



# CMS

Compact Muon Solenoid

## General CMS and Computing Schedule Overview

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## 1) Detector Installation, Commissioning & Operation

Barrel ECAL Inserted

Trigger/DAQ Ready Commissioning

Tracker Inserted

CMS Cosmic Run CCR1 (+end)

Test Magnet at low current  
Tracker cabled & Commissioned  
Last Heavy Element Lowered

CMS Cosmic Run CCR2 (YB0)

CMS Cosmic Run CCR3 (-end,RE)

Beam-pipe Closed and Baked-out

≥ 2 EE Dees Installed, Pixels installed

CMS Cosmic Run CCR4 (4T)

June

July

Aug

Sep

Oct

Nov

Dec

Jan

Feb

Mar

## 2) Preparation of Software, Computing & Physics Analysis

HLT Exercise  
Pre CSA07

S/w Release 1\_6 (CSA07, CCR1)

CSA07

S/w Release 1\_7 (CCR2, HLT Validation)

2007 Physics Analyses Completed

S/w Release 1\_8 (Lessons of '07)

S/w Release 2\_0  
(CCR4, Production of startup MC samples)

MC Production for Startup

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# CMS Schedule, Summary

**CMS will be recording cosmics with more and more elements, culminating in cosmics data taking with the Low Luminosity detector (except for one ECAL endcap) at 4T by end Mar 08.**

**Low Luminosity CMS detector commissioned and ready for recording collisions at design energy expected in mid-2008.**

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# CMS Physics: Basic Program of Work

- **Up to Nov 2007**
- **Concentrate on the physics that we can do with up to  $1\text{fb}^{-1}$ .**
  - Work in being done in order to chart out the “how” we will do this work, and to prepare methods, tools and people.
- **Two major milestones, namely**
  - **HLT milestone (due now)** - Goal CPU within a factor 2 of 40ms/evt. **May 120 ms  $\rightarrow$  now  $< 50$  ms/event**, very large effort (see Thurs Plenary).
  - **Completion of  $1\text{fb}^{-1}$  exercise (Nov)** - Approach the “ $1\text{fb}^{-1}$  goal” in a set of successive approximations (10, 100 and 1000  $\text{pb}^{-1}$ ).
- **From Dec 07 to May 08**
- **Prepare for the actual data. Goals:**
  - Have all the datasets and streams defined
  - Have all of the HLT code in place
  - Have all the trigger monitoring system (code + people) in place
  - Have all the Monte Carlo events in place
  - Have all the data-analysis organization (code + people) in place
  - Have analyses (geared for 10  $\text{pb}^{-1}$  & 100  $\text{pb}^{-1}$ ) ready to absorb the data

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# Tier1 visits planed in Fall 07

We propose to visit the CMS Tier-1 centers after CSA07.

- We might want to invite associated Tier-2 center people to the site visit where appropriate.
- We see the following motivation for these visits:
  - to meet the people in charge of operating the Tier-1 centers and the CMS contacts at the sites
  - to review the operational experience during CSA07
  - to discuss site specific issues
  - collect feedback from the site
  - coordinate site and global CMS schedules

It is probably not so easy that the same people attend all the visits, we think that we should try cover the following expertise when we visit:

- Commissioning
- Site and Data operations
- CSA07 coordination
- Computing management



# Tier1 visits (2)

## Tentative schedule:

- ASGC visit: the schedule for this visit is becoming firm, it is planned for Friday Nov. 2, in connection of the WLCG-Tier-2 & EU-India workshop which is scheduled for Oct 28-Nov.2. A draft agenda is available at:
  - <http://indico.twgrid.org/conferenceTimeTable.py?confId=118>
  - There is a program for the whole week, the WLCG T2 workshop is on Wednesday and Thursday. ATLAS is planning a site visit on Tuesday (30.10.),
  - CMS would have the site visit on Friday (2.11.) We have contacted ASGC about this and agreed on the dates for ATLAS and CMS visits.
  
- For the next T1's a schedule might look like:
  - FNAL: on the way back from Taiwan (Monday, Tuesday Nov 5+6) or a week later Nov 12/13
  - CNAF/PIC/Lyon in one week: 26.11.-2.12.
  - FZK + RAL around the CMS week in December (10-14)
  
- We want to fix the schedule during this week