# SID HCAL

A. White, V. Zutshi

## Towards the Lol

- Baseline choice with possible alternates
- The LoI should serve as the mechanism by which SiD arrives at a baseline design
- Especially relevant for HCAL as multiple technologies are being pursued
- Series of hardware and software benchmarks that the technologies have to address for inclusion in the LoI
- Operationally propose a series of reviews...
- Who reviews?

# Proposed HCAL Reviews

### January 2008

all available information on potential technologies assessed against performance and technological criteria preliminary mechanical design for all options identify needed information for second review

#### March 2008

updates from all technology options basis for decision on baseline

### May 2008

presentation of the recommendations of the review

writing starts

## Given the new realities....

- The plan needs to be reviewed
- On one hand there is more time available
- On the other, manpower and resource allocation may have to change in the HCAL R&D groups
- We need to understand this...
- Also need to better understand what the LoI process means in the changed climate and what degree of specificity in choices is needed
- Still think there maybe enough to make some reasoned preliminary choices

# What will be available...(most probably)

- Analysis of Scint. HCAL data (including detailed comparisons to hadronic models)
- Analysis of RPC vertical slice test data
- Analysis of cosmic/beam data w/ GEMs using DCAL and/or KPiX
- Cosmic data from Scint. IRL prototypes
- Reliable PFA results
- The difficult part will be the timely and full integration of test beam and simulation results

# Summary

- Need to take stock of the previous plan in light of the present situation and what information is likely to be available
- It is possible that not that much change is required
- The process is just beginning....
- Plan to converge by the April meeting (hopefully sooner)
- At any rate document technology R&D in some way