## SIW ECAL

Analysis BT2017 working group

A. Irles, 30<sup>th</sup> November 2017















- IEEE2017 proceeding submitted: https://agenda.linearcollider.org/event/7773/
- CHEF proceeding writing is ongoing: use IEEE2017 as starting point but making less emphasis in the introduction and the general overview of the SiW-ECAL project and more in beam test
  - Other talks (i.e. Vladik's) where more focused in the general picture of the project
  - Deadline 15<sup>th</sup> december.
- Commissioning procedure update → integrated in calicoes.
  - https://twiki.cern.ch/twiki/bin/view/CALICE/CommissioningProcedure Comments are wellcome.
  - To do list: optimize find noisy algorithms and fix some loose ends in the scurve analysis.
  - Also available as offline tool: https://github.com/SiWECAL-TestBeam/tpecal/ branch → commissioning2017





## News

- Some mistakes in the event building scripts detected
  - Major bug in the event building python script → merging bcids bug solved.
  - Bug in the event building python script when using very long run files (crash while counting the spill) → solved
  - Error when subtracting pedestals  $\rightarrow$  the script assumed that we always have pedestal data.
    - In very rare cases we can have chips where the pedestal was not calculated for one SCA (chip 15, layer 7)  $\rightarrow$  I take the average value for all sca's with calculated pedestals.
    - Chip 10 of layer 1 is not fully masked but it is missworking and pedestals are not well calculated for this chip (multiple peak spectra) → I tagged it as masked
  - Error when saving the calibration files (naming error)
- New data processed → pass3
  - Minor improvements in the RAW2ROOT.cc (profiting that I had to create a new pass for the data)
- Software updated:
  - Debugging event building and pedestal subtraction, mip calibration etc
  - Final (hopefully) pedestal, mip and masked list of channels uploaded.
  - Debugging and improvements of the analysis tools.



## Agenda of today

- Simulation status → D. Jeans
- MIP efficiency and more pedestal & noise studies → A. Irles
- Beam test plans → all



