

XENON group publications (July 2017- December 2019)

- [1] **XENON** Collaboration, E. Aprile et al., “Search for Light Dark Matter Interactions Enhanced by the Migdal effect or Bremsstrahlung in XENON1T”, *Phys. Rev. Lett.* **123** (2019), no. 24, 241803, arXiv:1907.12771. doi:10.1103/PhysRevLett.123.241803.
- [2] **XENON** Collaboration, E. Aprile et al., “Light Dark Matter Search with Ionization Signals in XENON1T”, *Phys. Rev. Lett.* **123** (2019), no. 25, 251801, arXiv:1907.11485. doi:10.1103/PhysRevLett.123.251801.
- [3] **XENON** Collaboration, E. Aprile et al., “XENON1T Dark Matter Data Analysis: Signal Reconstruction, Calibration and Event Selection”, *Phys. Rev.* **D100** (2019), no. 5, 052014, arXiv:1906.04717. doi:10.1103/PhysRevD.100.052014.
- [4] **XENON** Collaboration, E. Aprile et al., “The XENON1T Data Acquisition System”, *JINST* **14** (2019), no. 07, P07016, arXiv:1906.00819. doi:10.1088/1748-0221/14/07/P07016.
- [5] **XENON** Collaboration, E. Aprile et al., “Observation of two-neutrino double electron capture in ^{124}Xe with XENON1T”, *Nature* **568** (2019), no. 7753, 532–535, arXiv:1904.11002. doi:10.1038/s41586-019-1124-4.
- [6] **XENON** Collaboration, E. Aprile et al., “XENON1T dark matter data analysis: Signal and background models and statistical inference”, *Phys. Rev.* **D99** (2019), no. 11, 112009, arXiv:1902.11297. doi:10.1103/PhysRevD.99.112009.
- [7] **XENON** Collaboration, E. Aprile et al., “Constraining the spin-dependent WIMP-nucleon cross sections with XENON1T”, *Phys. Rev. Lett.* **122** (2019), no. 14, 141301, arXiv:1902.03234. doi:10.1103/PhysRevLett.122.141301.
- [8] **XENON** Collaboration, E. Aprile et al., “First results on the scalar WIMP-pion coupling, using the XENON1T experiment”, *Phys. Rev. Lett.* **122** (2019), no. 7, 071301, arXiv:1811.12482. doi:10.1103/PhysRevLett.122.071301.
- [9] B. Aimard et al., “A 4 tonne demonstrator for large-scale dual-phase liquid argon time projection chambers”, *JINST* **13** (2018), no. 11, P11003, arXiv:1806.03317. doi:10.1088/1748-0221/13/11/P11003.
- [10] **XENON** Collaboration, E. Aprile et al., “Dark Matter Search Results from a One Ton-Year Exposure of XENON1T”, *Phys. Rev. Lett.* **121** (2018), no. 11, 111302, arXiv:1805.12562. doi:10.1103/PhysRevLett.121.111302.
- [11] **XENON** Collaboration, E. Aprile et al., “Signal Yields of keV Electronic Recoils and Their Discrimination from Nuclear Recoils in Liquid Xenon”, *Phys. Rev.* **D97** (2018), no. 9, 092007, arXiv:1709.10149. doi:10.1103/PhysRevD.97.092007.

- [12] **XENON100** Collaboration, E. Aprile et al., “Search for Bosonic Super-WIMP Interactions with the XENON100 Experiment”, *Phys. Rev.* **D96** (2017), no. 12, 122002, [arXiv:1709.02222](https://arxiv.org/abs/1709.02222). doi:[10.1103/PhysRevD.96.122002](https://doi.org/10.1103/PhysRevD.96.122002).
- [13] **XENON** Collaboration, E. Aprile et al., “The XENON1T Dark Matter Experiment”, *Eur. Phys. J.* **C77** (2017), no. 12, 881, [arXiv:1708.07051](https://arxiv.org/abs/1708.07051). doi:[10.1140/epjc/s10052-017-5326-3](https://doi.org/10.1140/epjc/s10052-017-5326-3).
- [14] **XENON** Collaboration, E. Aprile et al., “Intrinsic backgrounds from Rn and Kr in the XENON100 experiment”, *Eur. Phys. J.* **C78** (2018), no. 2, 132, [arXiv:1708.03617](https://arxiv.org/abs/1708.03617). doi:[10.1140/epjc/s10052-018-5565-y](https://doi.org/10.1140/epjc/s10052-018-5565-y).