

# SDHCAL activities

I.L

# Hardware

ASICs HR3: 732 were produced and tested. Yield of 85%

PCBs-ASUs : 100x33 cm<sup>2</sup> hosting each 48 ASICs conceived, produced and electrically tested

DIFs : Long and thin DIFs designed and produced.

Connectors : DIF-ASU, ASU-ASU are identical. Designed and produced

ASU's sent from Lyon to CIEMAT for full test with the new Firmware.

Detectors : 2 Glass plates of 2m x 1m were coated. Construction of the first large detector should be performed before September.

We need a help to conceive and build the cassettes to host the detector and its embedded electronics

# Analyses

-Simulation: Guillaume

PID: Bing and Sameh

-Energy estimate using standard methods : Guillaume

Energy estimate using MVT : Bing and Sameh and Master students of JTSU

Pion-proton separation : Antoine

Hadronic shower separation : Rémi, Bo ( Arbor paper is stopped. What to do?)

## Next steps

Common test with SiW technological prototype end of September.

We need to have a clear program taking into account the results obtained so far:

- Applying a configuration with equalized response (using threshold variation)?
- Having many energy points for MVA?
- Having more proton runs?
- Homogeneity study

Large prototype: when to finish it and where to test it?