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Analysis meeting
December 15, 2022

Instrumental Asymmetries

Inputs for Moriond23

- Measure $\mathcal{A}_{\text{det}}$ for $B^0 \rightarrow K^+\pi^-$, $B^+ \rightarrow K_s^0\pi^+$, $B^+ \rightarrow \pi^+\pi^0$ and $B^+ \rightarrow K^+\pi^0$ using $D^0 \rightarrow K^-\pi^+$ and $D^- \rightarrow K_s^0\pi^-$ ($\sim 360/\text{fb}$).
- Measure $\mathcal{A}_{\text{det}}$ in D channels from data and assign a systematic uncertainties as the difference between control and target (B decays) values in MC (MC15ri).

$\mathcal{A}_{\text{det}}(\pi^+)$ (for $B^+ \rightarrow \pi^+\pi^0$) : $(0.37 \pm 0.24 \pm 0.37) \% \rightarrow (0.37 \pm 0.45) \%$

$\mathcal{A}_{\text{det}}(\pi^+)$ (for $B^+ \rightarrow K_s^0\pi^+$) : $(0.37 \pm 0.24 \pm 0.44) \% \rightarrow (0.37 \pm 0.50) \%$

$\mathcal{A}_{\text{det}}(K^+)$ (for $B^+ \rightarrow K^+\pi^0$) : $(xxx \pm xxx) \%$ in progress (finished by today)

$\mathcal{A}_{\text{det}}(K^+\pi^-)$ (for $B^0 \rightarrow K^+\pi^-$) : $(xxx \pm xxx) \%$ in progress (finished by today)

Justin

Benedikt

$B^0 \rightarrow D^\star l \nu_l$ analysis

Fitter

- **Goal** : generalise the code to fit simultaneously n bins of w .
- Take the modifications made by Benigno (thanks!) and generalise for my 7 bins of w .

Next steps:

- Continue to modify fitter.cc;
- Modify plotter.cc;
- Modify generator.cc (for toys).