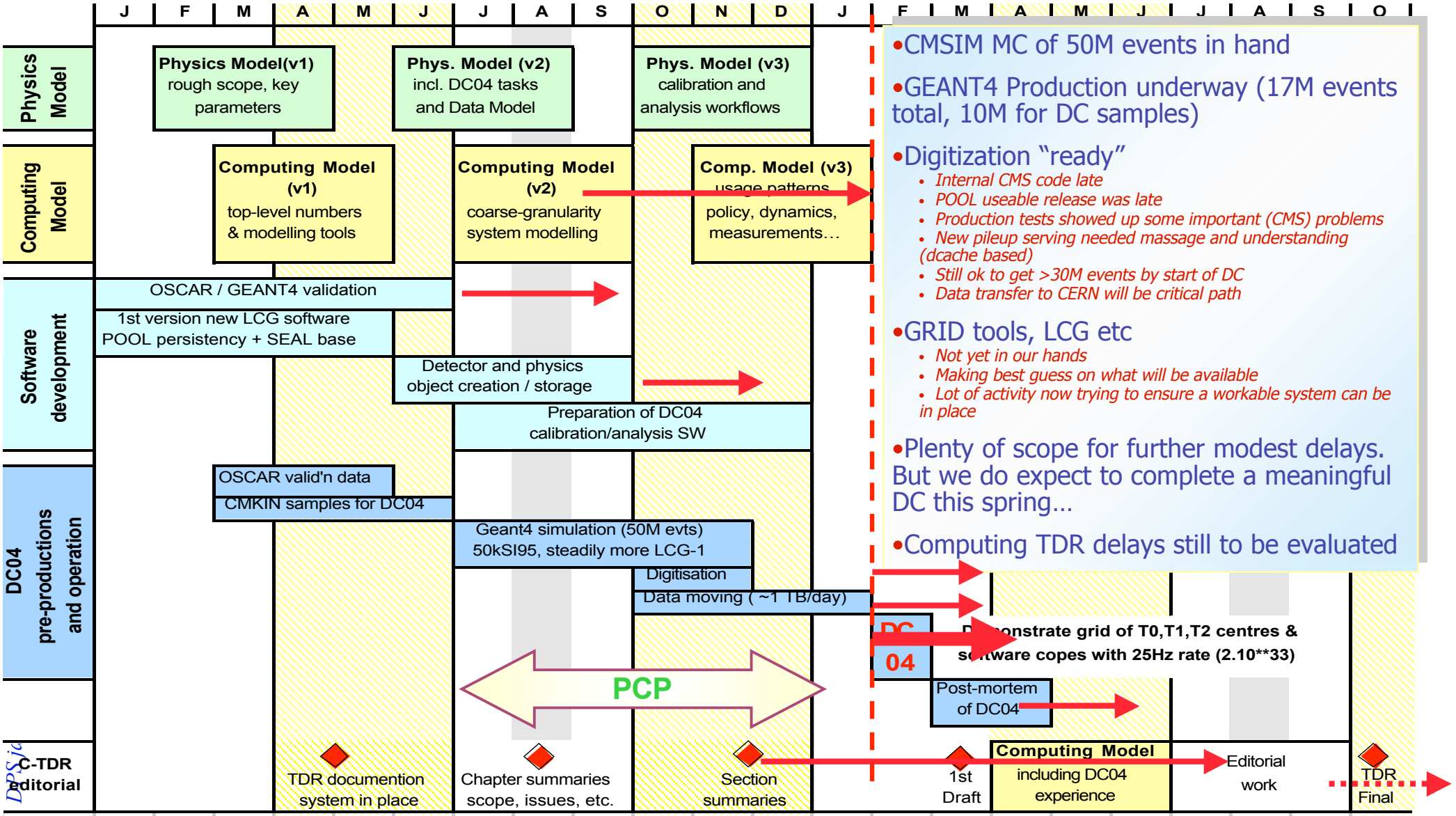
Schedule: PCP, DC04, C-TDR …

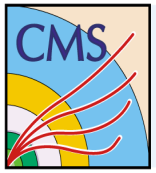


Computing TDR

- We are currently almost 8 months behind in the TDR schedule set 14 months ago.
  - A late TDR affects LCG TDR, workplan for CMS, Physics TDR, …

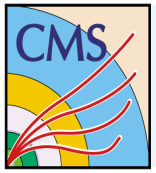
- We must now assess effect of:
  - Changing scope and maintaining schedule
  - Changing schedule and maintaining scope

  - But we are pre-occupied with DC04.
    - We propose to work with LHCC and LCG to analyze the possible changes and propose a new planning.
    - This will be hard to finalize before Easter (With actual experience of DC04 in hand)



LCG releases

- It is hardly possible to plan sensibly with the LCG2 release cycle
  - We appreciate the constraints the LCG team works within
  - But:
    - No pre-releases to test against
    - Dependence on big-bang release sequence
    - Its always easy to say we fix this next time
  - Weekly meetings with the experiment reps of the LCG integration team have to start now
- LCG0/CMS was very fruitful experience
  - We suspect this was ultimately successful because it was entirely under the control of CMS collaborators working together and able to make required changes in a timely fashion
- LCG1 required intense effort from CMS to make a working setup
- N.B. CMS has made heavy and effective use of the USMOP/GRID3 resources in the USA for Production



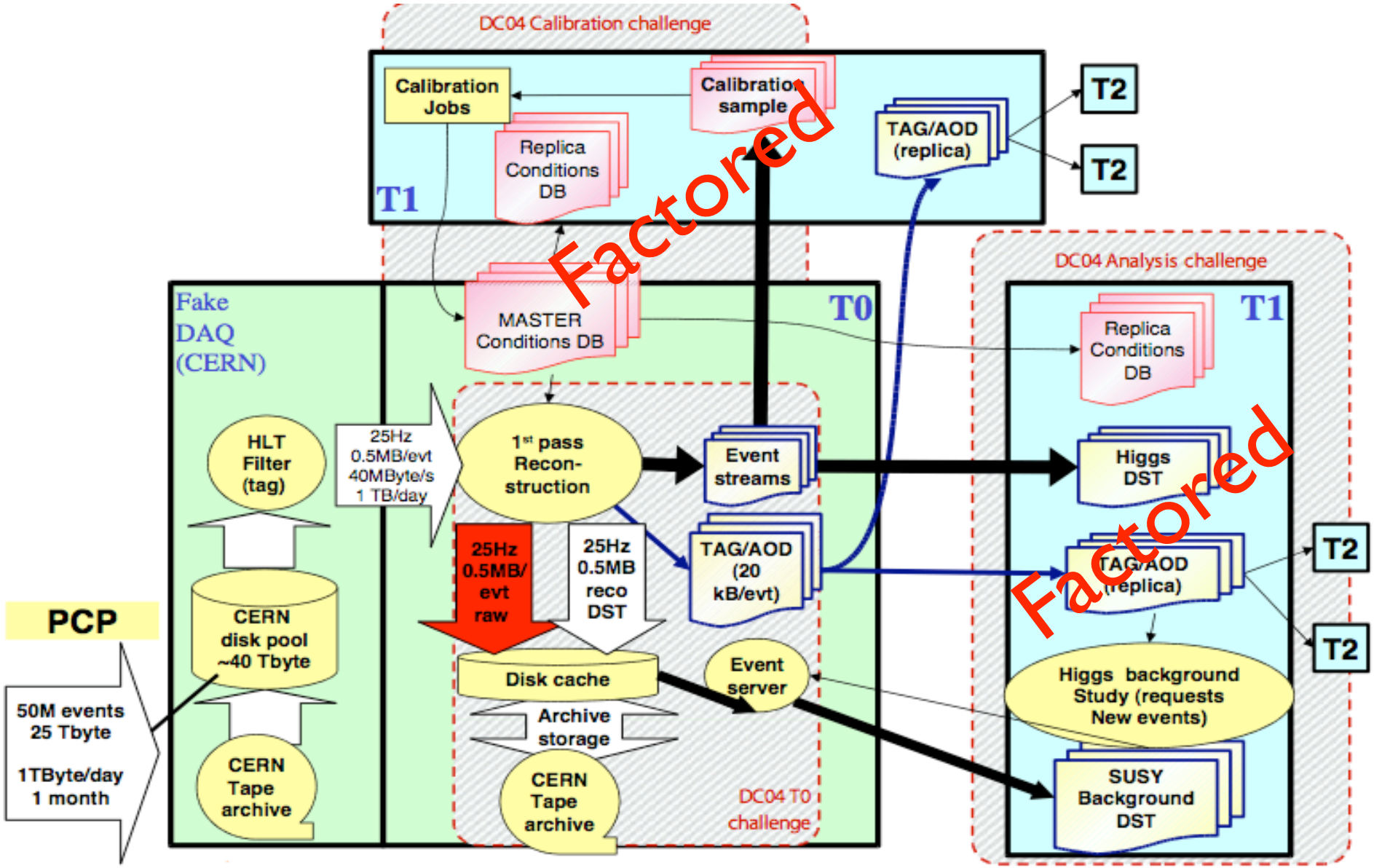
Schedule and Workplan for DC04

- We have a trackable workplan designed to show up problems as soon as possible
  - Quantified commitments of T0 and T1 centers: CERN, CNAF, FNAL, GridKA, IN2P3, RAL
  - Working teams in place
  - Tremendous amount of work to do, but very active
    - Would have been better to do some of this earlier, but lacked good definition of what would be available/possible. Above all lacked people capable and free back then
    - DC activity is very effective in marshalling work to the common goals and bringing in new and very competent people to the project.
- We will work in a heterogeneous environment
  - For example
    - T1 centers using the transfer tools of their choice (actually that means essentially two systems)
    - Central RLC at CERN, Oracle based, Use online Oracle replication to at least CNAF/Bologna. Other centers will import catalog fragments to maintain their local RLC.
  - Heterogeneity is NOT a problem, it is the solution.

CMS and LCG2

- We don't have LCG2 yet
- CMS Data Challenge DC04 has three components
  - Tier-0 challenge. Reconstruction at CERN
    - Complex enough. Doesn't need grid per se
    - But will publish catalog to CERN RLS service
  - Distribution challenge. Push/Pull data to Tier-1's
    - RAL and IN2P3 will use SRB. FNAL will use their SRM installation, CNAF will use LCG SRM (These two look essentially the same from CMS perspective) GridKA probably also use SRM.
  - Analysis/Calibration Aspects
    - At Tier-1/2 centers (not at CERN during DC04 "proper")
    - Encourage use of LCG2 and GRID3 to run these
    - Working with IT/DB on RLS mirroring/multi-masters via Oracle tools
      - But expect mostly asynchronous mirroring via catalog fragments
      - Will try to operate at least two online synchronized catalogs (CERN/CNAF)
- Aim to complete first two components in "March"
  - Expect last one to continue and be repeated over next 6 months as LCG matures. Factorized from Tier0 and distribution challenges
- CMS expert manpower is saturated with work for DC04.
  - Hard to respond to anything even slightly off of this goal.

DC04


DC04 Calibration challenge
Calibration Jobs
Calibration sample
Replica Conditions DB
T1
TAG/AOD (replica)
T2
T2
Factored
Fake DAQ (CERN)
MASTER Conditions DB
T0
DC04 Analysis challenge
T1
Replica Conditions DB
HLT Filter (tag)
25Hz 0.5MB/evt 40MByte/s 1 TB/day
1st pass Recon-struction
Event streams
Higgs DST
TAG/AOD (20 kB/evt)
TAG/AOD (replica)
T2
T2
Factored
25Hz 0.5MB/ evt raw
25Hz 0.5MB reco DST
PCP
CERN disk pool ~40 Tbyte
Disk cache
Event server
Higgs background Study (requests New events)
50M events 25 Tbyte
1TByte/day 1 month
Archive storage
CERN Tape archive
CERN Tape archive
DC04 T0 challenge
SUSY Background DST