
Mixing and Time-dependent analysis

(see pdf file of the section available on the meeting page)

3rd Physics of B-factories Meeting

JGU, Mainz, Germany

1st – 2nd October 2010

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Outline

- Proposed outline posted on the HN after the KEK meeting:
 - <http://hypernews.slac.stanford.edu/HyperNews/BFLB/get/Time-Dependent-Analyses/1.html>
- Some feedback from Owen posted to revise this.
- Mixing added to the time-dependent part.
 - Now also correlated with the B-mixing and lifetimes, charm mixing & CPV, EPR & CPT sections... as well as the angles.

Recent developments

- Started to work on latex (this talk)
- Have some feedback on this [need to digest and incorporate...]

Overview

- Editors: AB (+ *some clever Belle person*)
- Section outline:

7. Mixing and time-dependent analysis

- Neutral meson mixing
- Time-dependent evolution
- Use of flavour tagging
 - dilution
 - Tag-side interference
- Resolution on Δt
- Parameter extraction from data

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Initial rough draft:

[SP/BG] B and D can't be described completely in parallel or completely together. See drafts of other sections to try and make this blend in.

Starting to pull text together:

Not Started.

Really need to see how the tagging section starts to take shape to know what needs discussing and gauge level. Can start working on this, but better to see a draft of tagging section.

Starting to pull text together.

[SP] What is the level of detail you are planning for Delta t resolution functions? Foreexample, were you planning to discuss GExp (an Exponential convolved with a Gaussian used in BaBar's B lifetime measurements)?

Not started

Aim of Today

- Look at the text that currently exists (see agenda page for draft).
- Discuss content:
 - Level of mixing: OK / not enough / too much / comments?
 - Tagging: when text start to come together for me to see what has to be done in this section?
 - Is anything missing?
 - Anything else?

What next

- Put into SVN.
- Continue working (taking on board comments)