

Results and Prospects in Rare and Semi-leptonic decays

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Run1 results from UZH

⇒ Zurich group was super active in Rare decays! just to give you a hint:

⇒ Angular analysis of $B^0 \rightarrow K^* \mu^- \mu^+$

⇒ Inflaton search in $B^\pm \rightarrow K^\pm \chi(\mu\mu)$

⇒ Moments analysis of $B^0 \rightarrow K^*(1430) \mu^- \mu^+$

⇒ Lepton flavour violation search for $\tau \rightarrow \mu\mu\mu$.

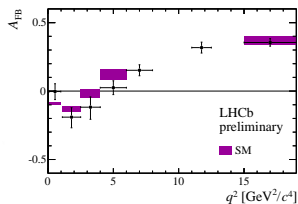
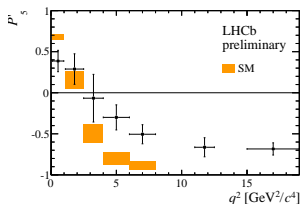
⇒ Kaggle competition for LHCb.

⇒ The "holy grail" of LHCb $B_s^0 \rightarrow \mu^- \mu^+$.

Angular analysis of $B^0 \rightarrow K^* \mu^- \mu^+$

N.Serra, M.Chrzaszcz, E.Bowen, B.Storaci, M.Tresh

- Huge impact of the group!
- We were involved there from the start: pre-selection, BDT, etc.
- One of the three methods (MoM) is fully and exclusively ours.
- Separate paper about the method published: **FIXME!**
- Paper is in the final stage of the review.

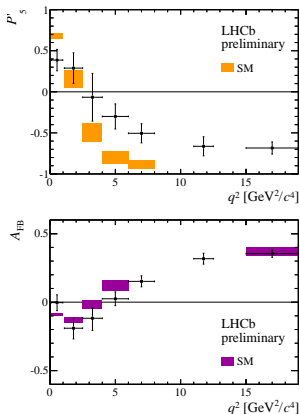


Angular analysis of $B^0 \rightarrow K^* \mu^- \mu^+$

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⇒ "Take a moment and discover New Physics"



Inflaton analysis: $B^+ \rightarrow K^+ \chi(\mu\mu)$

A.Mauri, N.Serra, M.Chrzaszcz

