**Belle II PXD EVO Meeting**

26.10.2010

Present:

H-G Moser, A. Ritter, P. Pütsch, B. Kisielewski, S. Tanaka, C. Kreidl, J. Ninkovic, L. Andricek, Z. Dolezal, Z. Drasal, I. Kichichita, S. Fourletov, J. Furletova, M. Koch, J. Knopf, S. Rummel, A. Wassatsch, Y. Ushiroda, M. Lemarenko, Karlsruhe

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|   | [Tuesday 26 October 2010](http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=1012#2010-10-26) |  |
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| **Tuesday 26 October 2010** | [toptop](http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=1012#top)  |

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| 10:00 | Particle BG reduction by movable masks at KEK (20') ([files Slides](http://indico.mppmu.mpg.de/indico/materialDisplay.py?contribId=0&materialId=slides&confId=1012) pdf file  )  | Shuji Tanaka |

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| 10:20 | Tests of voltage regulation (20') ([files Slides](http://indico.mppmu.mpg.de/indico/materialDisplay.py?contribId=1&materialId=slides&confId=1012) pdf file  )  | Stefan Rummel |

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| 10:40 | AOB (20')  |  |
|  | * DCD-B submission (15')
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|  | * TDR review (15')
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|  | * B2GM organisation (15') ([files agenda](http://indico.mppmu.mpg.de/indico/materialDisplay.py?subContId=2&contribId=2&materialId=0&confId=1012) pdf file  )
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(http://indico.mppmu.mpg.de/indico/conferenceDisplay.py?confId=1012)

1. **Background reduction by movable masks at KEK**

Shuji Tanaka explained the fixed and movable masks used at KEK. The movable masks need to be tuned to the beam conditions. Optimal positions are different for injection and run periods and also not stable in time. The adjustment is done by the BCG shifters (Belle Commission Group).

There are some issues to be resolved:

* + Vertical masks are probably useless for the nanobeam
	+ Horizontal masks exist only inside the beam orbit, outside they are exposed to synchrotron radiation. Would outside masks be useful reducing background? Can the mask be cooled?
	+ Positioning is rather coarse, 100µm. Improvements are needed and probably possible
	+ Design of new masks can start next year (the machine optics needs to be fixed before)
	+ More discussion in the IP/PXD/SVD session at the B2GM
1. **Tests of voltage regulation**

Stefan Rummel presented an update of the work on voltage regulation he presented in Valencia. The test circuit has now independent ground of regulator and load (15 m away). This is more realistic, since we want to use floating power supplies. The overshoot after load switching doubled, but is still within tolerances. In order to keep the voltage overshoot below 1% a blocking capacitance of 1µF is needed, which can be accommodated in the patch panel.

So regulation at 15 m distance is possible, this is the location of the DHH. So far there is no need for regulation closer, or of overvoltage protection in the patch panels.

Stefan asked whether there is rack space available at 15m. According to Yukata-san presently not, but it can be created.

We decided to organize a visit of the area during the next B2GM (Action Shuji Tanaka)

1. **AOB**
* DCD-B submission: Submitted October 25 as scheduled.
* TDR follow up meeting, November 7. Christian Kiesling and Hans-Günther Moser will present talks on injection noise, detector status, ASIC status and general issues. Hans-Günther asked everybody to help with material, especially since the deadline for slides is end of this week.
* Ushiroda-san confirmed the date for superKEKB commissioning will be October 2014, with the cosmic run starting in parallel to commissioning. Detectors (beampipe/SVD/PXD) need to be ready and operational by then. Hans-Günther will update the PXD schedule.
* Next meeting: November, 10, 10:00 (CET, daylight savings time ends October 31 !). Topic: B2GM preparation. Please inform Hans-Günther if you will attend B2GM.