



News

TDCPV meeting 24/8/2020

Stefano Lacaprara

INFN Padova

Status after ICHEP





- Flavour tagging performances arxiv:2008.02707
- Prompt measurement of TDCPV and mixing for J/psi Ks (Approved plot) just in time <u>BELLE2-NOTE-PL-2020-011</u>
 - We will discuss in details plan for the near and medium future with core analysis team (Thibaud and Chiara)
 - Both for plan and for tasks sharing
 - Not possible yet due to (well deserved) holiday
 - Will do next WG meeting and on mailing list before that
- Phi Ks analysis (RB and FL) approved arxiv:2005.07507,
- In the pipeline:
 - J/psi KL [BELLE2-NOTE-TE-2018-007]
 - Giuseppe et al. will present status next AG meeting
 - Eta' Ks [BELLE2-NOTE-PH-2020-053]
 - (SL) Some progress done, will present next AG as well
 - J/psi Ks MC reweight

2

Next conferences





- Beauty (zoom-only) 21-24 september
- CKM Melbourne (?) 30/Nov 4/Dec
- Please be aware of the mandatory steps for approval
 - AG review
 - Need to have a B2note updated describing the analysis
 - RC review
 - At least 14 days
 - Very optimistic scenario: all is ready and well documented.
 - o CWR
 - Not needed for approved plot

Guidelines for approval
of physics results in
Belle II

Stage	Days before start of conference		
	Aggressive	Recommended	Paper
Target AG sign-off	45	60	90
Start of RC Review	25	40	60
Start of CW Review	10	20	30

Focus on analysis SKIM - udst





- So far, we have not used much the udst analysis skim in this
 - The plan is that in the future only udst will be available for analysis, with some exception,
 - We need to validate the skim selection for each analysis
 - Also need to understand if the current skims covers all the analysis we want to make or if we need to introduce new ones
 - For data processing point of view, it would be also important to optimize as much as possible the skims, to reduce retention rate and the number of different skims
 - This will result in faster udst availability, so it is in our interest too.

Skim issue: example





- Do not take for granted that the skims work out of the box or that they have no impact on your analysis
- Example: B₀ -> η' Ks: η'->η (->γγ) π⁺π⁻; Ks->π⁺π⁻
 - Efficiency starting from hlt_hadron:

Reconstruction efficiency: 39 %

+ selections: 31 %

Starting from analysis skim (udst)

Reco: 24.5 %

+ selection: 19.5 %

- Relative efficiency: ~60 %
 - Still investigating
- Need to perform this kind of test for every analysis, and investigate possible issue
 - This is AG responsibility

Data Production status





- bucket13 (2020a/b data runs 4272-4481, ~5.0/fb): details on Processing 2020a-b
 - HLT skims on KEKCC, all events on the grid
 - Also mdst for hlt_hadron available on the grid
 - And udst systematics skim
- bucket14 (2020a/b data runs 4686-5247, ~9.7/fb): details on Processing 2020a-b
 - HLT skims on KEKCC
 - hlt_hadron + all events on the grid (in progress)
- bucket15 (2020a/b data runs 5248-6427, ~19.0/fb): details on Processing 2020a-b
 - Cdst production for post-tracking calibration in progress
- Slow down due to kekcc/distributed computing servers replacement

Reminder KEKCC replacement





Dear KEKCC users,

Here is the schedule of system replacement work of KEKCC:

- 2020/8/31 12:00 Current KEKCC will be terminated
- 2020/9/01 13:00 New KEKCC will start

https://wiki.kek.jp/x/moHpBw

S. Nishida

TDCPV meeting schedule





- Will resume normal bi-weekly schedule
 - Europe friendly: Monday 18:00 JST 05:00 EST 11:00 CEST
 - O US friendly: Wednesday 7:00 JST 17:00 EST (Tues) 23:00 CET (Tues)
- Next meetings:
 - 24/8 EU-friendly (today)
 - 9/9 US-friendly
 - o 21/9
 - o 7/10
 - 0 ...

Today meeting





TDCPV Group Meeting (EU friendly)

Monday 24 Aug 2020, 18:00 → 20:00 Asia/Tokyo

Stefano Lacaprara (Belle (SuperKEKB Experiment)), Yosuke Yusa (Niigata University)

Description https://speakapp.link/to/FUJkZQ

18:00 → 18:10 **News**

Speakers: Dr Stefano Lacaprara (Belle (SuperKEKB Experiment)), Yosuke Yusa (Niigata University)

18:10 → 18:30 **Dilepton skim**

Speaker: Alessandro Gaz (Belle (SuperKEKB Experiment))

18:30 → 18:50 **TDCPV skim**

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