



EICROCO meeting (07/19/2024)

Update on testing efforts at OMEGA/IJCLab

❖ July '24 OMEGA/IJCLab status:

- 2 functional test boards (updated PCB) with EICROCO alone
- 2 test boards (updated PCB) with 1 EICROCO and 1 AC-LGAD, ready to be tested (wire-bonding at IPHC Strasbourg late June. Thanks Gabriele for your help!)
+ test boards (previous version of the PCB), of which 1 with (EICROCO + AC-LGAD)
- **Arzoo Sharma**, 1 year postdoctoral fellow at IJCLab, started on July 10th

❖ Today's presentations:

- Testing at OMEGA: report by **Adrien Verplancke**
- Testing at IJCLab: report by **Arzoo Sharma**

Information and perspectives

- **Firmware update** to be performed at BNL (Hiroshima University) to run on the FPGA server
Much faster than through the client
Follow Adrien's documentation
- **Status of the flip chip fabrication at BNL?**
If ready, Carlos, attending the EICUG/ePIC meeting next week could take back some to IJCLab
Otherwise, estimated delay?
- After electronics response characterization and cross talk evaluation of the **board with an AC-LGAD**, we foresee to perform measurements at **IJCLab** with a ^{90}Sr source to determine the achievable charge sharing ratio (in Autumn).
- Would it be possible to get AC-LGADs (4x4) **without metalization (flip chip?)** from **BNL** in view of measurements with an **IR laser** at IJCLab? The objective will be to evaluate the achievable spatial resolution.
- Foreseeing to perform **measurements at a testbeam facility** by **next Spring**. Is there any already scheduled within « AC-LGAD » working group? How to proceed?
 - ❖ Welcoming someone from BNL (Alex?) at IJCLab in November?
- Important deadline for EICROC teams: **IN2P3 Scientific Council** (October 21st)
Exhaustive document about the Roman Pots to be submitted **Sept. 20th**
Needs of **inputs/help** for the **mechanics** also for EICROC project (mass production, assembly, characterization, ...)