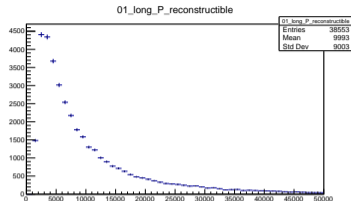


Tracking with open Velo, C-side

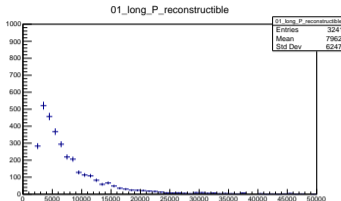
Michel De Cian

14.3.2022

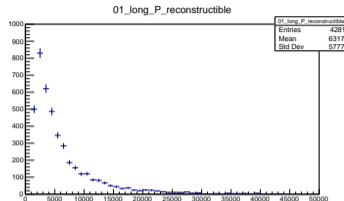
nominal



Velo open, plus

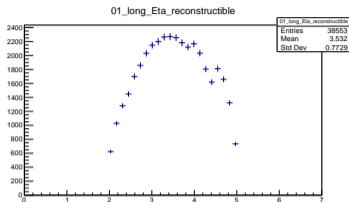


Velo open, minus

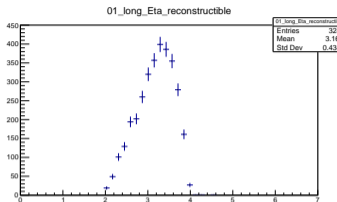


- Test tracking performance for open Velo, only C-side.
- Use minbias sample with Velo open conditions. Filter Velo tracks to be only on the C-side, do the same thing for the "reconstructible" category.
- Also split between the charges.
- Have about 20% of reconstructible tracks with respect to full Velo closed.
- Clear difference between charges.

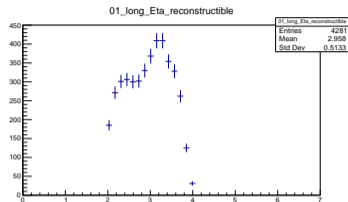
nominal



Velo open, plus

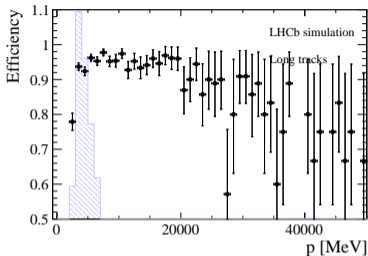


Velo open, minus

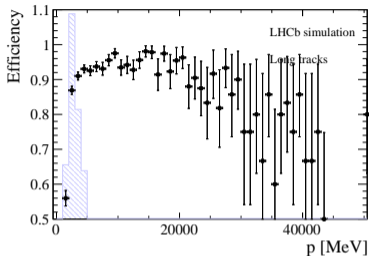


- Also have reduced pseudorapidity range.

Velo open, plus



Velo open, minus

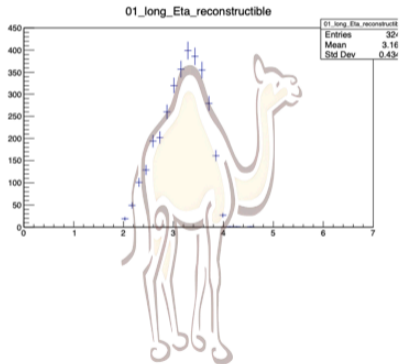


- Tracking efficiency (i.e. efficiency of reconstruction algorithms) remains high.
- With some difference between the charges.

conclusion

- Get about 20% of minbias tracks with Velo open, C-side only wrt to Velo closed, both sides.
- See some charge asymmetry, mostly for low momentum.
- Tracking efficiency remains high.
- Implemented in [MR!1413](#)

Velo open, plus



Velo open, minus

