**Belle II PXD EVO Meeting**

3.8.2010

Present:

Hans-Günther Moser, Jochen Knopf, Stefan Rummel, Jochen Schieck,IEKP Karlsruhe, Mikhail Lemarenko, Shuji Tanaka, Henryk Palka, Andreas Ritter, Martin Ritter, Ariane Frey, Tomasz Hemperek, Ivan Peric, Peter Fischer, Frank Simon, Ichi Kishishita, Oksana Brovchenko, Norbert Wermes, Manuel Koch, Julia Furletova, Andreas Moll

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| **Tuesday 24 August 2010** | [top[top](http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=936#top)](http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=936#top) |

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| |  |  |  | | --- | --- | --- | | 10:00 | DHPv0.1 First Test Results (20') ([[files](http://indico.mppmu.mpg.de/indico/materialDisplay.py?contribId=0&materialId=slides&confId=936) Slides](http://indico.mppmu.mpg.de/indico/materialDisplay.py?contribId=0&materialId=slides&confId=936) [pdf file](http://indico.mppmu.mpg.de/indico/getFile.py/access?contribId=0&resId=1&materialId=slides&confId=936) [ppt file](http://indico.mppmu.mpg.de/indico/getFile.py/access?contribId=0&resId=0&materialId=slides&confId=936)  ) | Tomasz Hemperek (Bonn) | |

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| |  |  |  | | --- | --- | --- | | 10:20 | AOB (20') |  | |  | * Configuration Database |  | |  | * Irradiations at ELSA |  | |  | * next meeting |  | |

(http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=936)

1. **DHCP First Test Results**

Tomasz Hemperek reported on first results of the DHP test chip which recently came back from the fab. In short: so far all tests were successful, the chip works. Clearly, this is a big success and we all congratulated the people (mainly Bonn and Barcelona) involved in its development and testing.

For the next (final?) iteration Tomasz needs more information on the exact algorithm (e.g. based on MC data) and the maximal occupancy expected.

Norbert Wermes asked when the final production run should be made and how it should be financed. It will be more expensive than the actual ½ chip prototype and at least 160 working chips are needed to equip the detector (+ contingency for tests, prototypes, spares). He also asked whether a 2nd prototype run is needed.

Yes, we should plan for a second run (since some modifications and additions are needed, e.g. higher driving power of the LVDS etc). We should consider if the final production can be done in the next funding period (end 2012). According to Hans-Günther’s schedule, this might be too late, however.

1. **AOB**

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|  | * Configuration Database   A copy of an Email by Takanori Hara requesting information on database needs:   |  | | --- | | In the Belle II experiment, we have to design the database for the detector configuration (defined as ConfigDB, now) and for the calibration/alignment (defind as CalibDB).  The former is for, e.g. "run configuration", "software/firmware version" "dead/hot channels" and the latter for the detector constants (e.g. alignment, calibration, timing, pedestal, etc).  Today, we had a coordinator meeting to discuss the database issue.  And we concluded that we should have a database group, but not formed yet.  (I attached a slide shown in the coordinator meeting)  As a first step to design and establish the database (DB) scheme, we need to know the requirements to the DB from each sub-detector.  For instance, what kind of data has to be stored, how large it is, how frequently access to the DB, etc. Could you discuss this issue in you group and report to me your requirements.  I think that the current Belle database used in offline analysis will helps you to start the discussion in your group.  And please assign (a) responsible person(s) who can work on this issue.  I would like to set the deadline to the September 6th (Mon), 2010. 17:00PM (JST) sharp. I believe that each group has at least one meeting by that time. | |

Clearly we need such a database for alignment, pedestals, configuration data and power supply data (and more). In addition we should nominate a person responsible for slow control and configuration database. It was proposed to do this in our next meeting in Valencia. Till then Hans-Günther will stay in contact with Takanori Hara.

Most of the volume will be the pedestal data, it is estimated that 10 bits per pixel are needed. Conservatively we assume 16 bit, 8x106 pixels.

The access frequency depends on the pedestal update scheme. Pedestal updating would require frequent readout of the pedestal values for monitoring and logging. To be defined.

* Elsa status: (Julia Furletova): Stages and pin diodes are installed. Next week the commissioning of the linac (After repair of the RF) can start. Hopefully ELSA will be operational in a few weeks. However part of the system is new and new problems may reveal. We need to be aware that the irradiation crew (Andreas Ritter, Peter Müller) need time for planning and preparation.
* Next meeting: September 14, 2010, 10:00