# IDEA DRC HiDRa prototype

High Resolution, highly granular Dual-Readout demonstrator Prototype large enough to (almost) fully contain hadron showers

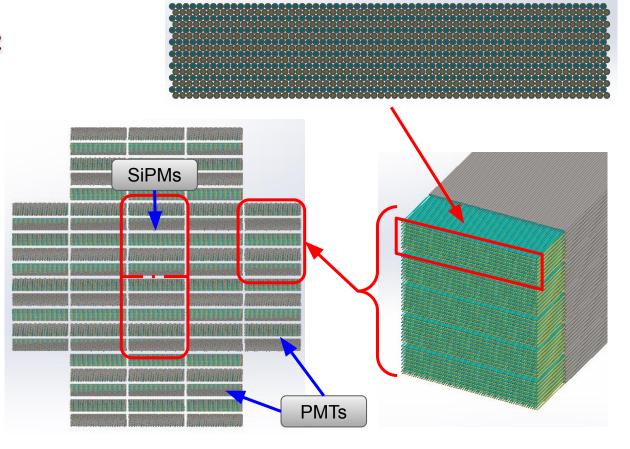
→ 65 × 65 × 250 cm<sup>3</sup>

80 minimodules, each one made of 16×64 capillaries

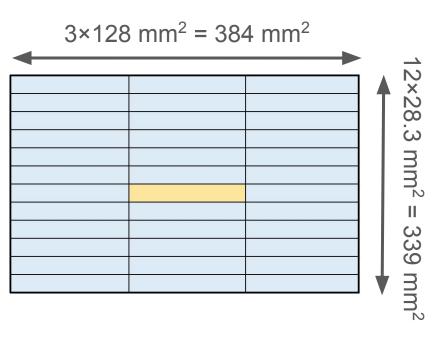
Mixed SiPM and PMT readout

- → Cost/performance optimisation
- → Significant increase in DAQ complexity (10240 SiPMs)

Each external mini-module read out by two PMTs, one for S fibres and one for C fibres (512 fibres each)



## 36-MM PMT-only calorimeter



Test of PMT-readout modules

SiPM-readout modules will be produced later in 2024 - to be tested in 2025

### Program (week 35):

- Calibration and equalisation procedure
- EM resolution
- Uniformity response
- Muon and pion response
- Tuning of G4 simulation



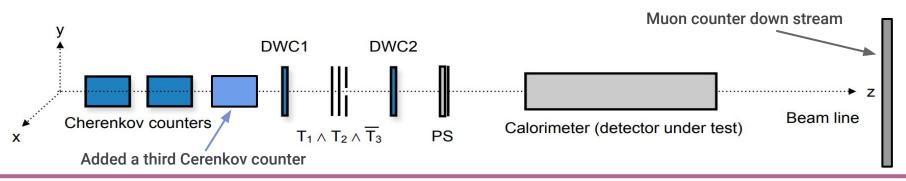
## Equipment to be installed in Week 32

#### In PPE-168 area

### Already available xy and rotating tables, cables

#### To be installed

- Auxiliary detectors on beam line (2 triggers + veto, 2 DWCs, 3 Cherenkov counters)
- Muon counter (after beam dump)
- Preshower
- Tail catcher (to be positioned after the calorimeter)
- Leakage counters



## Activity in week 32

- Installing and test ancillary detectors
- Preparation of DAQ system, test with all available detectors and beam
- Arrival of calorimeter at CERN Prevessin foreseen on July 6th
- Elx mounting and tested on calorimeter
  - Possibly, find location off-beam for working on detector

