



# Week Summary Report

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## A. Overall Summary

Week type: Experiments and maintenance

Date/Week Number: 28/06/2021 to 02/07/2021 (Week 14)

EDMS number: -

Beam time: 2 days

Fatal Failure time: 0 days

Unscheduled time: 2 days (Beam permit cancelled on 1<sup>st</sup> July for essential safety works)

Installation time: 1 days

Number access: 6

| # | Experiment Name                 | Responsible            | Institute  | Installation time (h) | Access number | Beam time (h) |
|---|---------------------------------|------------------------|------------|-----------------------|---------------|---------------|
| 1 | LHC Cherenkov BPM               | Andreas Schloegelhofer | CERN - BI  | 8                     | 1             | 1             |
| 2 | SEU induced by neutrons on SRAM | Giuseppe Lerner        | CERN - R2E | 5                     | 2             | 3             |
| 3 | Micro-BPMs                      | Giuseppe Pezzulo       | CERN       | 2                     | 2             | 1             |

## Weekly activity

This week was dedicated to the measure of Single Event Upset (SEU) on SRAMs and diodes sending an intense beam (20nC – 10Hz) on aluminium targets for neutron production. Cherenkov button BPM tests were also resumed. In addition some beam time was used to test a new prototype of micro-BPM.

Monday afternoon the CEO of PMB/ALCEN company and accompanied by his technical manager for medical applications visited the CLEAR facility.

As programmed, the beam has been stopped on the 30<sup>th</sup> of June for mandatory works on the access control system.

## B. Day by day report

### Monday

- Installation and alignment of targets and SRAM detectors
- Installation and alignment of micro-BPMs
- Some modification of Cherenkov set-up



- Visit of PMB/ALCEN
- First beam on target for checking SRAM

Access: 1

## Tuesday

- Change for smaller diameter target
- Failure of PL turbo pump
- Tests of SRAM and of Cherenkov BPM
- Access to add a lead wall shielding and change Cherenkov set-up
- Irradiations and Cherenkov tests

Access: 2

## Wednesday

- Access for complementary installation
- Micro-BPM test
- Fail of the inductive BPMs
- Irradiation and last test of Cherenkov BPM successful at last

Access: 2

## Thursday

- Removing of Cherenkov BPMs and of diamond detectors left
- Access impossible after 10:30

Access: 1

## Friday

- No access authorized

Access: 0

## Other business

## Additional resources

### C. Main issues

Turbo pump group failure due to high radiation level  
Inductive BPMs to be fixed, especially the latest installed one

### D. Action needed to be followed up