Below a short summary from the 14th FCAL HWG meeting.  
  
1. Itamar showed his final results on shower development  
- his results on average shower depositions are in good agreement with Jakub's results  
- but Itamar obtains the ratio between high/low gain channels ~1.9, quite different from Jakub's 2.27  
- the difference in gains should be understood  
- Itamar uses Tpeak 60ns , instead of 70ns (Jakub). Itamar should check his results for Tpeak 70ns  
2. Aharon presented present status/comparison of the shower development results both for the data and MC  
Data:  
- Itamar and Jakub results agree well, while Veta and Titi curves show systematically smaller values  
- Veta and Titi do not reconstruct yet the pulse amplitude but use the maximum sampled value. Veta and Titi should update the analyses adding the amplitude reconstruction (either by fitting or deconvolution)  
MC simulations:  
- Alina and Strahinja results are similar, but small systematic differences are seen  
- Alina showed that large systematic differences are obtained between analyses  using 93% and 100% tungsten density  
- verification of the setup used in MC (not all tungsten plates have the same density) should be done  
data vs MC:  
- Itamar and Jakub results agree well with MC for >6\*X0, while are systematically higher (5-20%) for <6\*X0  
- Veta and Titi results show opposite behavior, but they should be first updated   
3. Yan showed the status of preparations for the next TB  
- gluing the LumiCal Module to envelope in progress, first results promising  
- laser soldering in progress, first results coming soon...  
- it is not obvious which readout will be used:  
 --the best would be VMM2 based but it is not clear whether it will be ready  
 -- APV chip based readout or our old LumiCal readout are two alternative options  
- Yan asked about availability of people  to run the TB:  
 -- not every group was represented so we do not have precise information  
 -- please send email to Aharon and me with the names of people who could participate in TB (even if you did it in the past)  
 -- there is a possibility to get some support from AIDA-2020, whoever is interested please contact Leszek, he will collect this info and prepare the request to AIDA-2020  
- Yan should also send Leszek the plan/description for the next TB  
We agreed that the next HWG meeting will be on 8th of September.  
  
Best Regards,  
  marek