### **CRILIN:**

- semi-homogeneous
- cherenkov PbF<sub>2</sub> crystals with UV-extended
- high granularity
- longitudinal segmentation (optimize for MuCol)
- time resolution better than 25 ps for energy above 3 GeV

## OREO:

**TROMAGNETI** 

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• homogeneous

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- oriented scintillating crystals (PbWO<sub>4</sub>):
  - reduced  $X_0 \rightarrow$  compact EM shower
- application:
  accelerator-based

experiment, space-borne HE&VHE y-ray satellite

# POKER:

- homogeneous
- ~100 PbWO<sub>4</sub> crystals
- 32 X<sub>0</sub> to fully contain the shower
- application: project for light Dark Matter production with fixed,

active target experiment (the calorimeter itself)



- sampling calorimeter
- MPGDs as active layers
- high granularity
- radiation hardness
- cost-effective for large area instrumentation
- R&D born for MuCol

## MAXICC:

HADRONIC

--REA

DUAI

- homogeneous cristal
- longitudinal segmentation for PID (6 X<sub>0</sub>+16 X<sub>0</sub>)
- high granularity
- dual readout capability:
  - readout of Cherenkov and scintillation light from same active element
- application: FCC-ee

#### HiDra:

- high granular dual-readout fiber calorimeter
- cherenkov and scintillating fibers inserted in stainless steel capillaries
- application: FCC-ee







