EMEC - HEC
Combined Run
- 1 -

- INTAS Proposal accepted
- First meeting 5.4.2000 at CERN

  Working groups set up

  Feed-back till July week

  Final proposal to be discussed during Kosice End-cap workshop in September
- Ambitious schedule (Working hypothesis):
  - First combined technical run: March 01
  - First beam run: August 01

EMEC - HEC Combined Run - 2 -

- Calorimeter set-up:
  - PS 2 modules
  - EMEC Module 0 (effect of imperfections to be studied by MC. Restacking?)
  - HEC 1 1 “new” module + 2 rebuilt mod 0s
  - HEC 2 2 half modules of 8 gaps each
  - Support structures: Designs well advanced
  - **Mock-up** to be tested in two weeks in HEC cryostat
- HV connections and power supplies:
  - # of existing parts in HEC cryostat sufficient
  - Filter elements in accordance with LARG specs?
- Signal connections:
  - Assume present FT with 960 channels
  - HEC 384 signal channels
    256 if high eta region ignored
    EMEC 622 or 478 cells (Restrictions by mapping to FEBs?
    There is confusion, detailed proposal needed
    Another mini feed-through of 960 channels ?

EMEC - HEC Combined Run - 3 -

- Frontend electronics:
  - HEC moves to LARG FEBs
  - Need LARG type FE crate

    (water cooling, power bars, …)
  - Base plane ok, since no LVL1 calorimeter sums to be formed.
  - Need more “warm” cables
- DAQ systems:
  - EMEC MiniROD

    HEC Full ROD, fall back solution EMEC MiniROD
  - Three options

    Expand HEC solution (manpower argument !)

    Eventually ATLAS DAQ-1
- Beam trigger: Use HEC system with cryostat
- Calibration Steering:
  - One calib.board for both EMEC and HEC
  - Steering to be studied:

    Computer driven (HEC) vs “automatic” (EMEC)

EMEC - HEC Combined Run - 4 -

- Slow controls:
  - No special requirements, use HEC
- Data analysis frame:
  - Use expanded version of HEC_adc?
    Manpower situation unclear.
- MC simulation:
  - HEC described in detail
  - EMEC geometrical description ok, cell level to be done.