

Outline:

Beam time for parasitic detector testing is available at Mainz from the 21st of July to the 11th of August.

Goal:

Reconstruct beam energy using several modules readout together.

Requirements:

- Sufficient modules exist once those with Jason are returned
- Readout
 - Populated PCBs needed (5 partially populated, 1 fully)
 - Need to develop a population scheme and a rough measurement scheme
 - Enough preamp boards are needed (gain matched)
 - Establish the constraints on DAQ channels
 - How to get the most out of the limited number of channels
 - How to power all the readout and amps needed
- York testing
 - Testing whether the 3D printed lightguides are adequate
 - All readout and modules are tested at York
 - Sufficient lightguides are printed to read out the fibres
- Setup in Mainz
 - Use the same table as before?
 - Setup in the tagger or in the photon beam?
 - Is the current laptop sufficient for running COMPASS?

Testing Plans:

- Set up on a Wednesday? (Accelerator training day)
- Locate the beam spot using a fully populated board
- Test using the 16 channel layout as [shown here](#) ([simulation studies here](#))
- Test the rotated layout
- Test the fully populated board at different positions to see shower develop
- Run all tests in the photon beam and near the electron beam dump?

To Do List:

- ☐ Populate PCBs (decide how to distribute the sipms)
- ☐ Interface boards
- ☐ Locate preamp boards (and have them gain matched)
- ☐ Get more lightguides printed and painted
- ☐ Testing at York
 - Modules
 - Lightguides
 - PCBs
 - Preamps
- ☐ Make enough cabling
 - 16 lemo to MCX
 - 6 preamp power cables
 - 6 lemo - lemo