SciPostPhysProc.9.001. arXiv : 2202.05097 [astro-ph.IM].

[2] A. Aguilar-Arevalo, D. Amidei, I. Arnquist et al. « Characterization of the background spectrum in DAMIC at SNOLAB ». Phys. Rev. D 105.6, 062003 (mars 2022), p. 062003. DOI : 10.1103/PhysRevD.105.062003. arXiv : 2110.13133 [hep-ex].

[3] A. Aguilar-Arevalo, I. Arnquist, N. Avalos et al. « Confirmation of the spectral excess in DAMIC at SNOLAB with skipper CCDs ». *arXiv e-prints* (juin 2023). arXiv : 2306.01717 [astro-ph.CO].

[4] I. Arnquist, N. Avalos, P. Bailly et al. « The DAMIC-M Experiment : Status and First Results ». *arXiv e-prints* (oct. 2022). arXiv : 2210.12070 [hep-ex].

[5] I. Arnquist, N. Avalos, D. Baxter et al. « First Constraints from DAMIC-M on Sub-GeV Dark-Matter Particles Interacting with Electrons ». Phys. Rev. Lett. 130.17, 171003 (avr. 2023), p. 171003. DOI : 10.1103/PhysRevLett.130.171003. arXiv : 2302.02372 [hep-ex].

[6] I. Arnquist, N. Avalos, D. Baxter et al. « Search for Daily Modulation of MeV Dark Matter Signals with DAMIC-M ». *arXiv e-prints* (juill. 2023). arXiv : 2307.07251 [hep-ex].

[7] K. J. McGuire, A. E. Chavarria, N. Castello-Mor et al. « Nuclear Recoil Identification in a Scientific Charge-Coupled Device ». *arXiv e-prints* (sept. 2023). arXiv : 2309.07869 [physics.ins-det].

[8] D. Norcini, N. Castelló-Mor, D. Baxter et al. « Precision measurement of Compton scattering in silicon with a skipper CCD for dark matter detection ». Phys. Rev. D 106.9, 092001 (nov. 2022), p. 092001. DOI : 10.1103/PhysRevD.106.092001. arXiv : 2207.00809 [physics.ins-det].