

# **B2GM / BPAC Meetings**



| KEK | VXD Mechanics Gemba | Oct. 17 |
|-----|---------------------|---------|
|-----|---------------------|---------|

KEK/ 
$$VXD - BPAC$$
 Oct.  $24 - 26$ 

**IPMU** 



### **B2BM**



Monday to Friday, Oct. 19 - 23 (prel. schedule uploaded)

#### Monday Oct. 19, morning session

- Opening T. Browder

Report from KEK management M. Yamauchi

SuperKEKB, Status and Schedule tba

- Commissioning Phases 1 & 2 tba

#### After coffee break:

VXD Gemba: service space, assembly, installation, racks parallel sessions (non-VXD)
VXD Interaction Region



### B<sub>2</sub>BM



### Tuesday, Oct. 20: Parallel Sessions

PXD, SVD specific: in parallel (9:00 - 16:00) Common PXD / SVD Session (16:00 - 18:00)

18:00 Party

#### Wednesday, Oct. 21: Parallel Sessions

Phase 2 commissioning Slow Control Background simulations Gemba (outer detector)



## **B2BM**



## Thursday, Oct. 22: Plenary Session

| 9:00:00  | 0:12:00 | 0:03:00 | Beam Pipe                  | S. Tanaka    |
|----------|---------|---------|----------------------------|--------------|
| 9:15:00  | 0:12:00 | 0:03:00 | PXD                        | C. Kiesling  |
| 9:30:00  | 0:12:00 | 0:03:00 | SVD                        | C. Schwanda  |
| 9:45:00  | 0:12:00 | 0:03:00 | VXD thermal test           | C. Niebuhr   |
| 10:00:00 | 0:25:00 | 0:05:00 | Inner detector integration | S. Tanaka    |
| 10:30:00 |         |         |                            |              |
| 10:30:00 | 0:30:00 |         | break                      |              |
| 11:00:00 | 0:12:00 | 0:03:00 | VXD commissioning          | C. Marinas   |
| 11:15:00 | 0:12:00 | 0:03:00 | CDC                        | N. Taniguchi |
| 11:30:00 | 0:12:00 | 0:03:00 | TOP                        | J. Fast      |
| 11:45:00 | 0:12:00 | 0:03:00 | ARICH                      | S. Nishida   |
| 12:00:00 | 0:12:00 | 0:03:00 | ARICH HV                   | H. Kakuno    |
| 12:15:00 | 0:12:00 | 0:03:00 | ECL                        | A. Kuzmin    |



## **B2BM** Thursday, Oct. 22: Plenary Session



| 15:00:00 | 0:30:00 |         | break                  |             |
|----------|---------|---------|------------------------|-------------|
| 15:30:00 | 0:12:00 | 0:03:00 | Slow Control           | M. Nakao    |
| 15:45:00 | 0:12:00 | 0:03:00 | DAQ                    | R. Itoh     |
| 16:00:00 | 0:25:00 | 0:05:00 | BEAST phases 1+2       | S. Vahsen   |
| 16:30:00 | 0:12:00 | 0:03:00 | Run coordinator report | S. Uno      |
| 16:45:00 | 0:12:00 | 0:03:00 | Phase 3 BKG            | H. Nakayama |
| 17:00:00 | 0:12:00 | 0:03:00 | Outreach               | T. lijima   |
| 17:15:00 | 0:30:00 |         | break                  |             |
| 17:45:00 | 2:15:00 |         | ТВ                     |             |
| 20:00:00 | 2:00:00 |         | FOP (from 20.00)       |             |



## **B2BM** Friday, Oct. 23: Plenary Session



Uehara

| 9:00:00  | 0:12:00 | 0:03:00 | Electric Safety                | R. Itoh        |
|----------|---------|---------|--------------------------------|----------------|
| 9:15:00  | 0:12:00 | 0:03:00 | Beam abort and Interlock       | H. Nakayama/S. |
| 9:30:00  | 0:12:00 | 0:03:00 | Injector                       | tba            |
| 9:45:00  | 0:12:00 | 0:03:00 | -                              | tba            |
| 10:00:00 | 0:15:00 | 0:05:00 | SuperKEKB beam instrumentation | J. Flanagan?   |
| 10:20:00 |         |         |                                |                |
| 10:20:00 | 0:30:00 |         | break                          |                |
|          |         |         |                                |                |
| 14:35:00 | 0:12:00 | 0:03:00 | Physics Coordinator's Report   | P. Urquijo     |
| 14:50:00 | 0:12:00 | 0:03:00 | Technical Coordinator's Report | P. Krizan      |
| 15:05:00 | 0:12:00 | 0:03:00 | Software Coordinator's Report  | E. Paoloni     |
| 15:20:00 | 0:12:00 | 0:03:00 | Computing Coordinator's Report | T. Hara        |
| 15:35:00 | 0:12:00 | 0:03:00 | IB report                      | C. Hearty      |
| 15:50:00 | 0:12:00 | 0:03:00 | EB report                      | F. Forti       |
| 16:05:00 | 0:12:00 | 0:03:00 | FB report                      | Y. Sakai       |
| 16:20:00 | 0:12:00 | 0:03:00 | close out                      | T. Browder     |
| 16:35:00 |         |         | adjourn                        |                |
|          |         |         |                                |                |



### **B2BM & BPAC in October**



## Saturday, Oct. 24

| 14:00 | 1:00 |      | executive session (closed)  |                 |                     |
|-------|------|------|---|-----------------|---------------------|
| 15:00 | 0:30 |      | Casual discussions over coffee  |                 |                     |
| 15:30 | 0:10 | 0:10 | General Introduction  | P. <sup>1</sup> | Krizan              |
| 15:50 |      |      | VXD common  |                 |                     |
| 15:50 | 0:10 | 0:10 | VXD installation  | C.              | Kiesling            |
| 16:10 | 0:10 | 0:10 | VXD services  |                 | Kiesling            |
| 16:30 | 2:00 |      | Tsukuba site visit (Beam Pipe, Mechanics, SVD ladder mount, VXD assembly) |                 | Tanaka, K. Nakamura |
| 18:30 | 0:30 |      | move to Okura   |                 |                     |
| 19:00 | 2:00 |      | reception   |                 |                     |
| 21:00 |      |      | Stay in Tsukuba   |                 |                     |
|       |      |      |   |                 |                     |
|       |      |      |   |                 |                     |

VXD Services: after discussion with M. Friedl, CK will summarize "inner" and "outer" services design



## **B2BM & BPAC in October**



### Sunday, Oct. 25, morning session

| 0:30 |  | executive session (closed)   |  |
|------|--|--|--|
|      |  | VXD common   |  |
| 0:15 | 0:10   | Remote Vacuum Connection   | C. Niebhur/K. Gardow   |
|      |  |  |  |
| 0:15 | 0:10   | Thermal design   | C. Niebuhr   |
| 0:15 | 0:10   | CO2 cooling  | H-G. Moser   |
| 0:15 | 0:10   | GND/EMC  | F. Arteche   |
|      |  |  |  |
| 0:20 |  | break  |  |
|      |  | PXD  |  |
| 0:20 | 0:10   | PXD overview, issues and schedule  | C. Kiesling  |
| 0:15 | 0:15   | PXD9 production  | J. Ninkovic  |
| 0:10 | 0:10   | Report from PXD ASICs review   | G. Varner (?)  |
| 0:15 | 0:15   | ASICs  | L. Andricek  |
|      |  |  | (for I.Peric)  |
|      | 0:15<br>0:15<br>0:15<br>0:20<br>0:20<br>0:15<br>0:10 | 0:15 0:10<br>0:15 0:10<br>0:15 0:10<br>0:15 0:10<br>0:20<br>0:20 0:10<br>0:15 0:15<br>0:10 0:10<br>0:15 0:15 | VXD common           0:15         0:10         Remote Vacuum Connection           0:15         0:10         Thermal design           0:15         0:10         CO2 cooling           0:15         0:10         GND/EMC           0:20         break         PXD           0:20         0:10         PXD overview, issues and schedule           0:15         0:15         PXD9 production           0:10         0:10         Report from PXD ASICs review           0:15         0:15         ASICs |



## **B2BM & BPAC in October**



### Sunday, Oct. 25, afternoon session

| 12:50 |      |      |                              |                       |
|-------|------|------|------------------------------|-----------------------|
| 12:50 | 1:00 |      | Lunch                        |                       |
| 13:50 |      |      | PXD                          |                       |
| 13:50 | 0:15 | 0:15 | PXD assembly                 | L. Andricek           |
| 14:20 | 0:15 | 0:15 | Ladder production. QC and QA | C. Koffmane           |
| 14:50 | 0:15 | 0:15 | Slow control                 | T. Roeder             |
| 15:20 |      |      |                              |                       |
| 15:20 |      |      |                              |                       |
| 15:20 | 0:30 |      | break                        |                       |
| 15:50 |      |      | VXD common                   |                       |
| 15:50 | 0:15 | 0:10 | Readout integration          | S. Lange              |
| 16:15 | 0:15 | 0:10 | BEAST phase 2                | C. Marinas (?)        |
| 16:40 | 0:15 | 0:10 | Monitor and Interlock        | L. Lanceri/L. Lorenzo |



## Cooling "Strategies"



#### CO2 cooling needed in the following phases:

assembly of "DESY Test" ladders at MPI
 MPI cooler

(alcohol, OK for SCB)

- DESY Test itself MARCO

(HNP pump delivered)

- Assembly of half shells @ MPI MARCO (-> MPI)

- BEAST Phase 2 @ KEK (in Belle) IBBelle

- Test of VXD @ KEK B1 MARCO

Pre-meeting with TÜV on Sep. 30, 2015: "certification" -> "statement of safety compliance"

Discussion with KEK cryogenics staff on Friday (Oct. 9) via Seevogh



### **PXD Milestones**



Bare PXD9 pilot modules:

Decision of SMD site/process (-> HLL):

- External ASIC review: Jul

final ASIC submission:

- first pilot modules assembled:

pilot module testing:

final ASICs tested:

test beam (DESY) with final ASICs:

Install IBBelle (Unit A) at Tsukuba hall:

- Commission BEAST 2 detector:

PXD at B1:

VXD Integration and Cosmic Tests (B1):

VXD installation

July 2015

July 2015

July 2015

Aug / Sep 2015

September 2015

Sep - Nov 2015

December 2015

February 2016

April 2016

Summer 2016

February 2017

March 2017 (?tbd)

June 2017 (?tbd)

Summer 2018

- (schedule needs some revision, finalize during B2GM)