EEE Upgrade Updates

Results at the CERN-01 with cosmics

10

R1234ze + CO2



Results at the CERN-01 with cosmics

Pure R1234ze











97/3 95/5 90/10 80/20

Dark Current





97/3 95/5 90/10 80/20

Cluster Size (strips)

3 8.5 HV (kV)

8





95/5 90/10 80/20 70/30





Gas ricirculation system test

- CERN-02 leak search were done with a ppm sniffer
 - Found leakages on
 - HV connectors
 - Gas connectors
 - Screws





A new chamber is Not leaking

Huge F-salts found

RH?







- Leaks before and after the sealing
 - 103 ml/h → 71
 - 76 ml/h → 73
 - 312 ml/h → 77

Gas ricirculation system test











Gas ricirculation system (2)







700 mbar	
Always based on negative	
pressure parameter	
driving the pump	
000 mbar whether when we want we want we want wat we want wat was a way was a way was a way was a way was wat w	41.MMYMN~~~
200 mbar	
100 mbar	
0 mbar 19:50 19:52 19:54 19:56 19:58 20:00 20:02	20:04

Gas ricirculation system (2)

- the reused fraction depends on the negative overpressure of the pump branch

- filters not mounted at the moment
- pump full scale too high 200 l/h
- price 1-2 keuro (depending on RH filters and components)
- needs the students to tune it (frequently?)
- INflow/OUTflow fraction-driven maybe more stable?