LFHCal TDR planning

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Friederike Bock for the LFHCal & insert crew

LFHCal & insert chapter general structure

- **Detector design**
  - Overview
  - Detector requirements
  - Radiation requirements
  - Test beam results (10/24?)
- **Performance**
  - Single particle studies w/ and w/o other detectors in front
  - Clusterization (07/24)
  - Full event reconstruction (09/24?)
  - Jet performance? (09/24?)
- **Mechanics**
  - Internal module structure (8M, 4M, insert)
  - Stacking plan
  - Seismic (07/24) & load deformation studies
  - Scintillator performance (07/24)
- **Read-out electronics**
  - SiPM boards (8M, 4M (10/24) & insert modules (??/??))
  - Transfer boards (11/24)
  - Summing stage (11/24)
  - FEB for LFHCal & insert modules (10/24)
- **Cooling**
  - Heat load simulations (08/24)
  - Cooling system for insert modules? (??/??)
- **Calibration system**
  - LED system (11/24)
  - temperatur monitoring (??/??)
- **Integration (??/??)**

"from previous work"
"ready to write up"
"partially ready to write up"
"lots to do"

Updates since last presentation

- First version of LED system currently under test at CERN
- First "short" long-PCB board being tested
- Updated version of SiPM flexes & FEB under test
- Insert test beam on-going in STAR hall