Diameter 25 m
Barrel toroid length 26 m
End-cap end-wall chamber span 46 m
Overall weight 7000 Tons

- Tracking ($|\eta|<2.5$, $B=2T$)
  - Si pixels and strips
  - Transition Radiation Detector ($e/\pi$ separation)

Calorimetry ($|\eta|<5$)
- EM: Pb-LAr
- HAD: Fe/scintillator (central), Cu/W-LAr (fwd)

- Muon Spectrometer ($|\eta|<2.7$)
  - air-core toroids with muon chambers
Barrel toroid system (eight 25m-long, 100 tons superconducting coils): tested at full field (20 kA current) in November 2006.
ATLAS: Inner Tracker

SCT + TRT in place, May 2007

Inner Detector installation in underground cavern completed

Pixels (+ beam pipe) insertion June 2007

T. Virdee, CHEP07
The calorimeter end-cap partially inserted, the LAr end-cap is filled with LAr.
ATLAS: Muon System

Barrel chamber installation is ~ completed
End-cap muon installation has progressed in parallel on both sides (6 of 8 Big Wheels done)
- Tracking ($|\eta|<2.5$, B=4T)
  - Si pixels and strips
  - Calorimetry ($|\eta|<5$)
  - EM: PbWO4 crystals
  - HAD: Brass/scintillator (central), Fe/Qfibres (fwd)
- Muon Spectrometer ($|\eta|<2.1$)
  - DTs, CSCs, RPCs
CMS Heavy Lowering: YB0

YB0 landing in the CMS experiment hall

Feb 2007
The Silicon tracker (200m²) was integrated into the support tube end-Mar. Been commissioned at several temperatures including operating temperature (-15°C).

- ~ 5 M cosmics recorded,
- Ready for transport to Pt. 5.
- Will be installed in UX in Oct.
Barrel ECAL installed at Point 5. Excellent quality (less than per mille).

Endcap crystals production is proceeding well: over 3500 crystals now delivered (out of 14750 needed). Last EE crystal will be delivered end-Mar’08.
All precision muons chambers installed and tested. RPC chamber installation will finish in September.

Feb 2007