



Report on the B2GM Meeting in Nagoya and other News

- B2GM Nagoya Meeting: July 6-9, 2011
- Status of CO₂ Cooling (MARCO)
- Visit at SOITEC in Bernin (Grenoble)
- Some News from EPS 2011 in Grenoble
- Scheduled Meetings on Mockup and Slow Control



B2GM (Nagoya University Campus)



B2GM was held in the traditional way: parallel sessions & plenaries (see <http://kds.kek.jp/conferenceTimeTable.py?confId=7108>)

Important sessions for the PXD:

Machine:

- Main lattice parameters defined
- IR focussing magnets (nano-beam) basically fixed.
- construction started, machine “on time”,
- commissioning will start in October 2014 (see also below)

Background:

- HER Touschek was calculated, much smaller than LER
- LER calculations not quite realistic since B-field after the quadrupoles is not correct, but background with correct field not significantly worse (factor 2 at most, extrapolated from Fuji area)
- SAD calculations now cross-checked with TURTLE (SLAC program), in good agreement



IR mechanics/installation:

- Service routing still under discussion (certainly need to modify cables at the power patch panel (too thick): additional connector in the dock area to receive the thick cables from the P/S is suggested)
- mockup for installation training foreseen at KEK (PXD and SVD)
- for machine commissioning a “Beast2” is foreseen, needs to be developed, candidates: μ TPC (Hawaii) + rad monitors + Si devices (DEPFET test, SVD module etc.)

CO2 Cooling:

- New parallel meeting was created (chaired by CK)
- report on CERN/MPI/Vienna efforts given (see below)
- CO2 cooling unit IBELLE seems to meet Japanese cryo regulations (= “small refrigerator system”)
- Unit(s) to be built at MPI will be brought to KEK
- No intention by KEK to develop their own closed CO2 system



Technical Board:

- group leaders will meet regularly (1 per month via EVO + at B2GMs) for synchronizing schedule and identifying (technical) bottlenecks, chaired by Yutaka Ushiroda
- Matrix of contact persons was established → discuss !
(<https://spreadsheets.google.com/spreadsheet/ccc?key=0Ap1uZWWWy6l0dFNsMjFScjAyem80WU9TbjJNNm1falE#gid=0>)

Schedule:

- Most important news from Belle II Technical Coordinator: Belle II will be delayed by 1 year, machine on time, but
- At the time of machine commissioning quadrupoles (QCS) will not be ready, Belle II will most likely not be in the beam (see above)
- Reason given for Belle II delay: funding of TOP (via US members) not yet secured



Schedule (cont.):

- Commissioning of machine without QCS until
- Unanimous vote from the Si systems (PXD and SVD): do not want to be in the beam line when machine starts commissioning
- Commissioning with BEAST2 (phase 1, no QCS) until May 2015
- During this time detector installation (without PXD/SVD)
- Roll-in (without PXD/SVD) in July 2015
- Start lumi commissioning in Aug 2015 (with Beast2 phase 2), until Dec. 2015
- Install PXD/SVD in winter shutdown (Jan/Feb 2016)
- Physics run from March 2016 on

The machine and Belle II schedule + commissioning phases (with and w/o QCS) has important consequences for the PXD:

- We have the chance to do a prototype run, it needs 1.5 years, but is in agreement with the overall Belle II schedule
- After consultation with Belle II TC and Spokesman we decided to add the prototype run to the PXD overall schedule



Schedule (cont.):

- Use the lumi commissioning phase of the machine to install the PXD + SVD on a second (identical) beampipe outside of Belle II (no cosmic ray running for the Si systems!)
- Electronics (a few thoughts from Nagoya, CK + Ivan):
We also profit on the electronics sector from the additional 1.5 years of prototyping: should think of pro's and con's of integrating the two ASICs (DCD, DHP) into one:
certainly easier for the flip-chipping and repair, better heat load distribution, potentially wider dynamic range (!),
redesign of DHP necessary anyway: unified technology (TSMC)
-> start discussion
- Need to make rapid progress now concerning the scope of the prototype run ("final" design, final layout, schedule),
must all be fixed by November 2011 ! No time to relax !



B2GM (Nagoya University Campus) cont.



B2GM outside Japan:

- Munich institutes (MPI, LMU, TUM) offers to organize the B2GM in July 2012
- tentative location: Bad Aibling, see foils thereafter

- We are asked to send the advertising foils to the Belle II IB chair and to the Spokesman by the end of this week (!)

- Please endorse -



12th Belle II General Meeting



Technische Universität München



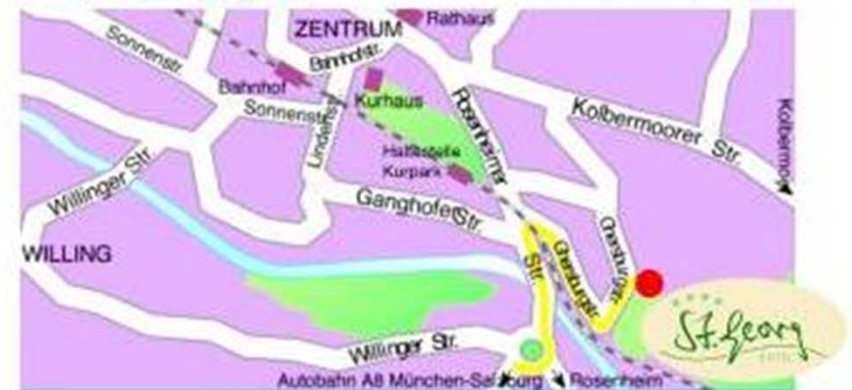
We propose to hold the Juli 2012 Meeting of the Belle II Collaboration in a secluded resort in Upper Bavaria, in the small town of Bad Aibling, some 50 km south of Munich

Local Organizers: C. Kiesling (MPI), S. Paul (TUM), J. Schieck (LMU)



Bad Aibling is a small town with a famous spa and a well-equipped conference center “Hotel St. Georg”, some 35 km away from the largest Bavarian lake “Chiemsee”.

The conference center St. Georg has all the infrastructure to accept up to 200 guests (wireless in all rooms). There is a big central auditorium and enough space for 4 or more parallel sessions. It has a swimming pool and wellness area.



Venue:

Hotel St. Georg (www.sanktgeorg.com)
Ghersburgstr. 18, D-83034 Bad Aibling

Proposed date:
either July 16-21, or July 23-28, 2012

arrivals on Sunday, July 15 or 22 (if BGM is held as usual)
departure on Sunday July 22 or 29

Price per day (single room, all meals and coffee breaks) ~ 140 Euros





Status of CO2 Project (MARCO)



- Frame for MARCO (M. Lippert, MPI-CERN) is ready, however a few parts are still missing to be installed (delay in ordering through CERN, unfortunately)
- Due to vacation time frame with parts (before piping) will only be ready by mid-September (5 weeks delay, mostly because we did not make it before the summer break, see above)
- Orbital welding machine (for stainless steel piping) will arrive at MPI on Aug. 12. Certified welder at MPI will start to commission the orbital welder, so that we can finish the piping job as soon as MARCO is in Munich (mid September)
- Next meeting at CERN on Aug. 2 (together with Immanuel, Tscharlie, Bart + Markus L + CK + ?)



Visit at SOITEC



Search for alternative SOI wafer production:

During EPS conference, CK visited CEO of SOITEC, Bernard Aspar, and production manager Chrystelle Lagahe-Blanchard a Bernin (near Grenoble) to discuss potential help from SOITEC in providing SOI process (bonding, grinding, polishing, edge trimming)

Main results:

- SOITEC itself cannot help (production line has changed)
- LETI (who did the job for us before, now owned by SOITEC) only produces 200 mm wafers. However, Bernard thinks that they can also do 150 mm, albeit not in their automatic production line. We agreed to follow this line.
- After discussion, Bernard contacted top management of LETI. We now wait for response from LETI (unfortunately everybody in France is on holiday right ...)
- Bernard will follow up the matter and keep us informed



News from EPS 2011 in Grenoble



Generally:

LHC runs fine, but nothing exciting coming out yet. Air gets thinner for Super symmetry (bounds now getting close to the TeV region !)

Marcello Giorgi gave a talk on SuperB (see one foil below). He is full of optimism that SuperB will become reality.

The problems:

- Only 50% of necessary funds are granted by Italy
- The synchrotron community is pushing the project, and this has never worked in favor of particle physics (sync. rad. community need one beam of positrons, they do not like electrons).

In a parallel session on accelerators (upon a question to SuperKEKB about possible competition from SuperB), the chairman said, SuperB exists „only on paper“ ...



Approved !

SuperB has been approved as the first in a list of 14 “flagship” projects within the new national research plan (December 2010).

The national research plan has been endorsed by “CIPE” (the institution responsible for infrastructure long term plans) (April 2011).

A financial allocation of 250 M€ in about five years has been approved for the “superb flavour factory”.

At the end of 2010 an initial sum of 19 M€ has been allocated.

A sum of the order of 50 M€ is expected in 2011 budget.



Work Group Meetings Coming up



- During the Nagoya meeting the DEPFET IB members unanimously welcomed DESY as a new member of the DEPFET collaboraton.

DESY is interested to contribute in mechanical / cooling tasks
A first meeting with all groups interested in the mechanical and thermal mockups (DESY, Krakow, MPI, Vienna, Valencia) will meet on Sept. 8 at MPI. Idea: Overview and status, define workpackage for DESY.

- The TUM informatics crew collaborating with us in the power supply area is also strongly interested to get into the overall Belle II slow control.

A meeting is organized (mainly by LMU) to get an introduction to the ATLAS slow control (participants LMU, TUM, MPI, KEK, ??) on September 9 at CERN. Anybody else wanting to join?
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