

RICH upgrade status

Rome/Sanit  Group

04 May 2007

Great news since last report (20 Feb 07)

30 April 2007:

RICH at the mechanical workshop in Rome

(after Easter + ~ 3 weeks of custom bureocracy + 2 National Holydays)

Work in progress

Ongoing work:

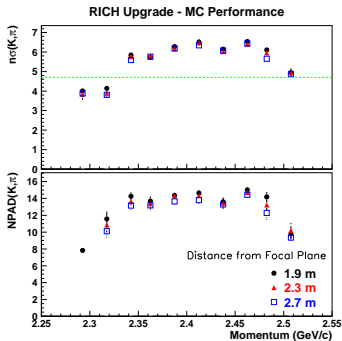
- Very accurate FEM analysis (larger number of elements, skew RICH) almost finalized. We do not expect surprise, results will help in detailed design.
- Parts procurement: wires, electronics firmware, HV passive boards ...

Coming work:

- RICH survey will start Tuesday next week (08-May-2007)
 - ▶ finalize the RICH drawing
 - ▶ evaluate the precise size of the final RICH (including electronics, support ...)
- Mechanical work expected to start end of May - beginning of June (after survey and detailed CAD)

RICH location in HRS

- Simulation does not show dramatic degradation of performance from 1.9 to 2.7 m
- RICH size should fit available space: in a couple of weeks (after survey) we should have precise estimations of it.
- Radiation Length of the RICH: $X_0 \sim 18\%$ + not uniform contribution of the front-end boards.



RICH before A1 ?

PROs

- RICH accessibility (on the back site - front end card cabling)
- Slightly improved RICH performances

CONs

- δ ray on A1 (kaon proton contamination on pion)
- ?? A1 acceptance ??