CMS DETECTOR

**Total weight**: 14,000 tonnes
**Overall diameter**: 15.0 m
**Overall length**: 28.7 m
**Magnetic field**: 3.8 T

**STEEL RETURN YOKE**
12,500 tonnes

**SUPERCONDUCTING SOLENOID**
Niobium titanium coil carrying ~18,000 A

**SILICON TRACKERS**
Pixel (100x150 μm) ~16 m² ~66M channels
Microstrips (80x180 μm) ~200 m² ~9.6M channels

**PRESHOWER**
Silicon strips ~16 m ~137,000 channels

**MUON CHAMBERS**
Barrel: 250 Drift Tube, 480 Resistive Plate Chambers
Endcaps: 468 Cathode Strip, 432 Resistive Plate Chambers

**FORWARD CALORIMETER**
Steel + Quartz fibres ~2,000 Channels

**CRYSTAL ELECTROMAGNETIC CALORIMETER (ECAL)**
~76,000 scintillating PbWO₄ crystals

**HADRON CALORIMETER (HCAL)**
Brass + Plastic scintillator ~7,000 channels