RCF meeting June 18

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on behalf of Brahms

Brahms Software Progress

- ROOT used as basis for framework.
  - Experience (good as well as bad) has been gained by implementation on different platforms
  - Base classes have been developed further
  - Scripts and makefiles assisting the user in code development has been written
  - Tutorial ‘macros’ developed.
- Analysis classes for tracking (TPCs and DC) developed
- Digitization classes for BB and TOF detectors completed

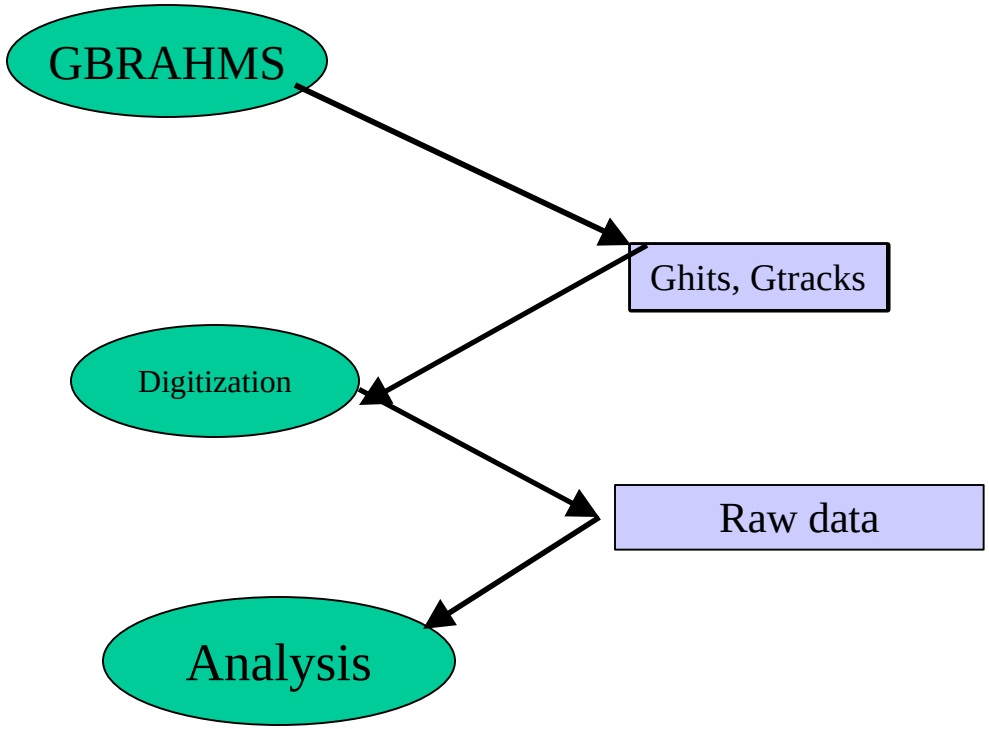
Schedule for next 3 month

- June 22-26: Software workshop at BNL with ~8 outside collaborators
- Goals
  - Develop and coordinate tracking, tof and PID modules and analysis.
  - Checkout of prototype code for MDC-1 production in September
  - Discussion and planning of *DST* formats.
  - Discussion of analysis strategy.

Simulated Data Generation

- A large data set of simulated GEANT hits and subsequent digitization has to be generated for the MDC-1 during July (August)
- The data volumes needed for the initial steps are fairly large.
- Substantial resources will be required from RCF in the coming month to generate the data for MDC-1

Data generation



Data Volumes

- From initial runs (12K events)
- Typical needs are (events per setting ie *4-6)

Angle	# events	Kbyte	Raw	Ghits	sec/ev		
2.3	4,000	120	1.9 Gb	24 Gb	340		
5	10,000	50	2	20Gb	160		
10	10,000	50	2	20Gb	130		
15	20,000	20	1.6	18Gb	90		

RCF experience

- Unix (DQS) farm
  - Priority, fair access
    - Other batch system ?
    - Experiment specific queues
    - Choices for Linux
  - Status of nodes in farm
    - disk accesibility (e.g. afs)
    - Develop tools that ensure proper environment and monitoring of machines

RCF experience

- Software environment
  - particular for development code high commonality has to be insured. Compilers, Libraries, queues.
  - The startup of the Linux has posed many problems in terms of standard paths, g++, etc.
  - Improvements has taken place. With the turn on of large *clusters* uniformity has to be insured.