

# *Towards a CALICE Run Plan*

Vishnu Zutshi  
NIU/NICADD



# Installation

- Computing goes in first (2<sup>nd</sup> week of April)
  - Data storage & transfer, remote control, ACNET
  - Detector installation begins in the 3<sup>rd</sup> week of April
    - HCAL table taken out of container (~1 day)
    - HCAL craned in and rolled (~1 day)
    - TCMT installation (platform, rails,...) (~1day)
    - Services + Track-trigger (~1 day)
  - Stuffing takes place in last week of April
  - Installation will take place in open access
  - Very likely that there will not be any other expt. taking data at that time
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# Commissioning

- Begins in the last week of April and extends into the first week of May
  - Change in training requirements
  - Expecting to be primary users of the beam since nothing else is scheduled
  - Exploratory studies:
    - triggering
    - cerenkov triggering
    - beam composition (w/ and w/o scatterer)
  - Accumulation of beam dump muons for calibration purposes
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# General Themes

- Period 1
    - overlap with CERN data
    - exploration of the 1-10 GeV/c region
    - calibration samples
  - Period 2
    - main low energy collection period
    - filling in the gaps (+ calibration)
  - Period 3
    - repeat with scint. ECAL
  - Nominally working with a 4 sec flat-top, every minute, 12 hrs/day
  - 1 sec flat-top may be useful for beam flux limited running conditions
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# *Data Collection Period 1*

- May 7<sup>th</sup> - 27<sup>th</sup> , 2008
  - Likely concurrent running w/ LHC-b expt.
  - Start with the high energy running and work downward
  - Approx. 2 weeks for high energy (10 GeV/c and above) running and 1 week for low
  - This implies ~ 60 high energy 250K event configurations (E, pid, angle, w/ or w/o ecal)
  - Situation on the ground may and most probably will require adjustments
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# *Interim*

- June 2008
  - No data taking but analysis feedback needed
  - The CALICE triggering and tracking apparatus extends 5m upstream of the motion table
  - Some of this may have to be moved during this period to accommodate expts. running during this period
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## *Data Collection Period 2*

- July 9<sup>th</sup> - 29<sup>th</sup>, 2008
  - Main period for low energy data collection
  - 2 weeks devoted to this running (start low and move higher)
  - Remaining week for filling in the gaps and calibration data
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# Very Low Energy Running

- i.e. 1-5 GeV/c running
  - Rather difficult w/o cerenkov triggering
  - e.g. @ 2 GeV/c :
    - ~ 20 pions/spill @  $7 \cdot 10^9$
    - ~ 3% pion content
    - since we can go ~ 100 times higher....
    - lead scatterer to clean the beam
    - will most probably loose a factor of 3 to
    - clean up a factor of 30
    - Ideally lead-assisted cerenkov triggering
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# Miscellaneous

- Shifts  
erika.garutti@desy.de
  - Coming to Fermilab  
web page detailing info on registration,  
computing, training etc. to be released soon
  - Visa  
request Roy Rubinstein (royr@fnal.gov) for  
letter of invitation
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