



A' search with POKER and NA64

FIPs in the ALPs, Les Houches (FR)

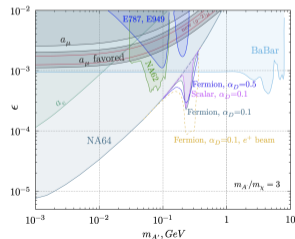
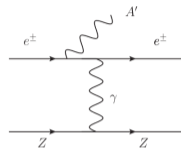
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NA64

- The experiment:
 - Fixed-target (Pb-Scintillator layers ECAL) experiment @CERN H4 beam line (e^- beam)
 - Active beam dump and missing energy techniques to search for rare events
 - Dark photon search (A').
- My contribution:
 - Hardware: characterization of PMTs for the NA64 ECAL (2023 summer run)
 - Software: estimation of the electronuclear background in the positrons run of 2022.



POsitron resonant annihilation into darK mattER

- The experiment:
 - Active beam dump experiment based on the missing energy technique
 - Resonant production of the dark photon (A')
 - Positrons beam impinging on a fixed target, i.e. an electromagnetic calorimeter consisting of PbWO_4 crystals
 - Crystals' readout: SiPM
- My contribution:
 - Characterization of the performances of the crystals
 - Tests of HV supply for the DAQ

