

# PUBLICATIONS MATIÈRE NOIRE – 08 APR 2024

## article

2023

1. Search for Dark-Matter–Nucleon Interactions via Migdal Effect with DarkSide-50, P. Agnes *et al.*, DarkSide Collaboration, Phys. Rev. Lett 130 (2023) 101001
2. Search for Dark Matter Particle Interactions with Electron Final States with DarkSide-50, P. Agnes *et al.*, DarkSide Collaboration, Phys. Rev. Lett 130 (2023) 101002
3. Search for low-mass dark matter WIMPs with 12 ton-day exposure of DarkSide-50, P. Agnes *et al.*, DarkSide Collaboration, Phys. Rev. D 107 (2023) 063001
4. Sensitivity projections for a dual-phase argon TPC optimized for light dark matter searches through the ionization channel, P. Agnes *et al.*, Phys. Rev. D 107 (2023) 112006
5. Measurement of isotopic separation of argon with the prototype of the cryogenic distillation plant Aria for dark matter searches, E. Aaron *et al.*, DarkSide Collaboration, Eur. Phys. J. C 83 (2023) 453
6. Study of cosmogenic activation above ground for the DarkSide-20k experiment, A. Elersich *et al.*, DarkSide Collaboration, Astropart. Phys. 152 (2023) 102878
7. Search for low mass dark matter in DarkSide-50: the bayesian network approach, P. Agnes *et al.*, DarkSide Collaboration, Eur. Phys. J. C 83 (2023) 322

2022

1. A study of events with photoelectric emission in the DarkSide-50 liquid argon Time Projection Chamber, P. Agnes *et al.*, DarkSide Collaboration, Astropart. Phys. 140 (2022) 102704

2021

1. SiPM-matrix readout of two-phase argon detectors using electroluminescence in the visible and near infrared range, C. E. Aalseth *et al.*, DarkSide Collaboration, Eur. Phys. J. C 81 (2021) 153
2. Sensitivity of future liquid argon dark matter search experiments to core-collapse supernova neutrinos, Agnes, P. *et al.*, DarkSide Collaboration, J. Cosmol. Astropart. P 03 (2021) 043
3. Separating  $^{39}\text{Ar}$  from  $^{40}\text{Ar}$  by cryogenic distillation with Aria for dark-matter searches, P. Agnes *et al.*, DarkSide Collaboration, Eur. Phys. J. C 81 (2021) 359

4. Simulating MADMAX in 3D: Requirements for Dielectric Axion Haloscopes, S. Knirck *et al.*, MADMAX Collaboration, *J. Cosmol. Astropart. Phys.* P 10 (2021) 034
5. Calibration of the liquid argon ionization response to low energy electronic and nuclear recoils with DarkSide-50, P. Agnes *et al.*, DarkSide Collaboration, *Phys. Rev. D* 104 (2021) 082005

2020

1. Design and Construction of a New Detector to Measure Ultra- Low Radioactive-Isotope Contamination of Argon, C. E. Aalseth *et al.*, DarkSide Collaboration, *J. Instrum* 15 (2020) P02024

## acte de conférence

2023

1. The simulation of DarkSide-20k calibration, M. Van Uffelen, indéfini, 57th Rencontres de Moriond, Electroweak Interactions and Unified theories (2023), La Thuile, Italy, 18-25 Mar 2023

2022

1. The calibration of a direct search for dark matter detector: the TPC of DarkSide-20k, M. Van Uffelen, indéfini, Journées de Rencontres Jeunes Chercheurs (2022), Saint Jean de Monts, France, 23-29 Oct 2022

## rapport

2020

1. MADMAX Status Report, S. Beurthey, N. Böhmer, P. Brun, A. Caldwell, L. Chevalier, C. Diaconu, G. Dvali, P. Freire, E. Garutti, C. Gooch, A. Hambarzumjan, S. Heyminck, F. Hubaut, J. Jochum, P. Karst, S. Khan, D. Kittlinger, S. Knirck, M. Kramer, C. Krieger, T. Lasserre, C. Lee, X. Li, A. Lindner, B. Majorovits, M. Matysek, S. Martens, E. Öz, P. Pataguppi, P. Pralavorio, G. Raffelt, J. Redondo, O. Reimann, A. Ringwald, N. Roch, K. Saikawa, J. Schaffran, A. Schmidt, J. Schütte-Engel, A. Sedlak, F. Steffen, L. Shtembari, C. Strandhagen, D. Strom, G. Wieching, arXiv:2003.10894 [physics.ins-det]
2. Usage of the CERN MORPURGO magnet for the MADMAX prototype, S. Beurthey, N. Böhmer, P. Brun, A. Caldwell, L. Chevalier, C. Diaconu, G. Dvali, P. Freire, A. Gardikiotis, E. Garutti, C. Gooch, A. Hambarzumjan, S. Heyminck, F. Hubaut, J. Jochum, P. Karst, S. Khan, D. Kittlinger, S. Knirck, M. Kramer, C. Krieger, T. Lasserre, C. Lee, X. Li, A. Lindner, B. Majorovits, M. Matysek, S. Martens, E. Öz, P. Pataguppi, P. Pralavorio, G. Raffelt, J. Redondo, O. Reimann, A. Ringwald, K. Saikawa, A. Sedlak, L. Shtembari, F. Steffen, C. Strandhagen, D. Strom, A. Schmidt, J. Schütte-Engel, J. Schaffran, G. Wieching, CERN-SPSC-2020-012, SPSC-P-366