

HPTD test beam measurements at PS in aug. 2010.

G. Hamar on behalf of the

REGARD* + VHMPID-BP groups

(MTA KFKI RMKI, ELTE, Budapest)

Group : G. Bencze, G. Hamar, C. Lipusz, D. Varga

Students: G. Bencédi, P. Horváth, G. Kiss,

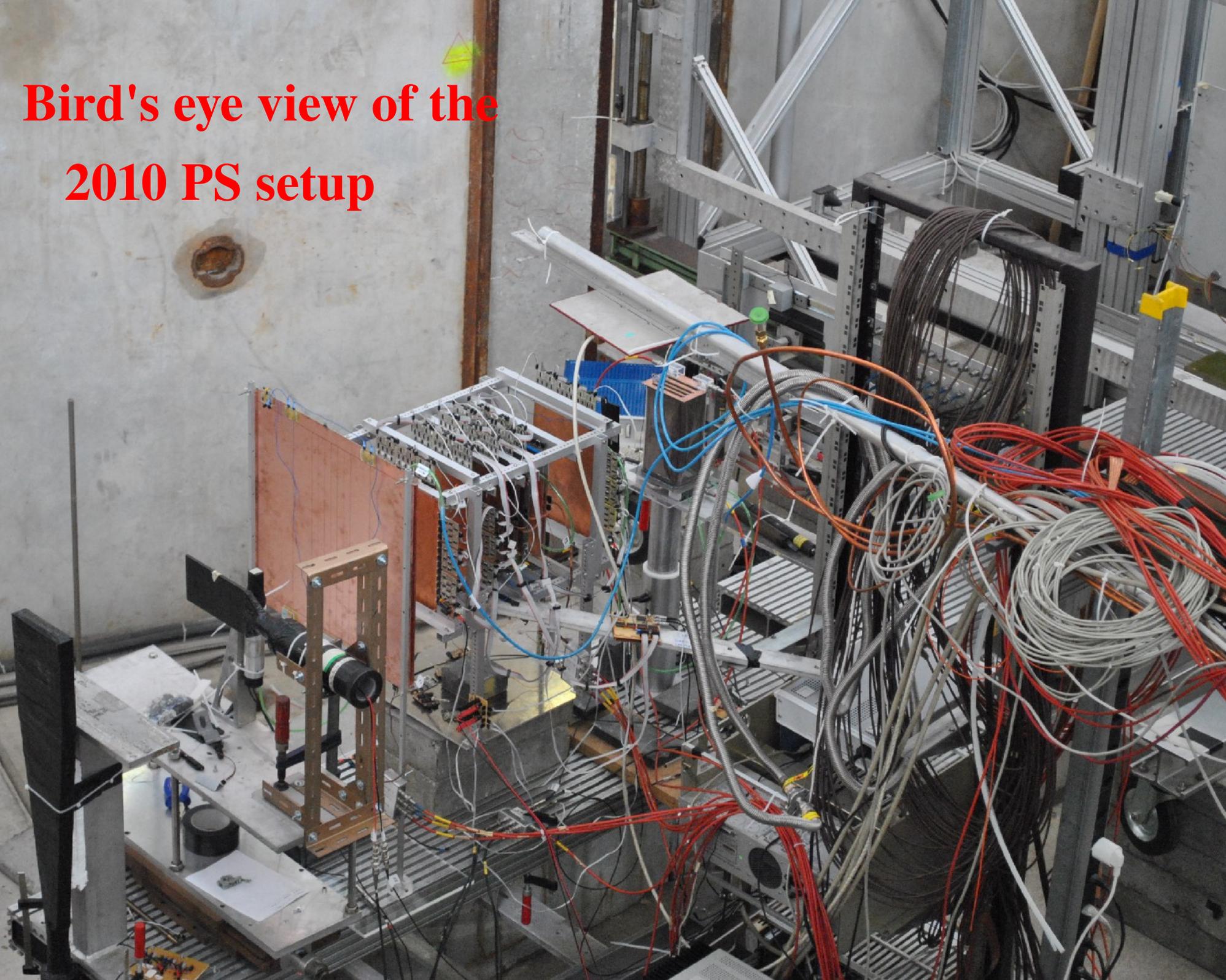
L. Kovács, K. Márton, L. Oláh

***REGARD : Rmki-Elte GAseous detector R & D**

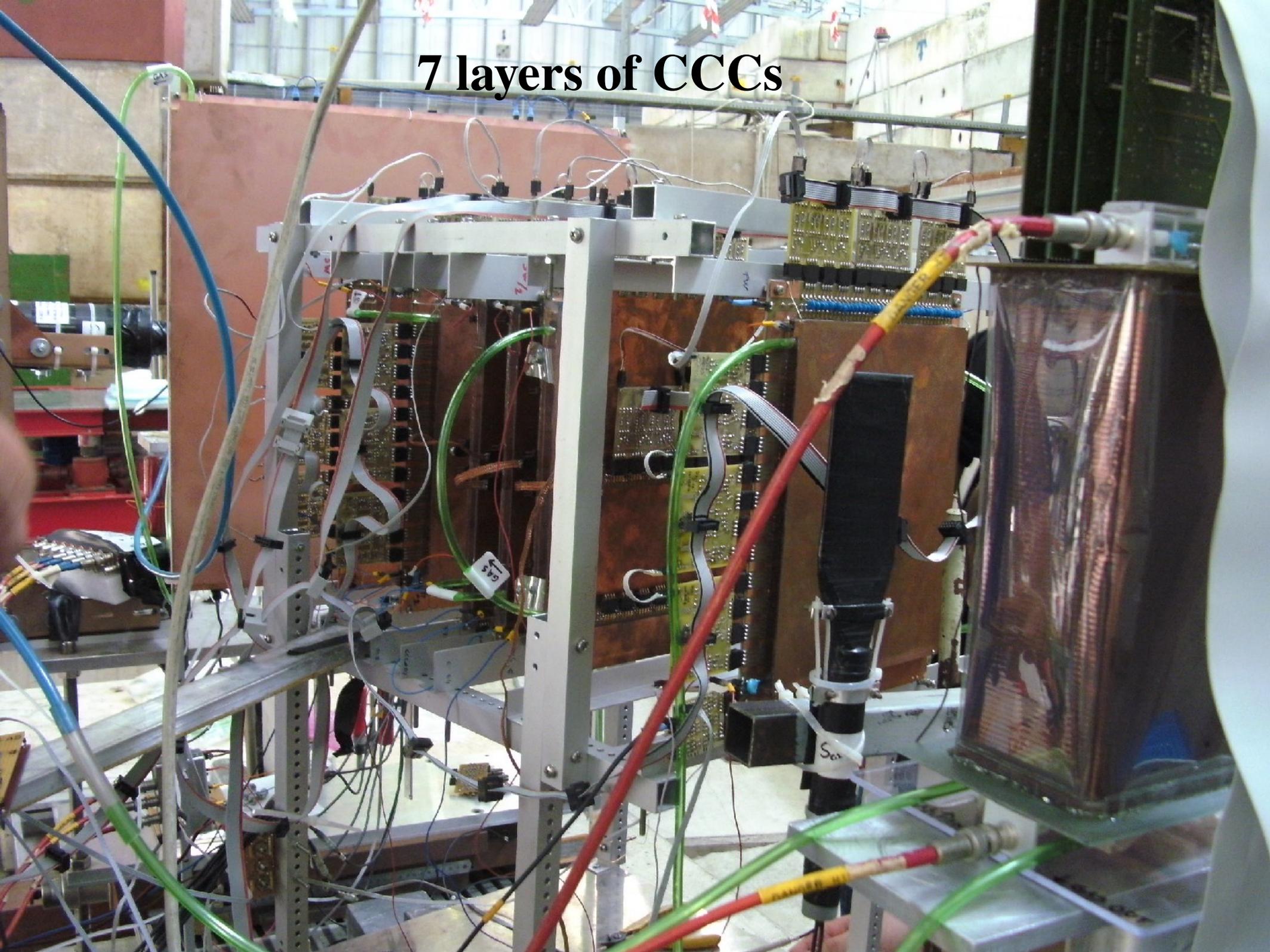
Measurements at PS in 2010

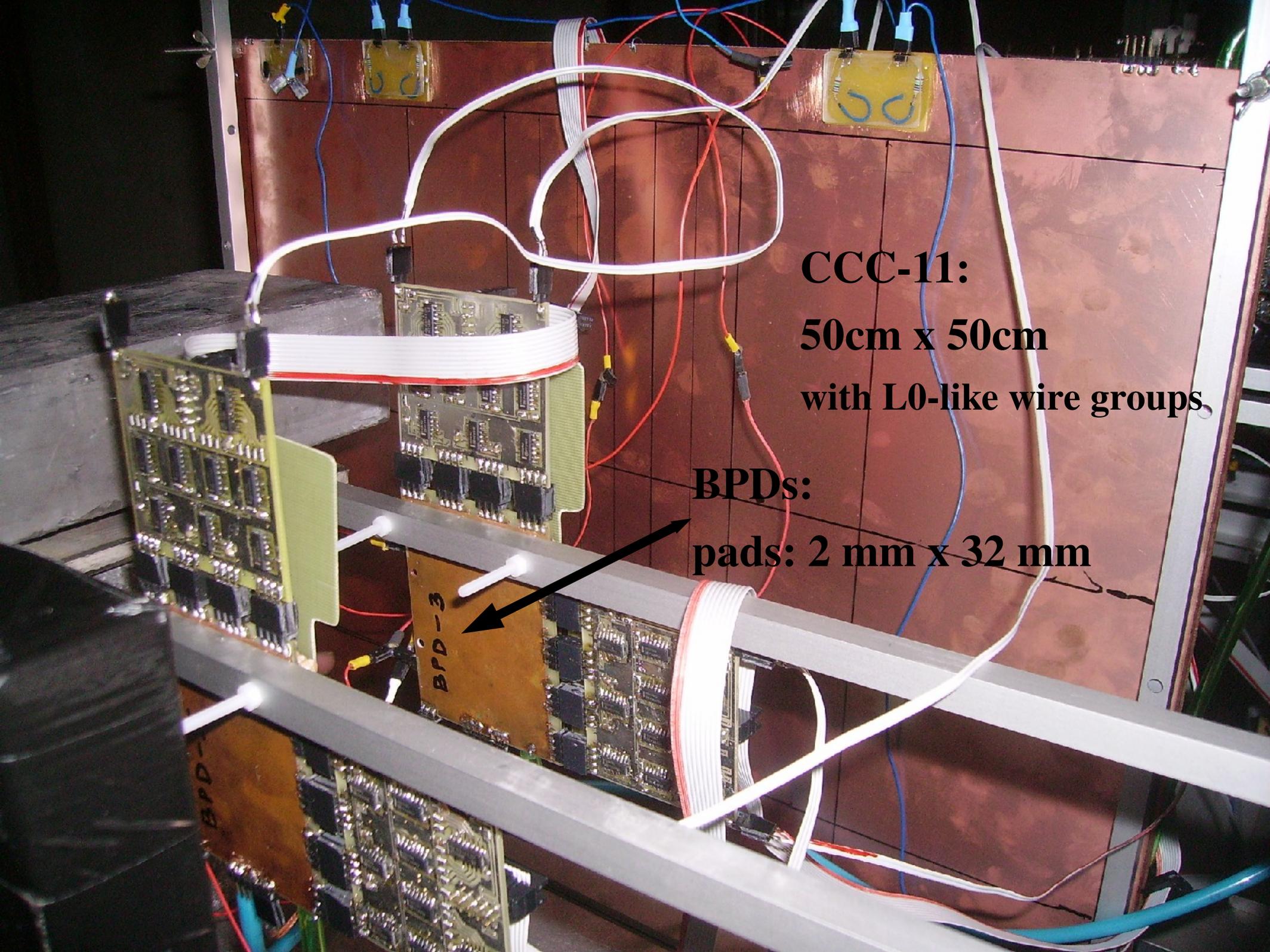
- Test new CCC chambers (eff., unif., spacial res., ang., ...)
- Test with 7 layers of CCCs (angular res., patterns, ...)
- Use the new all-SMD electronics (~500 channels)
- Test 50 cm x 50 cm CCC (eff., unif., spacers, wire groups, ...)
- Measure dead zone of spacers
- Test of small pad CCCs (BPD) (eff., spacial res., use, ...)
- Test FPGA readout at beam conditions (ser. & par., ...)
- Test FPGA pattern recognition

**Bird's eye view of the
2010 PS setup**



7 layers of CCCs





CCC-11:

50cm x 50cm

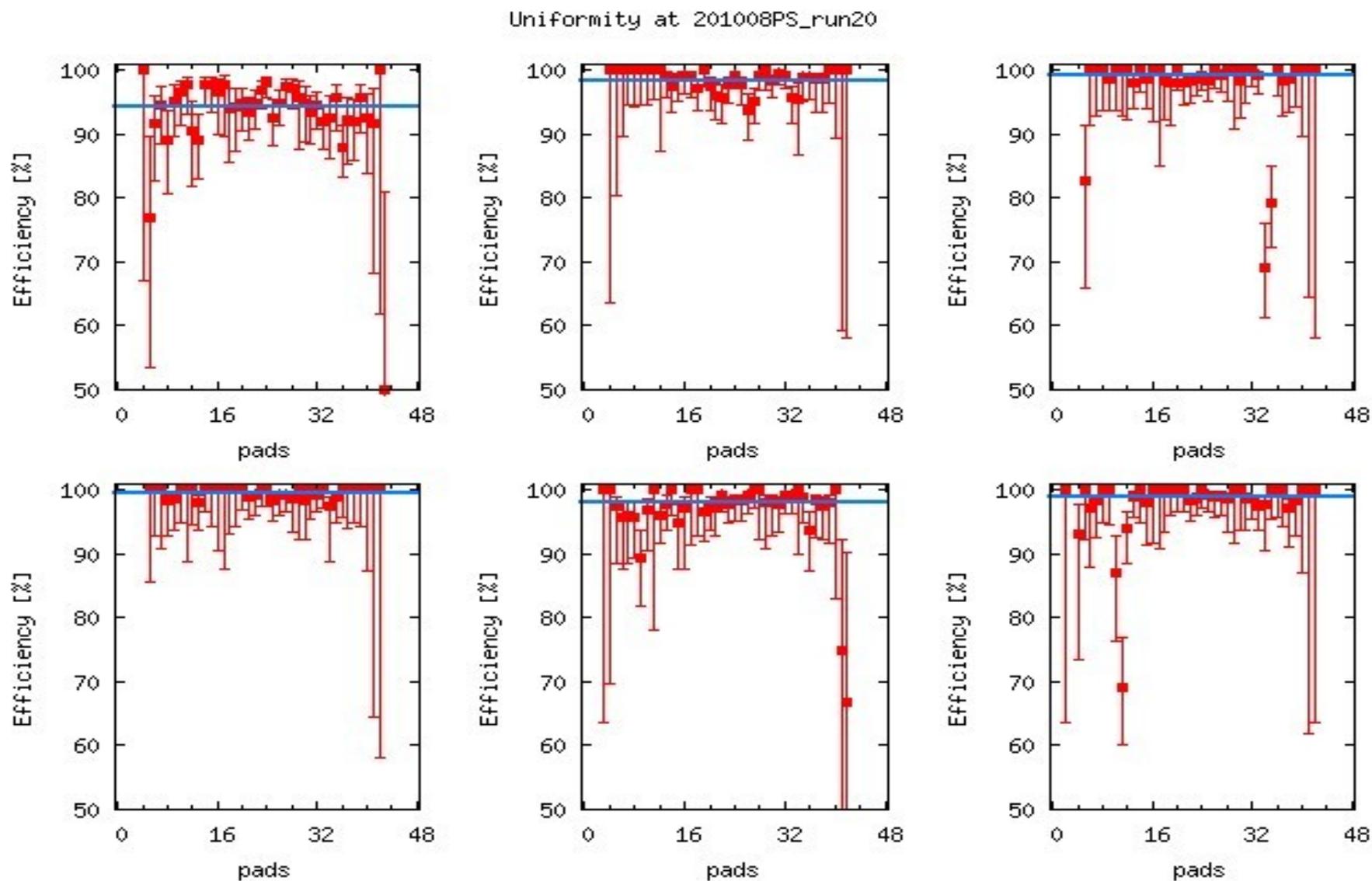
with L0-like wire groups,

BPDs:

pads: 2 mm x 32 mm

Preliminary results !

Efficiency and uniformity

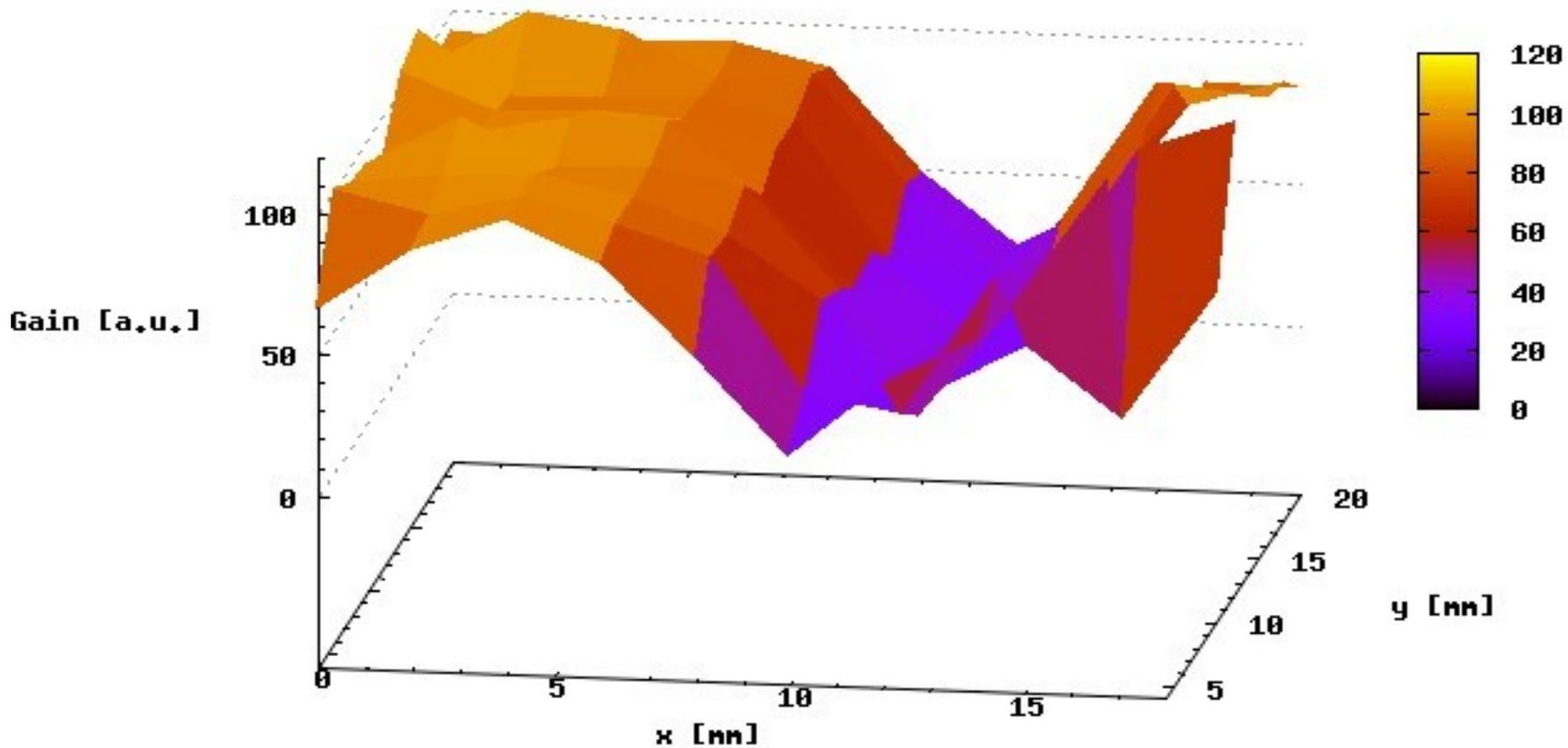


Efficiencies reach the 98-99 % level!

Preliminary results !

Spacer's dead zone

Average gain around the spacer of CCC-11 at 201008PS_run56



Effective spacer width ~ 4 mm