

Tracciatori

Camere a bolle

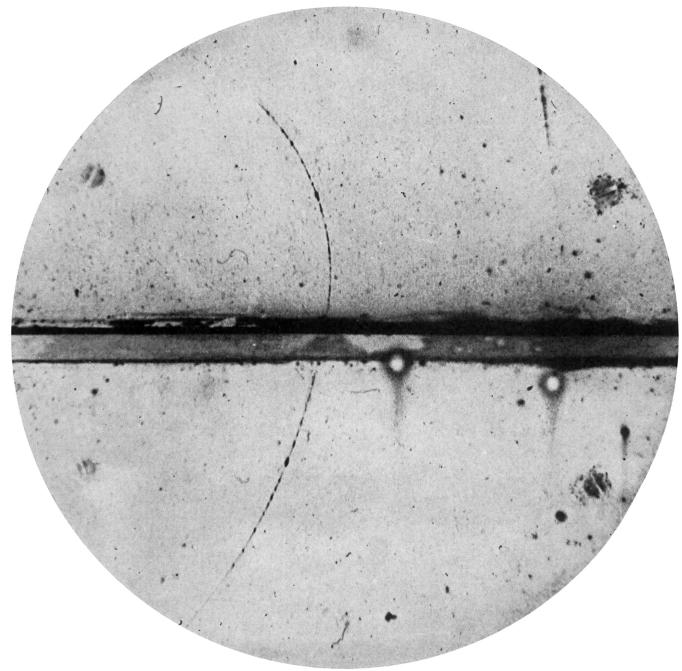
Risoluzione spaziale

$$\delta x \approx 500 \mu\text{m}$$

particelle di carica τ

$$P = 2 \times 0.3 \times B[T] \times R[\text{cm}]$$

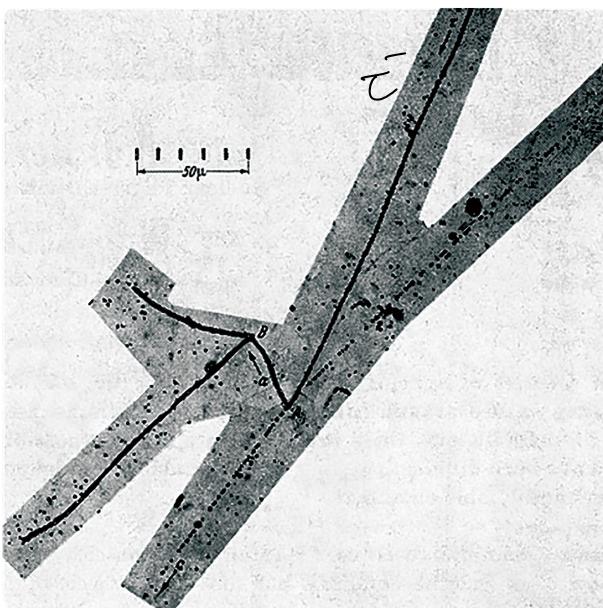
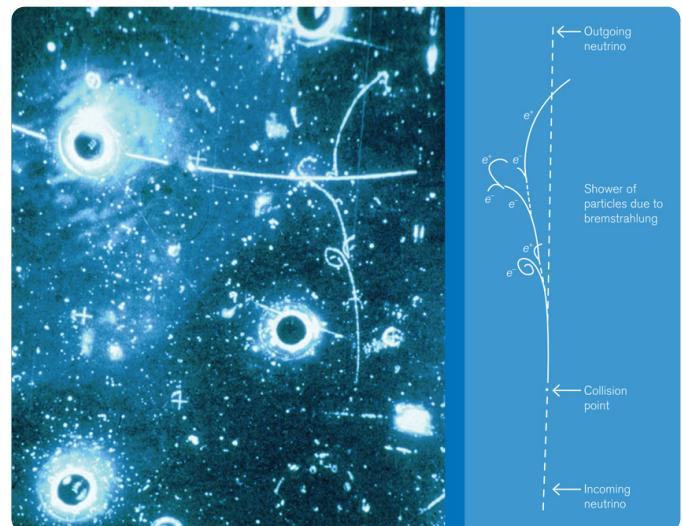
↳ mom in GeV



Gargamelle

camere a bolle

$$\delta x \approx 100 \mu\text{m}$$



Emulsioni su nuclei

Bromuro di Argento
sciolti in molecole gelatinoso.

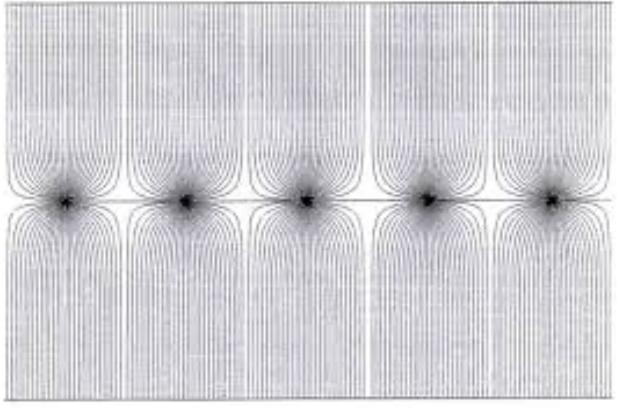
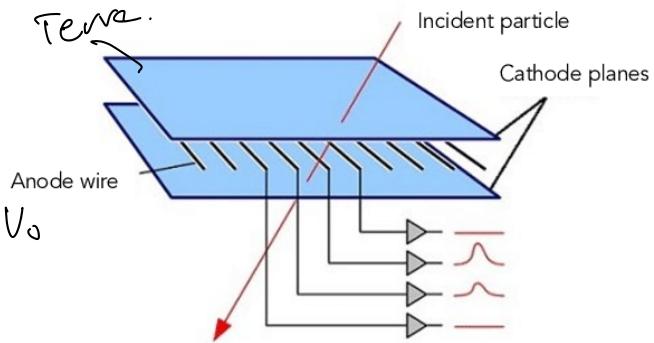
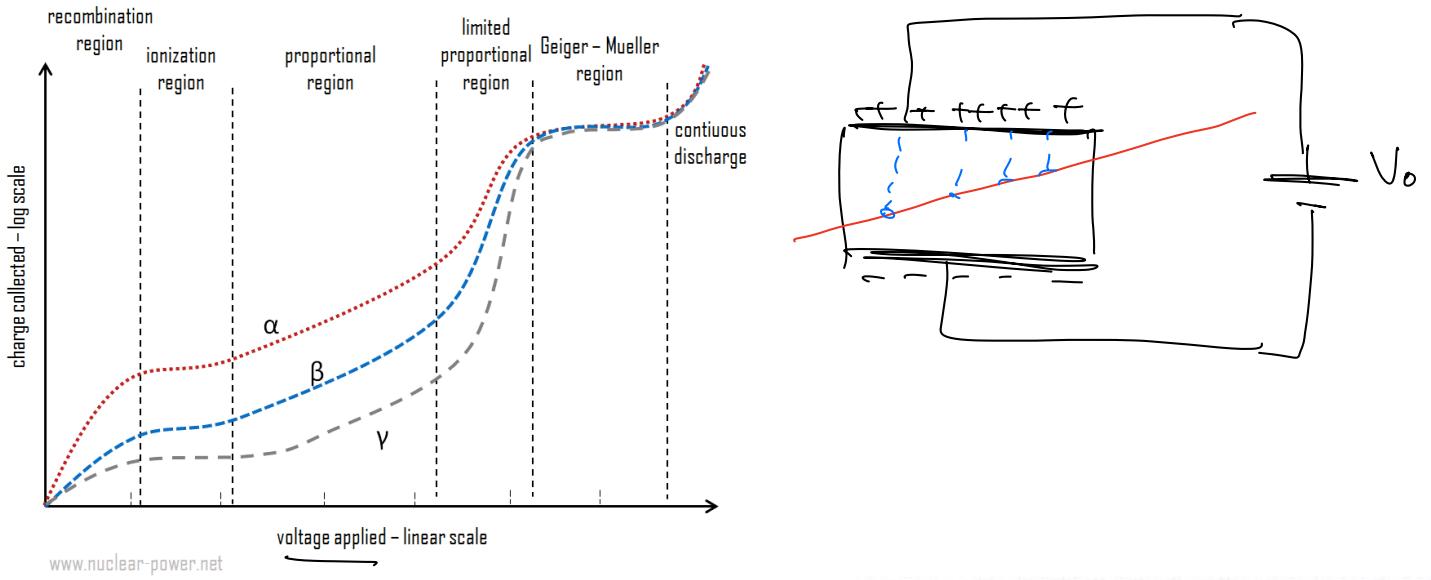
ionizzazione Cambia colore di BrAg
della densità $\bar{\tau}^-$ delle tracce

\Rightarrow mom. \propto ioniz.

$$\delta x \approx 1 \mu\text{m}$$

Rivelatori a ionizzazione

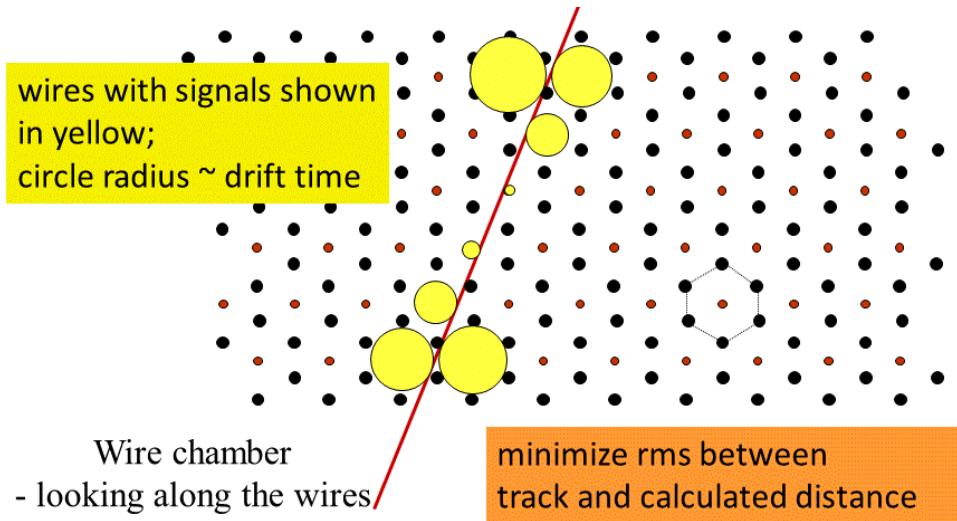
Regions of Gaseous Ionization Detectors



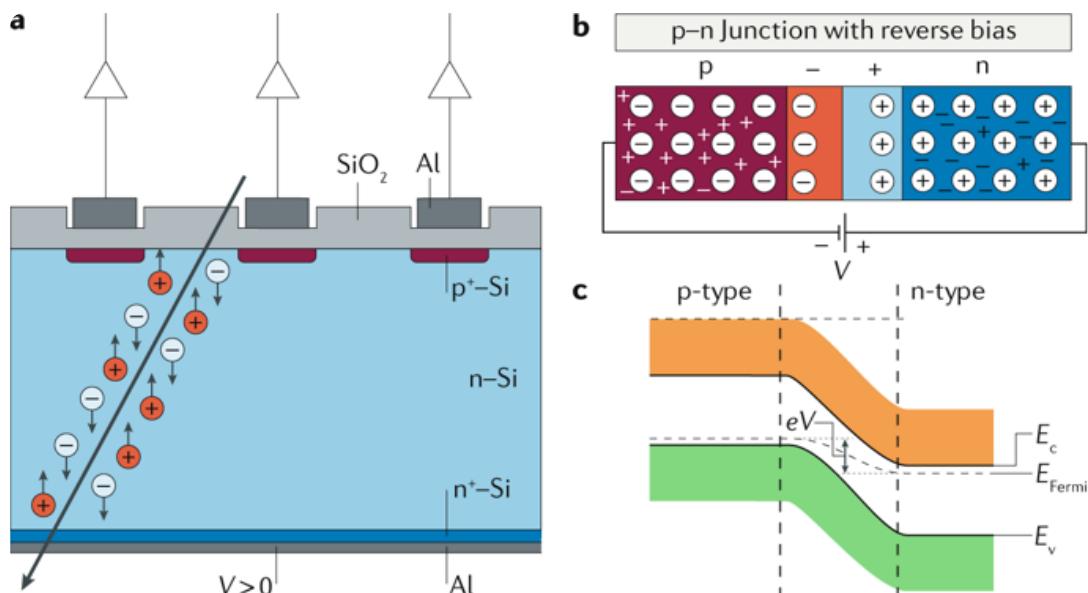
$$r = \frac{1 \text{ mm}}{\sqrt{12}}$$

Camera
a destra

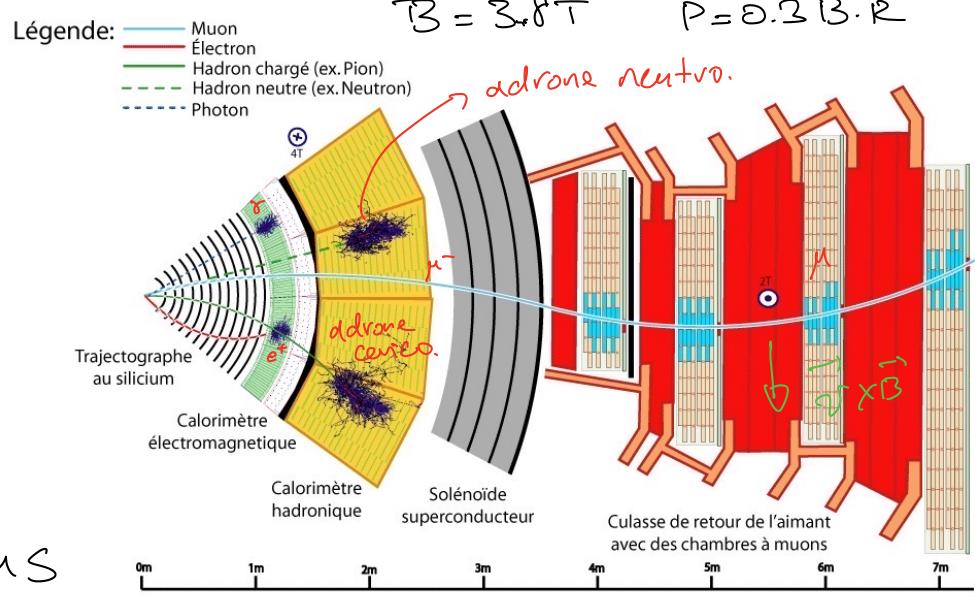
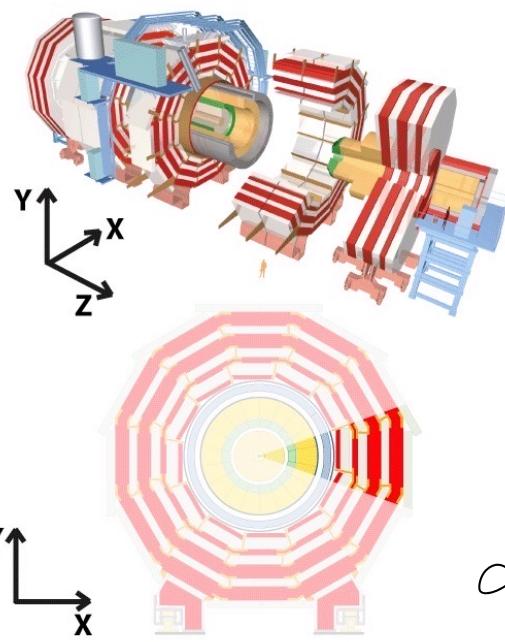


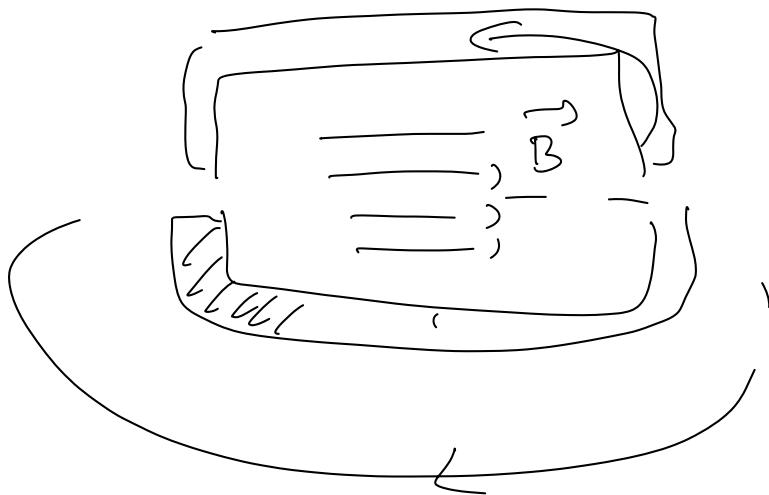


Rivelatori: a Semi-Coulomb Hove



Rivelatori moderni multi-purpose

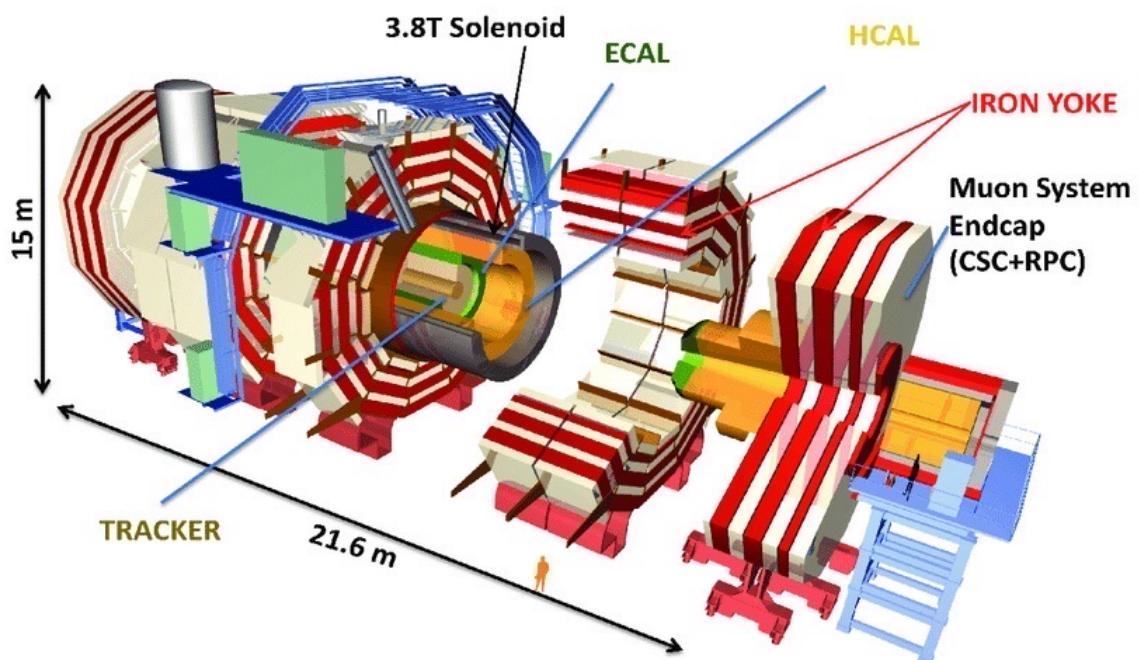




$$\vec{B}$$

$$\vec{v} \times \vec{B}$$

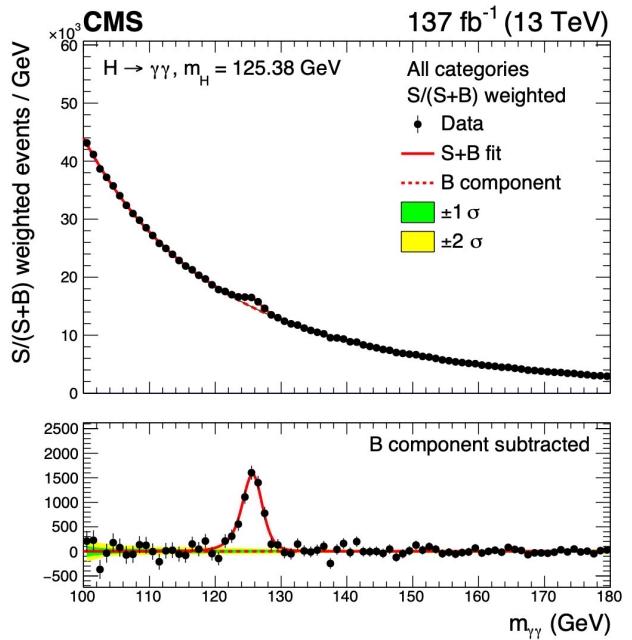
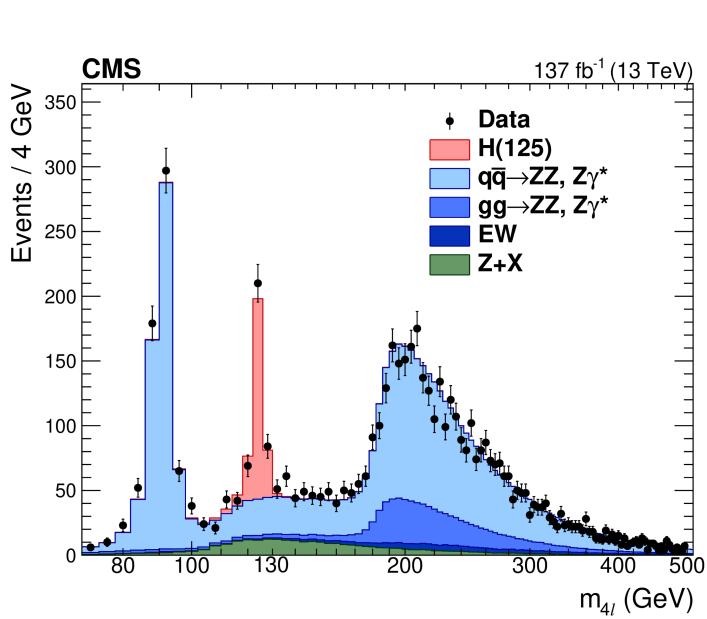
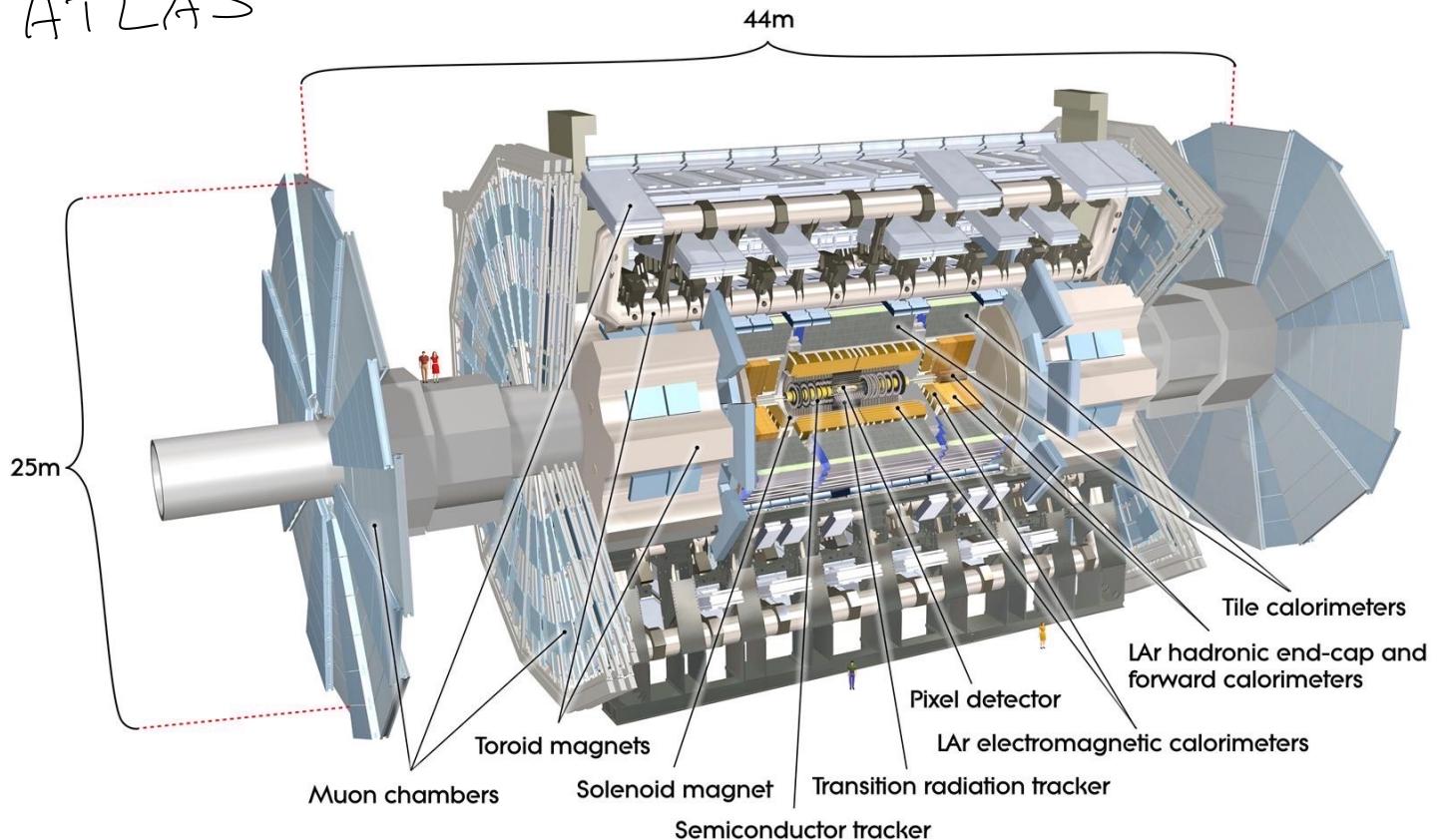
$$F = q(\vec{v} \times \vec{B})$$



Compact Muon Solenoid



ATLAS



$$H \rightarrow \tilde{\chi}^0 \tilde{\chi}^0 \rightarrow \ell^+ \ell^-$$

Diagram illustrating the decay of a Higgs boson (H) into two neutralinos ($\tilde{\chi}^0$). The neutralinos then decay into a pair of leptons ($\ell^+ \ell^-$).

$$H \rightarrow \gamma\gamma$$

Diagram illustrating the decay of a Higgs boson (H) into two photons ($\gamma\gamma$).