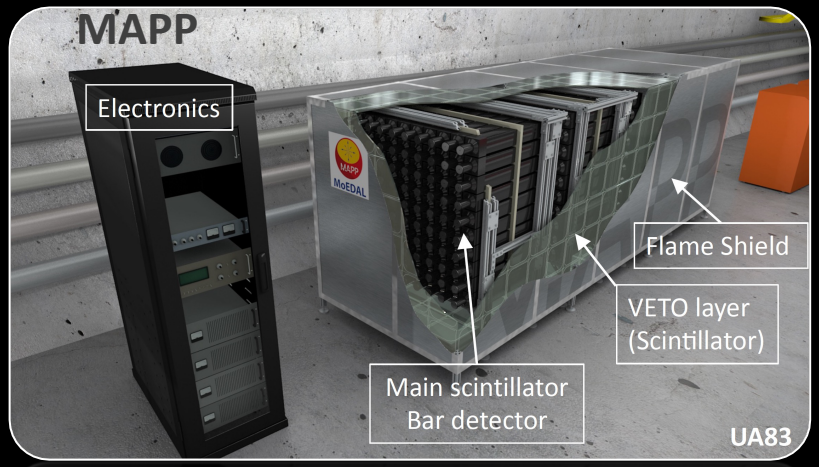
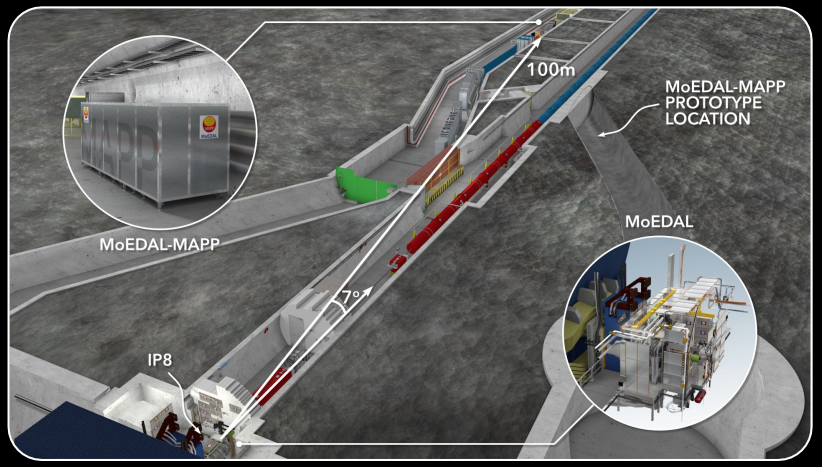
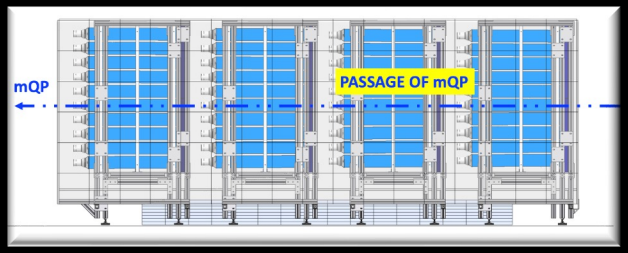
The MAPP-1 Detector at the LHC



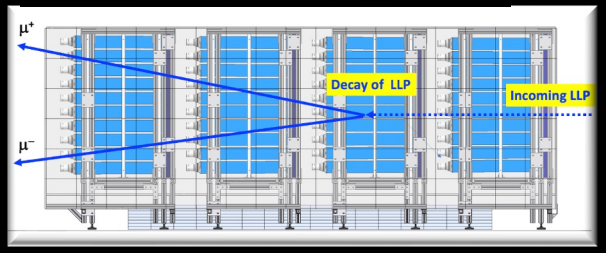


- *The MAPP (MoEDAL Apparatus for Penetrating Particles) detector at UA83 near IP8 is designed to detect feebly interacting, milli-charged and very long-lived particle avatars of new physics at the LHC.*
- *The detector consists of 400 (10 cm x 10cm x 75cm) scintillator bars arranged in 4 x (1.2m x 1.2m x 1m) sections. Each bar is readout by a 3.1-inch PMT. MAPP-1 is enclosed in a hermetic veto detector. All triggering is software based.*

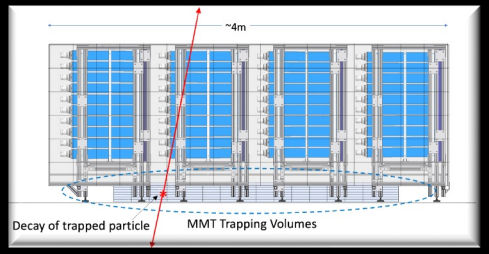
Detection Modes



Passage of a milli-charged particle



Decays of a long-lived particle



Decays of a trapped particle
(monitoring MoEDAL trapping volumes)