

The ATLAS experiment at the LHC

CMS

27 km

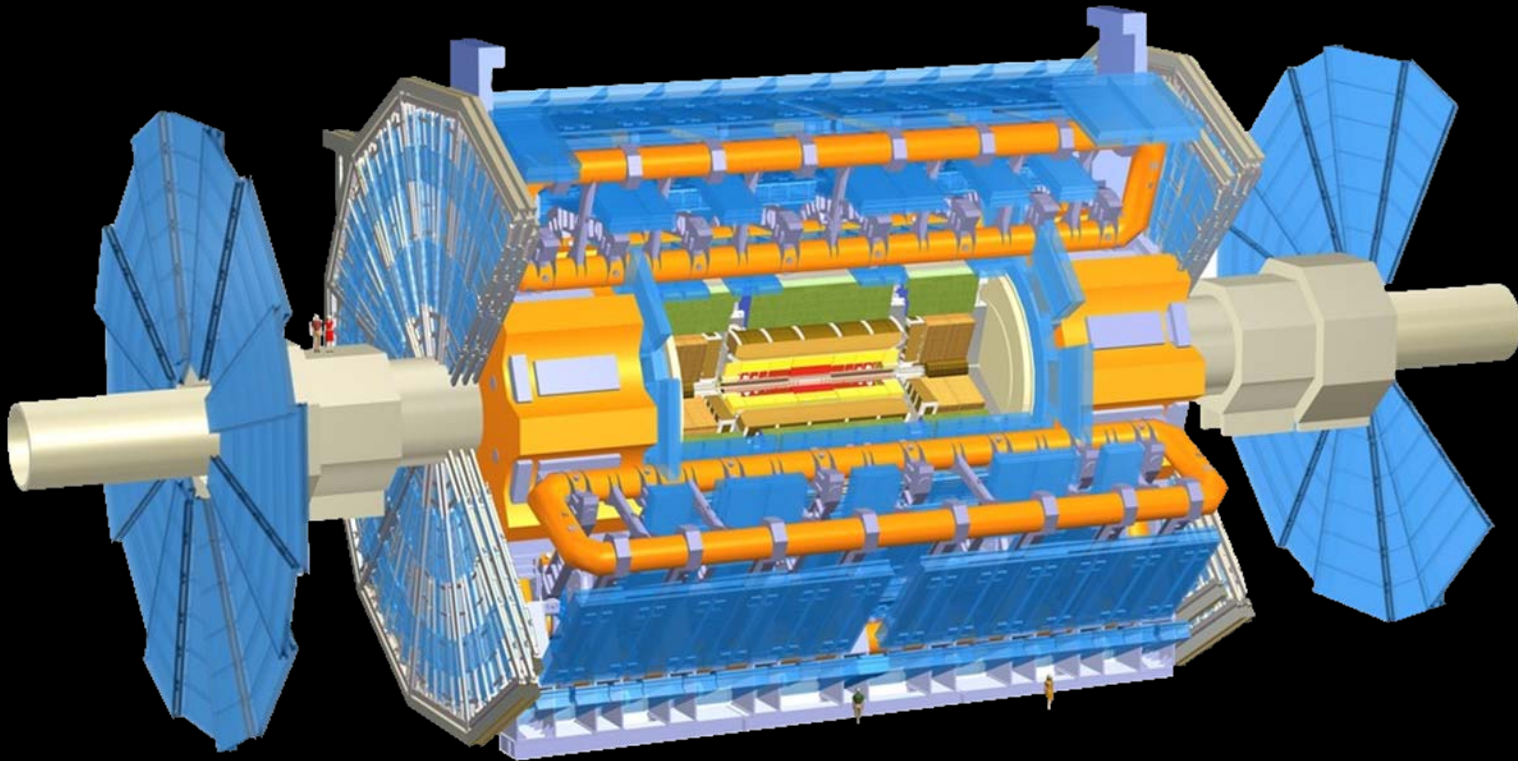


ALICE

ATLAS

LHCb

The ATLAS detector ...



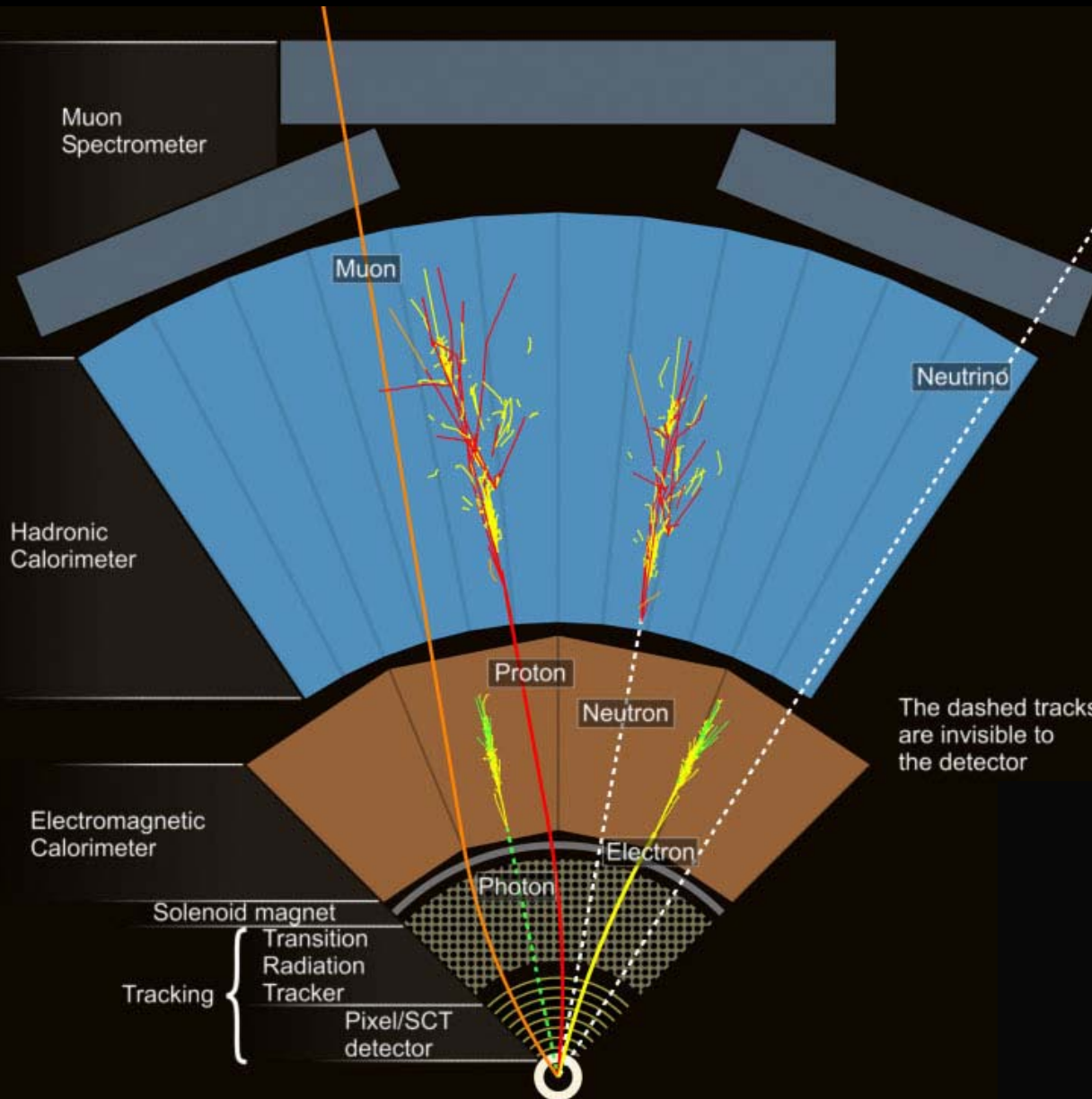
... is composed of cylindrical layers:

Tracking detector: Pixel, SCT, TRT (Solenoid magnetic field)

Calorimeter: Liquid Argon, Tile

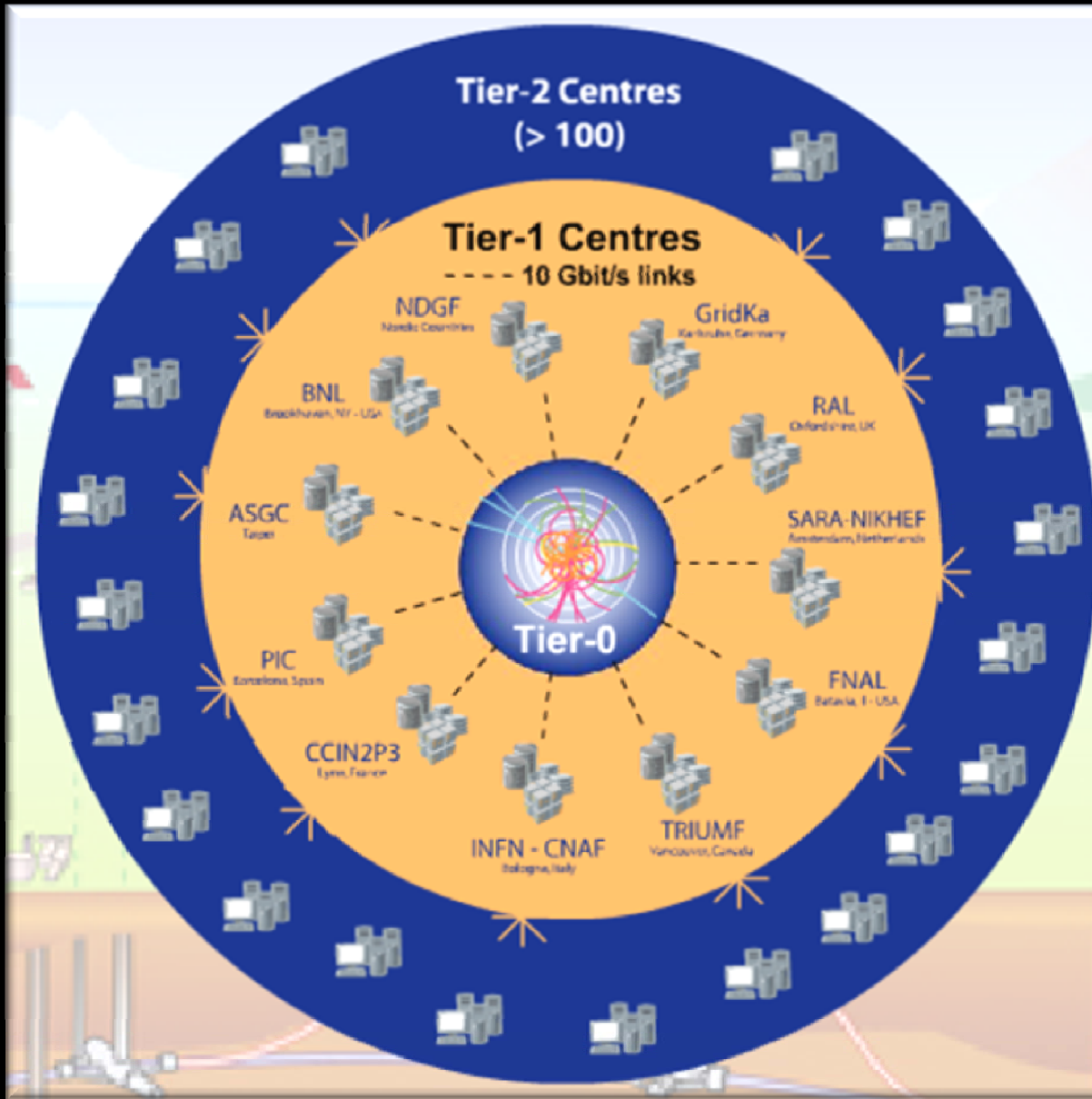
Muon spectrometer: MDT, RPC, TGC, CSC (Toroid magnetic field)

Particle detection in ATLAS



We measure:
time
charge
energy
position

LHC Computing Grid



Tier-0 (CERN)

- Data recording
- First-pass reconstruction
- Data distribution

Tier-1 (11 centres)

- Permanent storage
- Re-processing
- Analysis

Tier-2 (>50 ATLAS centres)

- Simulation
- End-user analysis

The ATLAS collaboration

