Status of PBF "Vertexing" section

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Wouter Hulsbergen (from Amsterdam, via *EVO*)

- editors
  - Belle: Takeo Higuchi
  - Babar: Wouter Hulsbergen
- contributors
  - Belle: K.Sumisawa

Section layout

introduction

decay tree reconstruction

delta-t measurement

Existing public documentation

- for Babar

    - Aubert etal., *"A Study of time dependent CP violating asymmetries and flavor oscillations in neutral B decays at the Upsilon(4S)"*, **PRD66:032003,2002, hep-ex/0201020**

    - → quite extensive description of delta-t measurement, resolution function, calibration

- for Belle

    - H.Tajima et al., *"Proper-time Resolution Function for Measurement of Time Evolution of B Mesons at the KEK B-Factory"*.Nucl.Instrum.Meth. A533 (2004) 370-386,

    - → even more extensive description of delta-t measurement, resolution function

- others?

    - Paul Avery's stuff is a source of inspiration, but never published

    - could refer to some papers by Billoir/Fruhwirth

    - Babar doesn't actually quote an*ything but* W. Hulsbergen, *"Decay chain fitting with a Kalman filter"*, NIM A552 (2005)

Overlap with/dependence on other sections

- section *"B meson reconstruction"*
  - what is in this section?

- section *"Mixing and time-dependent analysis"*
  - tag B vertex reconstruction
  - delta-t measurement
  - resolution function

- I am missing a section on **track reconstruction**
  - cannot do any vertexing without tracks ...

Status

- there isn't more than what you have just seen

- foresee no progress at short time scale
  - I am myself rather occupied at the lhc
  - did not succeed to contact Belle editor before this meeting