



Laboratoire d'Anecy de Physique des Particules

# LATS CERN-IPMC Status

SoM-less Multiplexed Design (20/03/2025)

Sylvain LAFRASSE, on behalf of the LAPP LAr Phase2 Off-Detector team



- Two custom network (router, DHCP, ...) for in-house development: operational
  - prototyping setup: on-table ShM and CERN-IPMC DevKit
  - production testing setup: LAPP Phase1 ATCA crate
  
- LATS v1 pre-production readiness tests
  - *REMINDER: due to NDA issues, we still have NO access to the closed documentation & sources*
    - sensor's drivers: all implemented and tested
    - sensor's thresholds: generic, remote, exercising & regression script built and operational
  - sensors systematic SNMP monitoring: dedicated Zabbix v7 VM built and operational
    - long test (i.e more than 1 week without any glitch): first successfully passed
  
- Rescue/updates at EMF/USA15: designed a portable, autonomous, JTAG & networked CERN-IPMC DevKit
  - prototype: operational and actively used at LAPP for our crate
    - *2 kits will be produced shortly: provisioning on-going*
  - *documentation and user manual: on-going*
  
- Updated sensor's thresholds following first long test
  - implemented and tested
  - *second long test in our crate currently on-going.*

1. LATS v2 RTM support for production-readiness test
  - CERN just provided what's needed in the PigeonPoint closed firmware
  - first implementation will start asap
  - will need to investigate RTM on-board EEPROM use for serial number reporting
  
2. FRU/SDR storage in the LATS on-board EEPROM
  - CERN yet to provide related documentation.

**Any questions ?**

---