

Optimization update for $B \rightarrow K \mu e$



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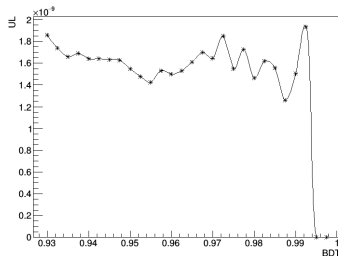
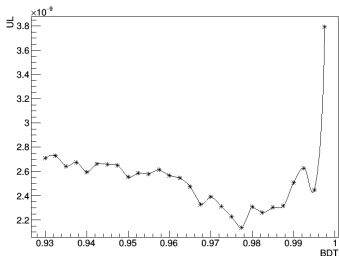


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Introduction

- ⇒ Since we added 2011 MC, we need to update everything:
- Retrain BDT.
 - Re optimize everything.
 - Calculate the UL.

BDT optimization

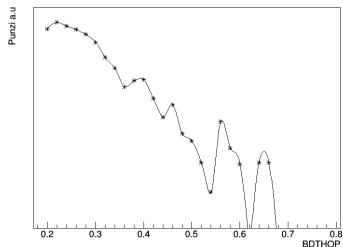
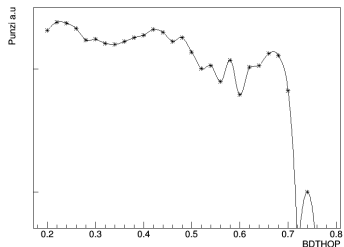
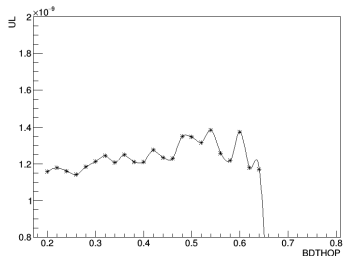
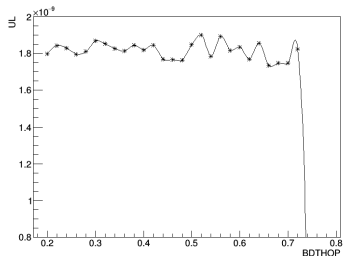


⇒ Again the result seems stable and the cut:

$$BDT > 0.98 \quad (1)$$

seems oki doki and the same as before.

BDTHOP optimization



⇒ Again the result seems stable and the cut: $BDT > 0.5$ seems ok.

Conclusion

- ⇒ The optimization is stable and we have the same working point.
- ⇒ The note is updated.
- ⇒ The switch of modes $B \rightarrow K^+e^+\mu^-$ and $B \rightarrow K^+e^-\mu^+$ is now made consistent in the ANA note.
- ⇒ We are moving towards systematics determinations.

Backup