AM – system activity during summer 2015

1. AMBSLP\_v4 ready to be submitted (Paola-Saverio); waiting for relevant validation (all the Pisa group, see attached schedule).
2. New (not included in the schedule). Chosen DC-DC converter not available until December for extra validation tests. Requested samples even if not totally validated. May be V4 with different DC-DC converter and V5 with the final ones. Saverio shluld change again the design
3. Test stand for AM06 activated at Pisa (F. Crescioli paid by IAPP 2 months) and shown at Microtest (11 of September).
4. Frascati mezzanine for test of AM06 validated (F. Crescioli paid by IAPP) at Pisa test stand using the sandwich pcb-AM05 built at CERN. Frascati mezzanine worked fine at the first try. CERN PCB has a small issue and the internal ful custom cells are not powered. All the rest is functional. We get the full list of patterns with THR 0, but no specific pattern can match with a realistic THR.
5. LAMBV3 received with CERN sandwiches assembled. JTAG is working fine. Links to be tested. Work in progress to read temperatures from the sensors added on top of LAMBs.
6. Tests of AMBSLPV3 (Giudo-Saverio-Hikmat-Federico-Paola) full with 3 LAMBs (the forth is at CERN) are going on. Rare problems appears like layers not matching the hits, or bunch of patterns lost all from one chip. It looks dependent on the configuration: each time we configure patterns and links the problem is clustered in one-two specific chips, when we reconfigure the board the problem move to one or two different chips. The system is good for integration at CERN, but a little bit inefficient.
7. Firmware improvements (Saverio-Hilmat-Paola) are going on to improve monitoring and diagnostic tools. Tools are essentials to debug rare events. Talashi, Guido, Federico producing new software tools
8. Chips for production have been ordered and companies for production have been chosen (Paola)
9. Infrastructure: Pisa did a lot of work for cooling tests and order of bins, PSes, Wiener fans. Material is almost installed. Cooling tests are successful for the Wiener rack, see the report for more details on the status of infrastructures:

<https://indico.cern.ch/event/437556/contribution/14/attachments/1144468/1642609/CoolingTestsReport.pdf>

Aggiungo le slides presentate recentemente al Pisa meeting e la lettera piu’ rilevante per la discussione delle firme avvenuta oggi ed il doc delle firme approvato da ATLAS Italia