

Electronics Discussion

Deywis Moreno

July 28, 2018



① Q: What is minimal level of digitization we can accept in order to reconstruct the single electron spectrum?

A: Depend on the Solution to the type to signal to be precessed. If charge integration option is chosen a lower digitization is needed. Questions about loosing the capacities of discrimination if the full waveform is not register were raised. Other point that needs to be considered is the time resolution expected to accomplish physics studies.

1 Q: What is the dynamic range?

A: It needs to determinate the maximum number of PE before saturation. Until now only studies considering small amount of PE are considered more studies are needed in the case of beam mode. Additionally, the efficiency of the light collectors is important to determinate the dynamic range. Clever trigger strategies would be needed in order to adjust the dynamic range to the physics options.

① Q: How do the choice of the SiPMs affects the performances of the electronics?

A: We need to find the effect of one SiPM and also the combined effect of the SiPMs array. Measurements with the final array are needed.