

PUBLICATIONS

“The only source of knowledge is experience.”

Albert Einstein

Journal Papers: XENON Experiment

XENON Collaboration (E. Aprile et al.)

[Signal Yields of keV Electronic Recoils and Their Discrimination from Nuclear Recoils in Liquid Xenon](#), Phys. Rev. D, 97(9):09200 arXiv:1709.10149 [astro-ph.IM] (May 2018)

XENON Collaboration (E. Aprile et al.)

[Search for magnetic inelastic dark matter with XENON100](#). Journal of Cosmology and Astroparticle Physics, 2017:039

XENON Collaboration (E. Aprile et al.)

[Search for Bosonic Super-WIMP Interactions with the XENON100 Experiment](#) arXiv:1709.02222 [astro-ph.CO] (7 Sep 2017)

XENON Collaboration (E. Aprile et al.)

[The XENON1T Dark Matter Experiment](#) arXiv:1708.07051 [astro-ph.IM] (23 Aug 2017)

XENON Collaboration (E. Aprile et al.)

[Intrinsic backgrounds from Rn and Kr in the XENON100 experiment](#) arXiv:1708.03617 [astro-ph.IM] (11 Aug 2017)

XENON Collaboration (E. Aprile et al.)

[First Dark Matter Search Results from the XENON1T Experiment](#) arXiv:1705.06655 [astro-ph.CO] (18 May 2017)

XENON Collaboration (E. Aprile et al.)

[Effective field theory search for high-energy nuclear recoils using the XENON100 dark matter detector](#) arXiv:1705.02614 [astro-ph.CO] (7 May 2017)

XENON Collaboration (E. Aprile et al.)

[Search for WIMP Inelastic Scattering off Xenon Nuclei with XENON100](#) arXiv:1705.05830 [hep-ex] (1 May 2017)

XENON Collaboration (E. Aprile et al.)

[Search for magnetic inelastic dark matter with XENON100](#) arXiv:1704.05804 [astro-ph.CO] (31 Oct 2017)

XENON Collaboration (E. Aprile et al.)
[Online \$^{222}\text{Rn}\$ removal by cryogenic distillation in the XENON100 experiment.](#)
arXiv:1702.06942 [physics.ins-det] (22 Feb 2017)

XENON Collaboration (E. Aprile et al.)
[Search for Electronic Recoil Event Rate Modulation with 4 Years of XENON100 Data](#)
arXiv:1701.00769 [astro-ph.CO] (3 Jan 2017)

XENON Collaboration (E. Aprile et al.)
[Removing krypton from xenon by cryogenic distillation to the ppq level](#) arXiv:1612.04284
[physics.ins-det] (13 Dec 2016)

XENON Collaboration (E. Aprile et al.)
[Results from a Calibration of XENON100 Using a Source of Dissolved Radon-220](#)
arXiv:1611.03585 [physics.ins-det] (11 Nov 2016)

XENON Collaboration (E. Aprile et al.)
[XENON100 dark matter results from a combination of 477 live days.](#) arXiv:1609.06154
[astro-ph.CO] (20 Sep 2016)

XENON Collaboration (E. Aprile et al.)
[Search for Two-Neutrino Double Electron Capture of \$^{124}\text{Xe}\$ with XENON100](#)
arXiv:1609.03354 (12 Sep 2016)

XENON Collaboration (E. Aprile et al.)
[DARWIN: towards the ultimate dark matter detector](#) arXiv:1606.07001 [astro-ph.IM] (22 Jun
2016)

Journal Papers: EDELWEISS Papers to which my Postdoctoral work contributed directly

M.-C. Piro , A. Broniatowski, S. Marnieros, L. Dumoulin, E. Olivieri
[Hot Carrier Trapping in High-Purity and Doped Germanium Crystals at Millikelvin Temperatures.](#) J. Low Temp. Phys. DOI 10.1007/s10909-014-1088-6 (2014).

A. Broniatowski, M.-C. Piro, S. Marnieros, L. Dumoulin, E. Olivieri
[H⁻-Like Centers and Space-Charge Effects in Cryogenic Germanium Detectors for Dark Matter Search.](#) J. Low Temp. Phys. DOI 10.1007/s10909-013-1060-x (2014).

Marie-Cécile Piro, PhD.

S. Marnieros, L. Bergé, A. Broniatowski, A.A Drillien, L. Dumoulin, N. Holtzer, E. Olivieri, M.-C. Piro, O. Rigaut

[Controlling the Leakage-Current of Low Temperature Germanium Detectors Using XeF2 Dry Etching](#). J. Low Temp. Phys. DOI 10.1007/s10909-013-0997-0 (2014).

A. Broniatowski, K. Eitel, S. Marnieros, B. Paul, M.-C. Piro, B. Siebenborn, The EDELWEISS Collaboration

[Pulse-Shape Analysis of Ionization Signals in Cryogenic Ge Detectors for Dark Matter](#). J. Low Temp. Phys. DOI 10.1007/s10909-016-1532-x (2016).

A. Broniatowski, M.-C. Piro, S. Marnieros, L. Bergé, L. Dumoulin, M. Chapellier

[Voltage-Assisted Calorimetric Detection of Gamma Interactions in a Prototype Cryogenic Ge Detector of the EDELWEISS Collaboration for Dark Matter Search](#). J. Low Temp. Phys. DOI 10.1007/s10909-016-1471-6 (2016).

Other Journal Papers

EDELWEISS Collaboration (E. Armengaud et al.)

[Measurement of the cosmogenic activation of germanium detectors in EDELWEISS-III](#). arXiv:1607.04560 [astro-ph.CO] (15 Jul 2016)

EDELWEISS Collaboration (L. Hehn et al.)

[Improved EDELWEISS-III sensitivity for low-mass WIMPs using a profile likelihood approach](#). arXiv:1607.03367 [astro-ph.CO] (12 Jul 2016)

EDELWEISS Collaboration (Q. Arnaud et al.)

Signals induced by charge-trapping in EDELWEISS FID detectors: analytical modeling and applications. arXiv:1616.08097 [physics.ins-det] (26 Jun 2016)

EDELWEISS Collaboration (E. Armengaud et al.)

[Constraints on Low-Mass WIMPs from the EDELWEISS-III dark matter search](#). arXiv:1603.05120 [astro-ph.CO] (16 Mar 2016)

EDEIWEISS and and LUMINEU Collaboration (E. Armengaud et al.)

[LUMINEU: a search for neutrinoless double beta decay based on ZnMoO4 scintillating bolometers](#). arXiv:1601.04989 [nucl-ex] (19 Jan 2016)

EDELWEISS and LUMINEU Collaboration (D.V. Poda et al.)

[Scintillating bolometers based on ZnMoO4 and Zn100MoO4 crystals to search for \$0\nu 2\beta\$ decay of \$^{100}\text{Mo}\$ \(LUMINEU project\): first tests at the Modane Underground Laboratory](#) arXiv:1502.01161 [physics.ins-det] (4 Feb 2015)

EDELWEISS Collaboration (E. Armengaud et al.)

[Axion searches with the EDELWEISS-II experiment.](#)

J. of Cosmo. and Astro. Phys. 11(2013)067 doi:10.1088/1475-7516/2013/11/067.

Journal Papers: PICASSO Papers to which my Ph.D. work contributed directly

PICASSO Collaboration (S. Archambault et al.)

[Constraints on Low-Mass WIMP Interactions on 1 9F from PICASSO.](#)

Phys.Lett.B711:153-161 (2012) (*corresponding author : M.-C. Piro).

PICASSO Collaboration (S. Archambault et al.)

[New Insights into Particle Detection with Superheated Liquids.](#)

New J. Phys., 13:043006 (2011).

Other Journal Papers

PICASSO Collaboration (S. Archambault et al.)

[Dark Matter Spin-Dependent Limits for WIMP Interactions on F-19 by PICASSO.](#)

Phys. Lett. B682: 185–192 (2009).

PICASSO Collaboration (F. Aubin et al.)

[Discrimination of Nuclear Recoils from Alpha Particles with Superheated Liquids.](#)

New J. Phys. 10:103017 (2008).

Proceedings

M.-C. Piro et al.

[PICASSO: Search for Dark Matter in the Spin-Dependent Sector.](#)

Proc. Of 12th ICATPP Conference on Cosmic Rays for Particle & Astroparticle Physics
October 2010, Como, Italy.

M.-C. Piro et al.

[Status of PICASSO Experiment for Spin-Dependent Dark Matter Search.](#)

Proc. Of Lake Louise Institute Conference 29 May 2010, Alberta, Canada.(arXiv:
1005.5455v1).