



News and plan

TDCPV meeting

19/10/2020

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2020c plan



- October ~20th: beams in the Main Ring, run ends on December 18th;
 - → target peak lumi: $\sim 4 \times 10^{34} \text{ cm}^{-2}\text{s}^{-1}$;
 - → target integrated lumi: $\sim 60 \text{ fb}^{-1}$;
- Cosmic started on Oct 12nd 0T night-time 1.5T day-time, to continue up to 19/10
 - Beam collision scheduled for Oct 26th

Physics Week 2020



- Belle II Physics week;
 - Topic: Belle II first publications and amplitude analyses
- Dates: November 30th – December 4th;
 - Times:
 - → Morning session: 8:30 – 12:30 CET (16:30 – 20:30 JST);
 - → Afternoon session: 15:00 – 19:00 CET (23:00 – 3:00 JST);
 - On Zoom (and recorded)

Lectures:

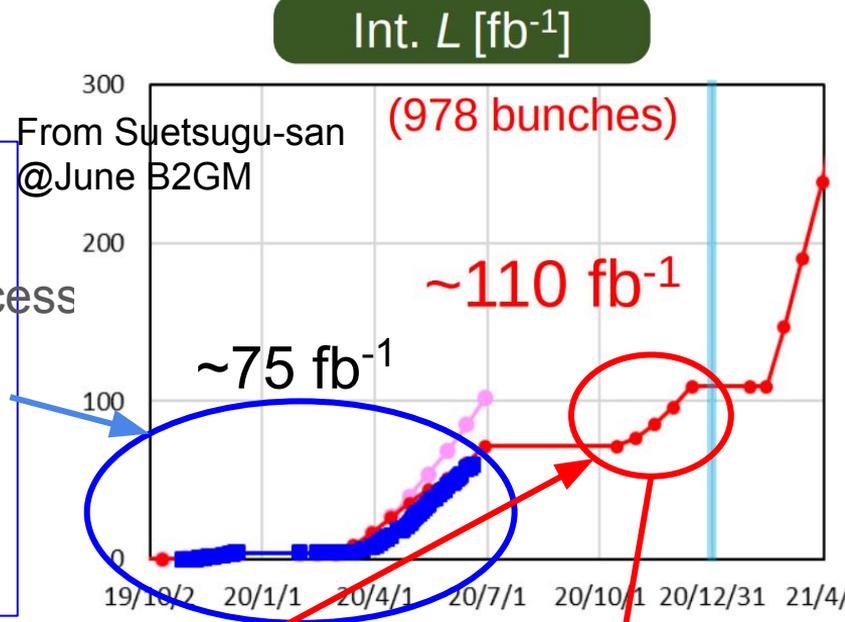
Speaker	Topic
Markus Roerken	Introduction to amplitude analyses
Tim Gershon	Experimental considerations
Christoph Hanhart	Amplitude analysis theory
Jonas Rademacker	How to build an amplitude model
Keri Vos	Selected topics in semileptonic B decays
Emilie Passemar	Amplitude analyses of τ decays

Discussion of upcoming Belle II papers:

Analysis	Speaker
Inclusive V_{cb}	Max Welsch
τ mass	Navid Rad
(Belle + Belle II) ϕ_3	Niharika Rout
Dark Higgsstrahlung	Marcello Campajola
$B^+ \rightarrow K^+ \nu \bar{\nu}$	TBD

Moriond 2021 dataset

- Moriond dataset
- ICHEP Dataset ~ 35 /fb
- Plus other ~ 30 /fb already collected and process
 - Bucket13 ~ 5 /fb **DONE**
 - Bucket14 ~ 10 /fb **DONE**
 - Bucket15 ~ 20 /fb **DONE**
 - GRL and offline lumi to be done
- Total ~ 75 /fb (including 10% off-res)



- Additional ~ 60 /fb foreseen for 2020c
 - Not for Physics for Moriond
 - Ok for detector studies
- **Total ~ 130 /fb**

Plan for Moriond 2021



For TDCPV WG

- B- \rightarrow eta' Ks rediscovery
- B- \rightarrow J/psi KL
- Ft update with 65/fb ?
- Any other possible analyses?

Moriond dataset

- ICHEP Dataset ~35 /fb
- Plus other ~30 /fb already collected and processed
 - Bucket13 ~5/fb DONE
 - Bucket14 ~10/fb DONE
 - Bucket15 ~20/fb DONE
 - GRL and offline lumi to be done
- **Total ~75/fb (including 10% off-res)**
- 2020c ~60/fb (target integrated lumi)
 - Ok for detector studies
 - Very unlikely for physics
 - PhyPerf studies and MC14 will not be ready in time

For preliminary results (conference papers and public plots), the usual set of deadlines for Moriond is:

	Recommended	“Just in time”
WG sign-off	January 28 th	February 18 th
RC sign-off	March 4 th	March 11 th
CWR sign-off	March 15 th	March 19 th

Ale at PGM

November B2GM and next meetings



- We will have again a “Physics Day” during the B2GM, on Thursday November 12th;
- Goal: plan for the results we want to show at Moriond (the February B2GM will be too late!), and start thinking about Lepton Photon 2021;
- We will have plenary sessions (starting at 1pm JST) for WG summary reports, and parallel sessions (in the Japanese morning and/or evening);
- Please start thinking about it, and let your Conveners know if you plan to give a presentation, so we can organize the sessions efficiently;

- Next Physics General Meetings:
 - October 22nd, 8am JST;

Ale at PGM

- Bucket15 (last of exp12) fully done for hadron-mdst at KEKCC and grid (new)
 - All events still running on the grid <https://agira.desy.de/browse/BIIDP-3187>
 - Still lacking good-run list <https://agira.desy.de/browse/BIIDP-3212>
 - and offline luminosity <https://agira.desy.de/browse/BIIDP-3209>
 - Expertes are working
- Exp10 proc11 reprocessing with KLM payload fixed running $\frac{2}{3}$ done
 - Paused due to lack of disk space at BNL
 - <https://agira.desy.de/browse/BIIDP-3099>
- S-proc1 (bucket15 w/ release 05-01-0x) to be done at BNL
 - first time calibration off-KEKCC
 - Prescaled hRAW produced (at KEKCC) and being copied at BNL
 - Some mod to Airflow to run at BNL, then start calibration
- MC14 will start mid november, as soon as CDC dE/dS payload from s-proc1
 - MC13 small request still ongoing

Data Production liason



- **Sviat Bilokin** wishes to step down as Data Production liason
 - **Many thanks for all the work done!**
- Wei Shan of Hunan Normal University (China) is willing to dedicate a student to take this responsibility.
 - She will start after B2GM, as HNU is not (yet) a BelleII member institution but they are asking to join at this B2GM
- In the meanwhile, Sviat agreed to continue his work in validation
 - He will also teach the new liason about the technicalities of the task
 - Thanks again, Sviat!

Flavour tagger developer



- Fernando will leave BelleII for LHCb (best wishes!) in a couple of months
 - Need to find a suitable person to follow up his work on Flavour Tagger
 - Obvious candidate Colm is in his last year as PhD, so need to focus on that
 - Willing to help, but not to take responsibility
 - Anyone interested?
- In a first phase Fernando and Colm will be around and helping, so not a hard task
 - Most of the work will be to validate with newer release(s)
 - And produce weight for MVA for new releases
 - Machinery is already in place, and well documented
 - Very good visibility, strategic tool for many BelleII analysis
 - Can be a good position for PhD or post-doc
 - Anyone interested?
 - We will contact some of you shortly

Analysis Skim



- In future analysis will start from analysis skim (udst)
 - We need to check that everything is fine
 - All channels covered (see Chiara's talk)
 - Efficiency is good (eg see mine and Ale's talks in past WG)
- To encourage people to look at analysis skim (udst) for TDCPV we are thinking to make mandatory to have them checked for your analysis in order to have an analysis approved by WG
 - It is not a big task: in first approximation
 - you apply TDCPV skim to your signal MC
 - look at the results (mostly efficiency)
 - Compare with what you get starting from all events mdst
 - If everything is ok, that's it.
 - If not, we need to understand what is going on, otherwise your analysis efficiency will be affected as soon as you will be using udst on data!

Today meeting



18:00 → 18:20 **News**

Speakers: Dr Stefano Lacaprara (INFN Padova), Yosuke Yusa (Niigata University)

18:20 → 18:40 **Update on J/psi KL**

Speaker: Giuseppe Finocchiaro (Belle (SuperKEKB Experiment))



18:40 → 19:00 **signal eff with TDCPV and BtoCharm skims**

Speaker: Jakub Kandra (Charles University)

19:00 → 19:20 **Beam spot calibration**

Speaker: Dr Radek Zlebcik (Charles University, Institute of Particle and Nuclear Physics)

19:20 → 19:40 **Skims update**

Speaker: Chiara La Licata (Belle (SuperKEKB Experiment))

19:40 → 20:00 **Update on B->eta' K**

Speaker: Dr Stefano Lacaprara (INFN Padova)



Backup