# Status of G3 Hits and Digits

- Global planning milestones:
  - G3 Digits available: April 2000
  - G3 Hits available: July 2000

- Digits milestone definition:
  - classes defined for digits and containers
  - definition of identifiers
  - minimal amount of detector description available
    - transformation matrices, readout channel dimensions, etc.

# Status of G3 Hits and Digits (2)

- G3 Digits status:
  - Inner Detector - available since beginning of 1999
    - TRT digits checked by Jim Loken and L. Vacavant
    - Pixel/SCT are beginning to be checked by users
      - Fixed bug in SiDigit this week (noise, threshold, dead channel bits)
  - LAr - EM, HEC available since mid-1999
    - Checked by new C++ LAr reconstruction
  - LAr - FCAL - only partially done
    - still waiting for tube to channel mapping
  - TileCal - available since release 0.0.41
    - checked by Sasha, not yet by reconstruction(?)

# Status of G3 Hits and Digits (3)

- G3 Digits status, cont.:
  - Muons - MDT (since 1999), RPC (since 0.0.41)
    - Check of MDT and RPC by reconstruction under way
  - Muons - TGC, CSC - remains to be done
- G3 Digits status summary
  - InDet, LArEM are being used (what about HEC?)
  - For April, succeeded in adding TileCal and RPC's
  - High priority for FCAL and TGC
    - FCAL - Simion, Schaffer, TGC - Goldfarb + postdoc(?)
  - CSC - first need simulation in a release

# Status of G3 Hits and Digits (4)

- G3 Hits status
  - Two elements to this:
    - Hits classes and containers
    - Hits to Digits transformations
  - Hits classes and containers
    - Work remains to be done
    - Is straight-forward following digit example
    - Organization:
      - InDet - RDS, include InDet people (Stan)?
      - LAr - RDS, Simion
      - TileCal - Solodkov
      - Muons - Goldfarb, + (?)
    - Estimate that a good fraction will be done by end July 2000

# Status of G3 Hits and Digits (5)

- G3 Hits status, cont.
  - Hits to Digits transformations
    - This should be organized within the detector subsystems
    - Should be done ONLY AFTER a migration of the Hits and Digits to full-fledged Transient Event Store (TES) objects
      - ➔ Transformations will be Algorithms
  - This raises the question of migrating Hits and Digits to the Transient Event Store
    - This should be incorporated in the plan - when and by whom?
    - Should probably wait until the Atlas version of the TES has stabilized
      - begin migration after the September release?

# Status of G3 Hits and Digits (6)

- G3 Hits status summary
  - Definition of a large fraction of Hits and Hit container classes possible by end July
  - Plans needed for Hits to Digits transformations
    - May need to wait for framework (TES) developments
  - Finally, evaluation of what is needed as far as pileup for G3 Hits/Digits within the framework remains to be done
    - Should this be done with G3 hits/digits or wait for G4 hits/digits?