

Minutes of RADWG meeting held on 15 October 2009

Presence: Daniel Kramer EN/STI, Thijs Wijnands EN/STI, Giovanni Spiezia, Sylvie Dubettier TE/EPC, Julian Palluel BE/CO.

Matters Arising (T. Wijnands):

- Please be aware that magnetic field perturbs the dosimeter reading of AD6 (hand held) and also the DMC-2000 (clip on), i.e. close to experiments. RP is in process of finding a proper replacement device.
- There are new more strict rules for the access to and extraction of material from the UX caverns.
- There is a nice newly upgraded facility for irradiation of electronics in Lyon (Ionisos)
- After the end of CNGS beam:
 - Each group has to take out the installed material from TSG4
 - It has to be specified if it will be disposed off as waste or not
 - Operation of the facility is foreseen again for 2010
 - This will present a considerable load to the temporary storage

Tests in CNGS – current status (D.Kramer):

- Quick overview about the status of the ongoing measurements was given together with the changes during the last access
- Most of the tunnel electronics seems OK for the startup from a radiation point of view
- In the Chamonix presentation, the electronics in the alcoves has to be separated from the tunnel ones

Update on the TE/EPC test results (S.Dubettier):

- Cross section of the memories measured in Louvain at 60MeV was about $10^{-15} \text{cm}^{-2}/\text{bit}$
- The fluence in CNGS provided by the Java tool matches very well this number
- All the SEUs in memories 100% corrected by EDAC
- Several SEUs observed in the system registers (mostly WFip related); corruption detection filter to be put in place
- Digital filter corruption SW being tested since last access together with the new SD360 card (so far OK)
- 1 crash in FGC generic and 3 in FGC COD so far unexplained, SEL is suspected or register SEU
 - Device is off for WFip interface, but power cycle possible with long message from gateway to the uFip and FTR than performs the hard reset
 - Could an SET generated by the FTR be causing the crashes?
 - Recover with remote power cycle, reset not working
 - SEL most probably not observed in Louvain
 - SEL in the COD device is less harmful due to redundancy of the system

RADECS summary (G.Spiezia):

- G.Spiezia presented the highlights from the RadeCS 2009 conference held in Bruges
- Most of the papers are on State of art devices, however, always something to learn...
- We might think about collaboration with some universities mostly for modeling and simulations

Neutron irradiation facility in Prague - NRI (D.Kramer):

- On overview of the measurement possibilities in the nuclear reactor field was presented

- The NBCT beamline with wide spectrum from thermal to fast neutrons was successfully used for the calibration of the RadMons.
- The beam time price is very reasonable compared to other facilities
- Access possible when reactor is ON
- Pure thermal neutron lines available but with very small cross-section (8mmx8cm)

A.O.B. (T.Wijnands):

- The radioactive workshop will be built in the building 867 with space available for everybody who asked for it
- Some more users need space
- ~450m² so far allocated, access system, RP tools etc have to be purchased and installed
- Mechanical workshop will be in the same building (i.e. for activated collimators)
- The works should start in January, completion by mid-Summer?
- No dedicated space foreseen so far in Meyrin (awaiting the “Plan d’urbanisme”)
- 867 will serve also for the temporary radioactive storage

- The DeriveFip prototypes had to be returned to HLP due to bad soldering
- 2 prototypes now available for tests in PSI
 - It was later found that they have errors even without radiation
 - CERN provided a dedicated test setup to HLP to reproduce the errors
- 2 places are available for W48 for neutron beam tests at 14 or 2.5MeV