

Agenda

DEPFET Institute Board Meeting
Ringberg, May 30, 2017

1. Project Leader's Report
2. Common Fund
3. MARCO at KEK
4. PXD "upgrade"
5. Manpower/equipment at KEK for Phase 2
6. Next PXD meetings (date/place)
7. Upcoming conferences
8. Switch of PL / Separation of Belle II and other DEPFET activities?

Common Fund

How to handle administration of the Common Fund after the switch of the Project Leader from C. Kiesling to C. Niebuhr?

Two options:

- (1) Common Fund is **transferred to DESY**
- (2) Common Fund **stays at the MPI** and **a representative at the MPI** triggers payments by request of the PL.
This representative should be elected by the IB.

It still needs to be figured out, which of the two options is administratively easier.

For now, would like to get OK from IB for **both** options.

MARCO at KEK

Plan: IBBelle for Phase 2

MARCO for PXD & SVD integration

MARCO is available until end of 2017

... then needs to be returned to CERN.

This would prevent us from operating Phase II and integration setups in parallel.

Suggested solutions:

- Further negotiations with CERN
→ decision is needed quickly, long negotiations no longer possible
- Build 2nd IBBelle-style system (Unit B)
→ expensive (> 100 kEUR), necessary manpower not available
- Build copy of MARCO
→ cost ? / manpower ?

PXD “Upgrade”

- Dedicated IB meeting (via SeeVogh) to discuss a PXD spare/upgrade took place on May 12, 2017.
- Participants: A. Bozek, J. Dingfelder, Z. Dolezal P. Fischer, C. Kiesling, P. Kodys, I. Konorov, T.Kuhr, S. Lange, C. Marinas, H.G. Moser, C. Niebuhr, I. Peric
- Results of the discussion:
 - It was concluded that a simple “spare” detector from day 0 is not possible, since the sensor production cannot be finished in time.
 - The DEPFET Institute Board decided unanimously to make the following recommendation:

An **improved version of the PXD** based on DEPFET sensors will be produced on the time scale of **2021**. The sensor production will start as soon as possible (in 2017). The decision, if changes to the metallization and/or the ASICs are necessary, will be taken in 2019 after the performance of the PXD has been studied with Phase 2 and early Phase 3 data.

Phase 2: Manpower at KEK

- **Module operation:** Botho Paschen (~ 2 mo.)
Göttingen NN (2-3 mo.)
- **DHH:** TUM (few weeks)
- **ONSEN:** NN (2 x 6 mo.)
- **DATCON:** Bruno Deschamps (~ 2 mo.)
- **SC/DQM:** Michael Ritzert (2-3 weeks), Björn Spruck (?)
- **MARCO/IBBelle:** Reimer Stever, Hua Ye (?)
- **Alignment:** Tadeas Bilka, Jakub Kandra (?, also cleanroom preparation in Aug.)
- **Miscellaneous:** Carlos Marinas (3 mo.)

Urgently need to reserve office space at KEK (Tsukuba hall, 3-gokan)!

Phase 2: Equipment at KEK

Some examples:

- PCs for the control room.
(KEK will supply monitors but not PCs for the different subsystems)
- FOS adapter for fibers to connect detector with eHut (ONSEN, DATCON)
(We have to buy a MPO-LC fanout module for Phase 3, production ~ 3 mo.).
- Clean room equipment (tools, etc.)
- ...

Questions:

- How to organize this?
- What/when to order (at KEK)?
- How to pay?

Next PXD meeting(s)

- **Short (1-day) meeting(s)** in Germany \Rightarrow DESY?

Suggestion:

- Beginning of July
- End of August

- **PXD meeting in fall in Japan**

Suggestion:

October 6-8, 2017

- Before B2GM (Oct. 9-13) and VXD BPAC (Oct. 15-17)
- By then will have results from pre-commissioning in B4
- Right before BEAST II installation in Belle II in mid October

... to be discussed ...

Conferences/speakers in 2017

Recently submitted abstracts and chose speakers for:

- NSS/IEEE 2017 Atlanta, USA Oct. 21
 - Andrey Rabusov, “PXD readout system using PERSY and DESY test beam”
 - Laci Andricek, “Final system tests of the DEPFET-based Belle II PXD”
- PSD11 Milton Keynes, UK Sep. 3
 - Botho Paschen, “Module production tests and integration of the Belle II PXD”
 - Roberto Blanco, “Integrated readout electronics for Belle II pixel detector”

Need speakers for:

- Vertex 2017 Asturias, Spain Sep. 10
Invited talk: “The Belle II Pixel Detector (PXD)”
- HTSD11/SOPIX17 Okinawa, Japan Dec. 12
Abstract deadline: Aug. 28, 2017