

- Status of simulation & performance studies:
  - Is anything still needed in the simulation for performance / calibration studies?
  - Which studies still need to be done?
  - Performance comparisons
  - Calibrations:
    - Which parameters are needed for calibrations?
    - Which parameters are known, and which are we not sure about?
    - What studies are needed, and what do we need to be able to do those studies (simulated data samples, personpower, ideas...)?
  - Where are parameters stored and configured? Menu or COOL?
  - Pileup dependence of parameters?
  - Interdependence of L1Calo & LAr calibrations (e.g. filters and noise cuts): how to handle this?
  - Do you need special runs for calibration, or can you use “regular” data? Which special runs are needed? When / how often?
  - Which streams / triggers are needed?
  - PEB: is it needed? (e.g. FEX fragments, supercells, etc?)
- List of calibration task and interdependence, graph of dependence: physics study versus “automated” tasks, what is clear: who and process
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- When do you plan to install, and what infrastructure / tests are still needed before you can do it?
    - crates/shelf are there
    - PCs (for DCS)? PC for JTAG do we need/want, maybe use server that are already there? Distinguish permanent (JTAG more permanent) versus testing/diagnostics (jitter cleaner)
    - Check if general servers are there, need them for testing
    - ...
    - DCS needs to be tested/approved
    - Need HUB (FELIX for common clock)-> for clock, need source for testing: FOX? Some source as soon it there, some sink (ROD should come with HUB)
    - Anything before?
    - Need fibres, are they Fibres installed -> find out ?
    - Need test fibres mapping? Need systematic way -> tower versus fibre
    - Complete testing and review (when? What is still missing for the final approval?) and production (could start before)
    - When do we want to put a board in? -> put production board already? -> need mechanical changes, all tests completed?
    - Ready to install conditions:
      - Testing and review: what test?
        - Read-out issues? TTC, algorithms
        - Ask Julio: Mezzanine ok for installation?
      - Mechanical changes: what still needs to be done? (Bruno needs Mezzanine thickness for FP),

- Make sure that all remote work can be done remote
- Will you have enough people present at CERN?
  - Julio and Ren-jie (Ralf?), is that enough?
  - For physical installation: will be done
  - For first test of installation?
  - For remote tests, should be enough
- How do the Covid travel restrictions / remote working affect your commissioning plans?
  - Stretch, due to limited travel
  - Permanent locate someone at CERN could be difficult from university side!
- How will you monitor and validate the new system? How to decide when new triggers are ready to be deployed for physics?
  - Bitwise simulation
  - Timing? Cannot be wrong (BCID labelled)
    - Monitor Error counter
  - Occupancy plots/ rate prediction
    - Masking possible
  - Inputs properly validation?
  - Validation of simulation
  - Should plan for some quick physics “turn-on” and efficiencies
- What can be done before beam, with cosmics, with splashes, with collisions?
  - (for Topo: compare with MUCTPi during cosmics, unbiased sample for Topo validation)
  - Cosmics -> jets / met validation
  - Hot tower tests -> automated, mapping check?
- Are special runs needed? Which ones, and when?
- Which streams / triggers are needed for commissioning?
- PEB: is it needed? (e.g. FEX fragments, supercells, etc?)
- Spares policy: how many spare modules / cables etc. will you have?
  - Spare from the beginning? Final production in one go. Quick ramp up
  - Spares for the long-run? In total XX boards (9-10, depending on FPGA purchase, FPGA are cheap at the moment), what is required? 6+3 fulfill requirement
  - Cables! No need to care

The main focus of this meeting is preparing for installation and commissioning at P1, so we have put together a list of points to consider when preparing your talk:

- STF test status and plans (focusing more on what is still needed vs. what has already been done)
- Latency measurements
- Hardware production & assembly status: are there any tests needed before launching the final production / assembly?
- For the firmware, please consider these questions prepared by Ian and presented at the Aug. 24 weekly meeting (see slide 3:

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