#### **BPS** amplifier for TBL

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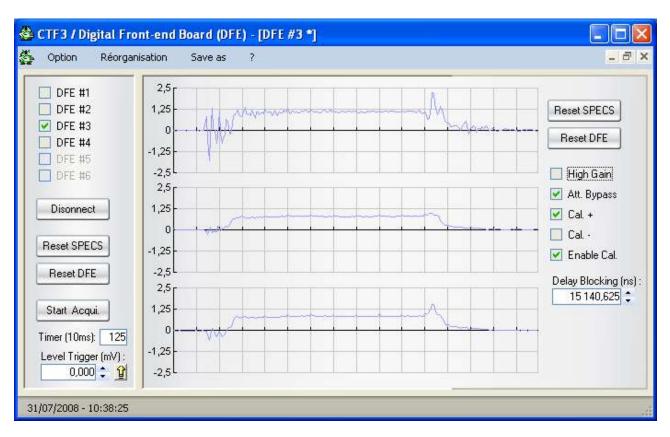
## It's been installed (on July 2008) a prototype unit of the BPS +amplifier



Amplifier prototype version v1.1 (as installed on July 2008)



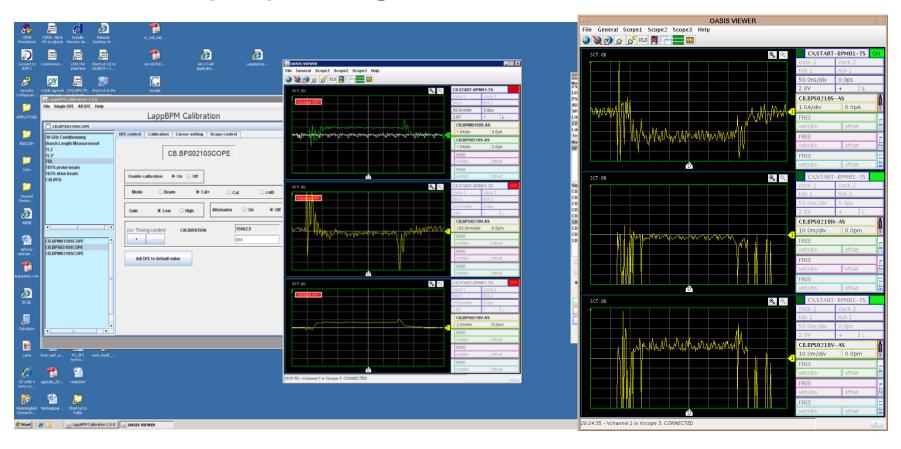
## A calibration test (BPS+amplifier+digitizer) was done on July



There was a 'glich' at the start and the end of the responses (Sum, deltaH, deltaV)



### More testings: October (left plot) and November (right plot) testings show more mismatches



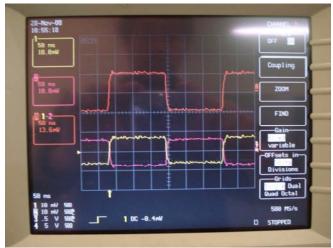
Sum and deltaV signals have some glitches ... but the deltaH has disappeared !!!



#### After Rework (did on 26th November in CERN)



Sigma signal, Cal+ AFE output



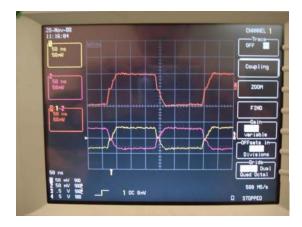
Sigma signal, Calibration AFE bypass (so, the calibration signal don't goes inside the amplifier box)



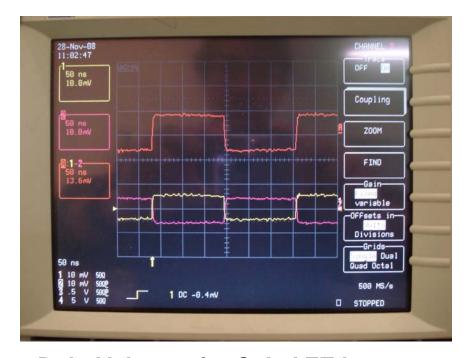
## After rework (did on 26th November in CERN)



DeltaH, high gain, Cal+ AFE output



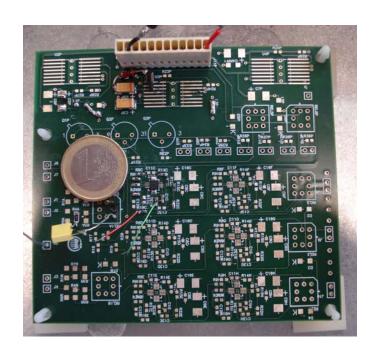
DeltaV, high gain, Cal+ AFE output



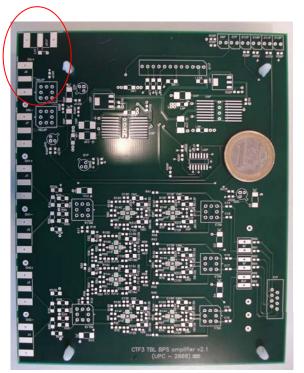
DeltaV, low gain, Cal- AFE bypass (the calibration signal don't goes inside the amplifier box)



# Moreover, it's been finished the PCB routing and manufacturing (16+2 units) of the second prototype version of the amplifier (v2.1), incorporating some improvements



1rst prototype version (v1.1)



2nd prototype (v2.1) PCB: 'the red circle' shows the position of the input and output calibration connectors.



#### Next work to do ...

- ... to build an unit of the 2nd Amplifier prototype v2.1 (on going ... we'll finish it soon!!)
- .... to test it in the UPC lab (before January)
- ... to send to the builder 17 PCB units for building 17 amplifiers (Tomorrow Friday we go to visit a circuits builder, Servicircuits, for starting it on the second week of January)



## Thanks ... and Merry Christmas!

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