Results for profiled FC for $B^0 \to K^\star \mu\mu$

Stefano Lacaprara

stefano.lacaprara@pd.infn.it

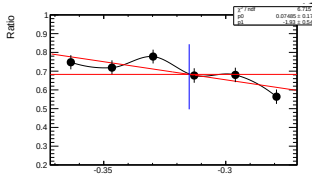
INFN Padova

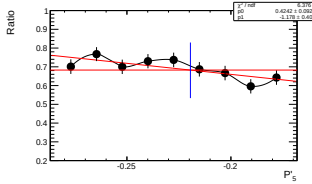
P5' meeting,
Vidyo, February 9, 2017

Introduction

- In the next slides I'm showing, for each bin and each regions:
  - reg 0 P_1 positive
  - reg 1 P_1 negative
  - reg 2 P_5' negative
  - reg 3 P_5' positive
- for each Generated Point (GP) for the FC procedure
  - the distribution of the values of the best fit of the toys for P_1 or P_5' (depending on the region) [black histogram]
    - ⋆ the best value is determined as usual by the bivariate guas fit to the 20 scanned points;
  - the value of the P_1 or P_5' of the GP [red histogram]
- What I expect is that the best fit values of the toys are distributed symettrically and maybe normally around the GP value;
- the presence of the physical boundaries alter significantly the distribution, of course, in some case

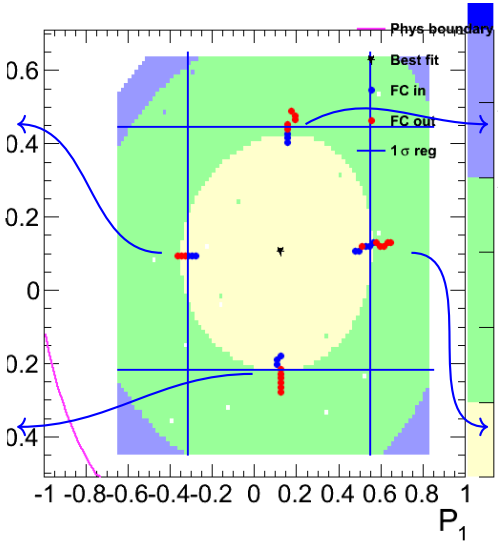
Bin 0

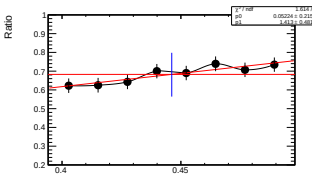




Done

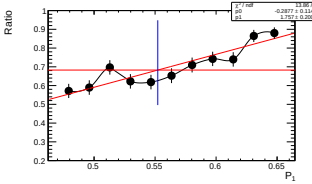
Done



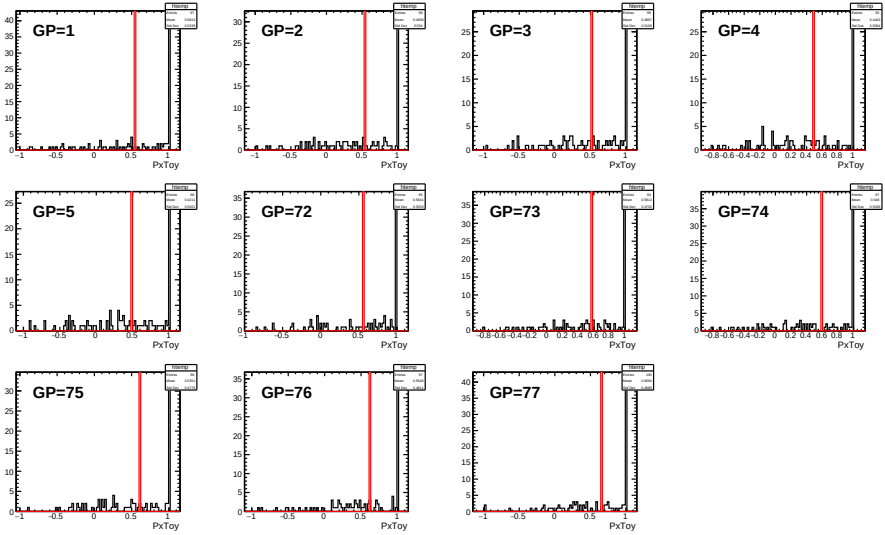


Done

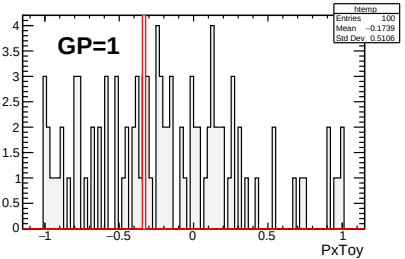
Done

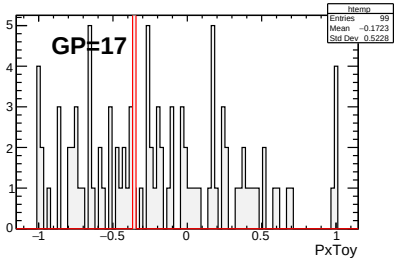


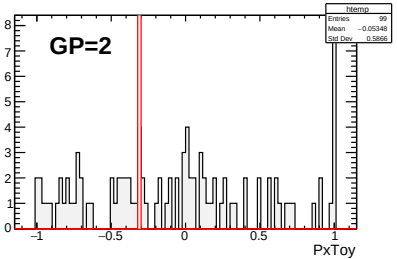
Bin 0 region 0: P_1 positive

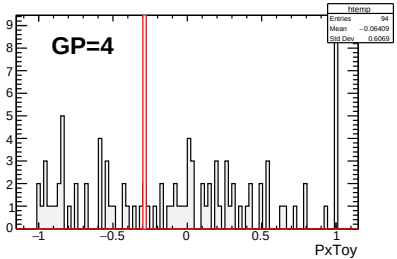


Bin 0 region 1: P_1 negative

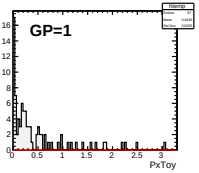


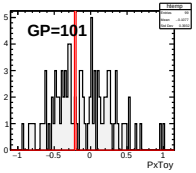


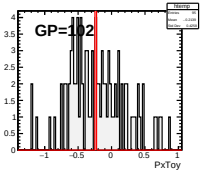


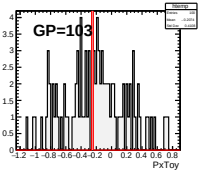


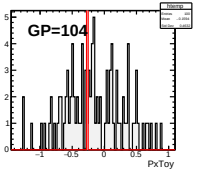
Bin 0 region 2: P_5' negative

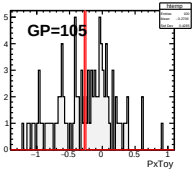


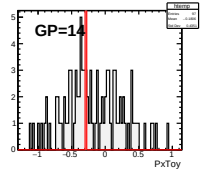


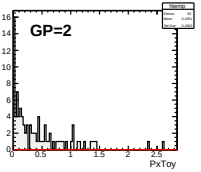


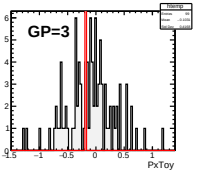




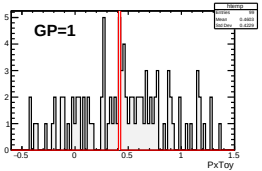


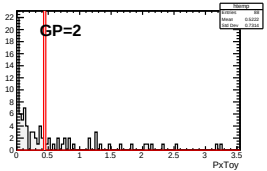


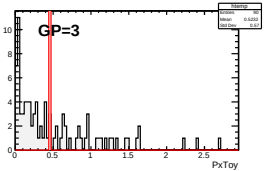


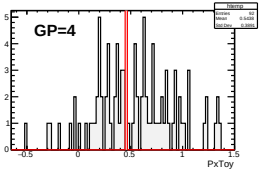


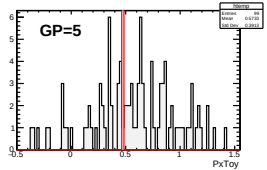
Bin 0 region 3: P_5' positive

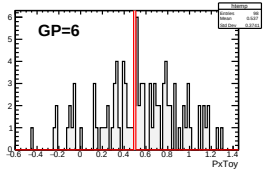


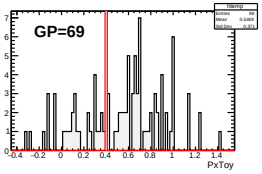


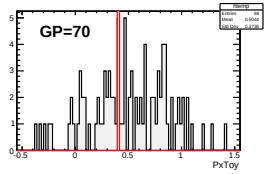




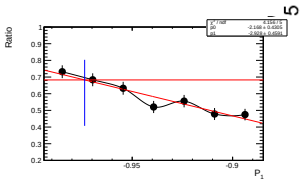






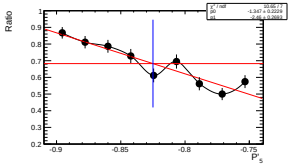


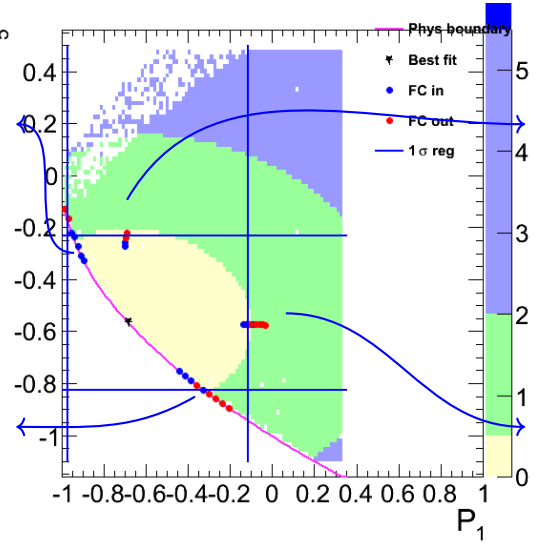
Bin 1

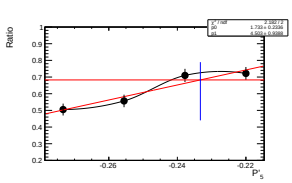


Done

Done

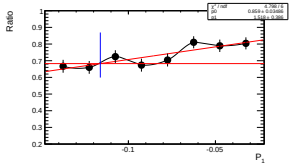




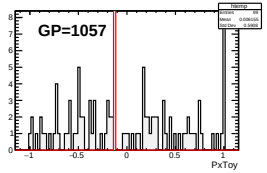


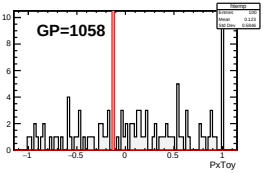
Done

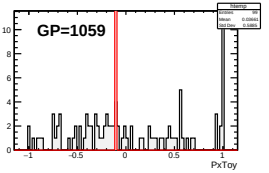
Done

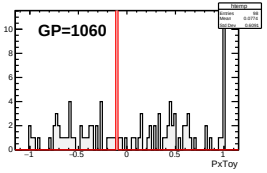


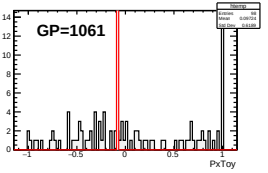
Bin 1 region 0: P_1 positive

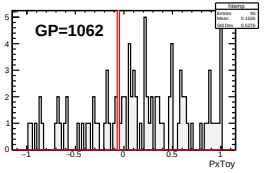


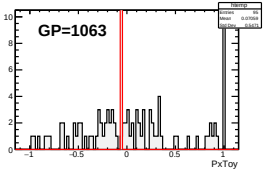


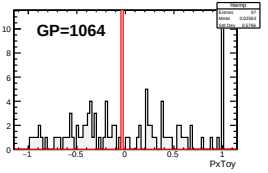




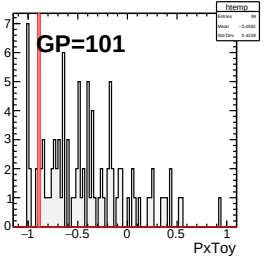


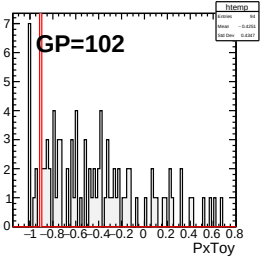


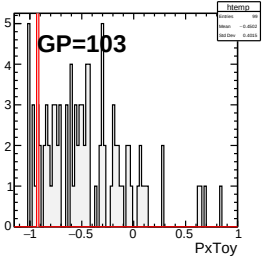


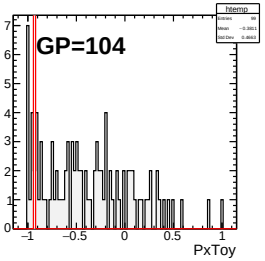


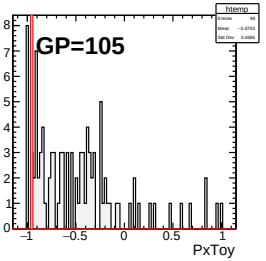
Bin 1 region 1: P_1 negative

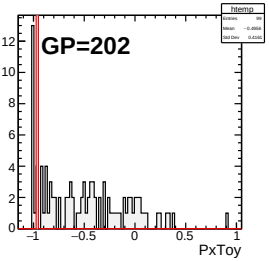




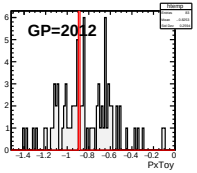


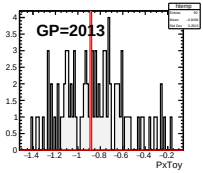


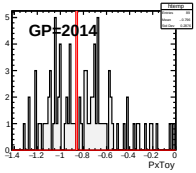


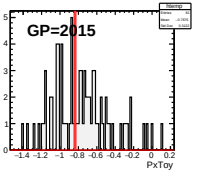


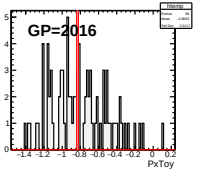
Bin 1 region 2: P_5' negative

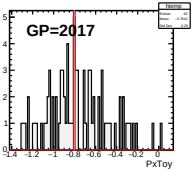


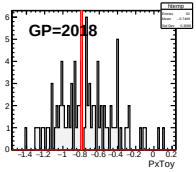


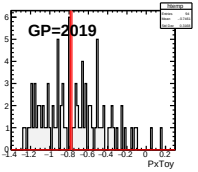


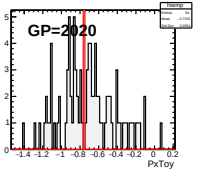




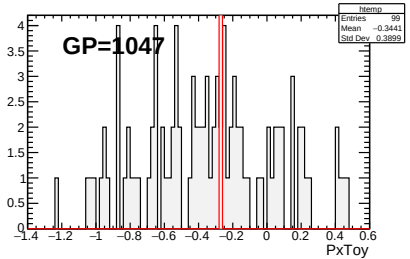


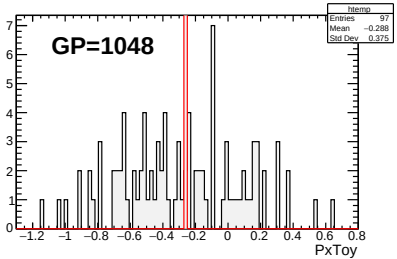


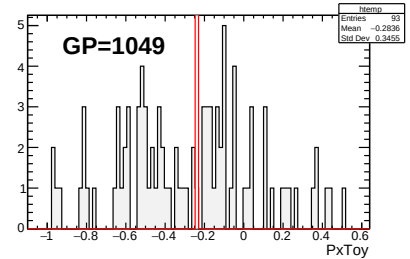


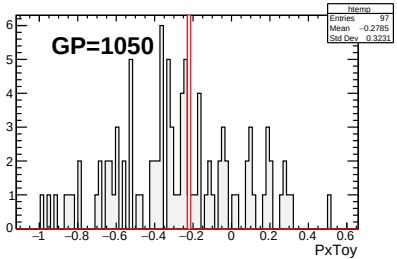


Bin 1 region 3: P_5' positive

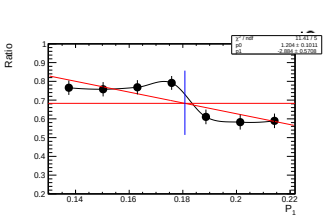


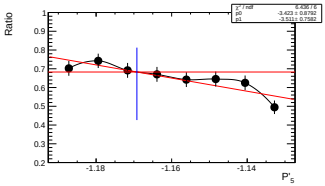


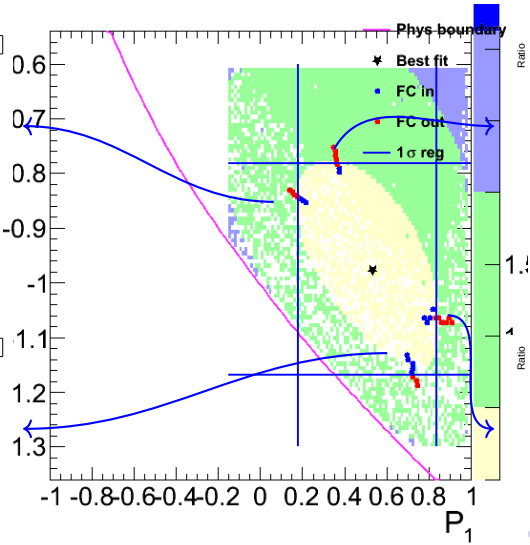


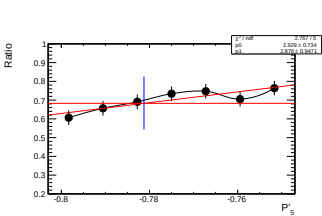


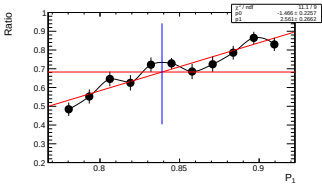
Bin 2











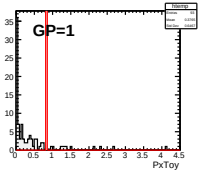
Done

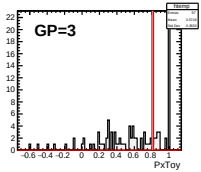
Done

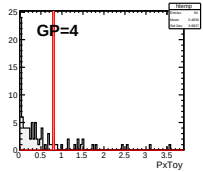
Done

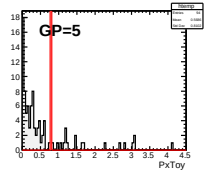
Done

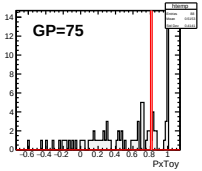
Bin 2 region 0: P_1 positive

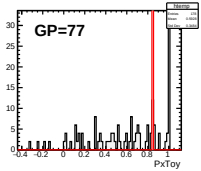


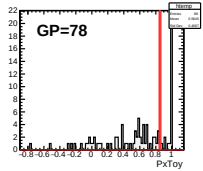


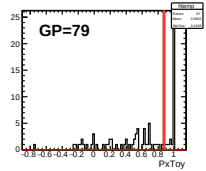


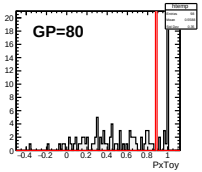


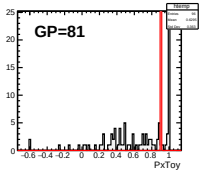


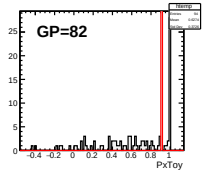




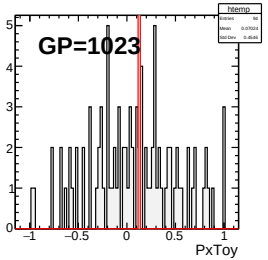


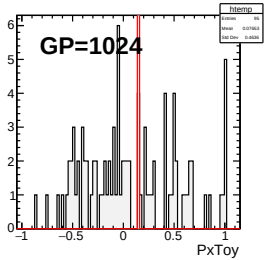


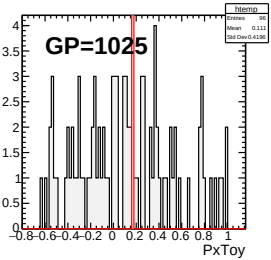


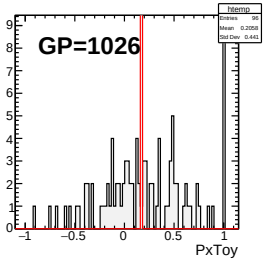


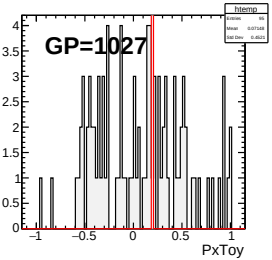
Bin 2 region 1: P_1 negative

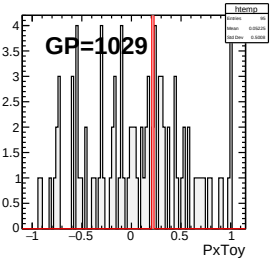




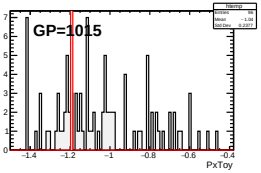


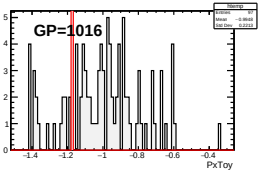


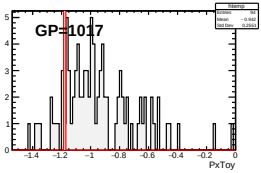


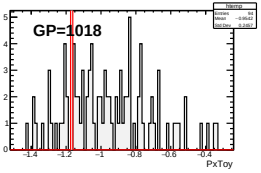


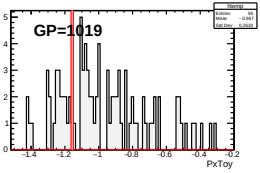
Bin 2 region 2: P_5' negative

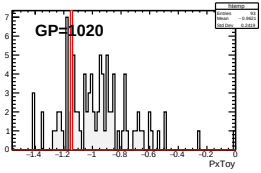


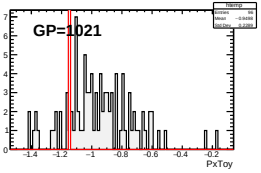


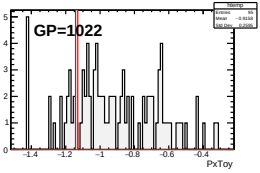




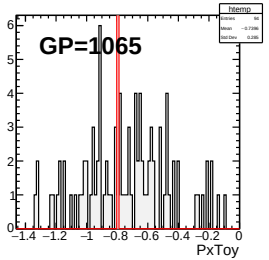


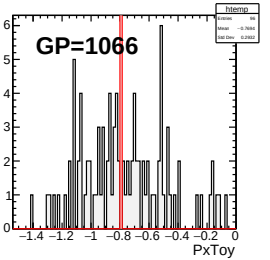


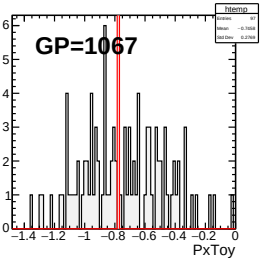


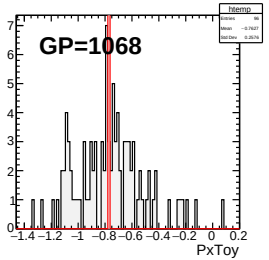


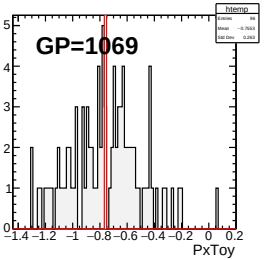
Bin 2 region 3: P_5' positive

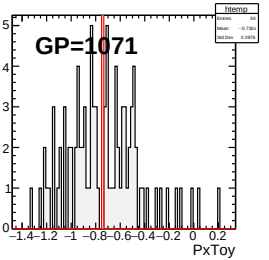




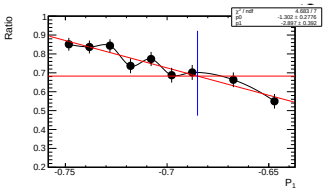






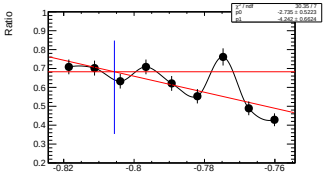


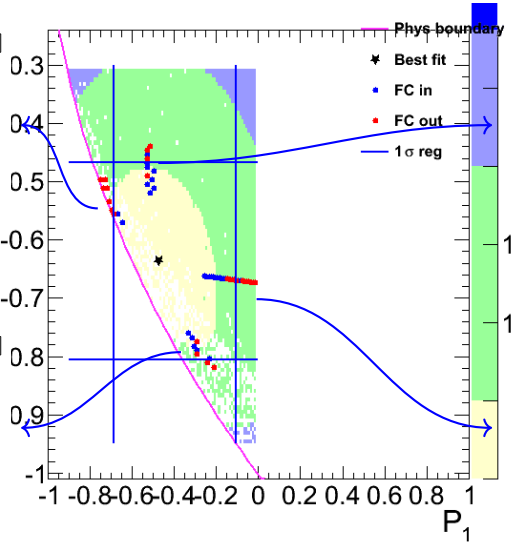
Bin 3

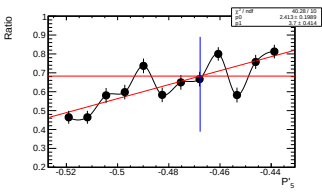


Done

Done

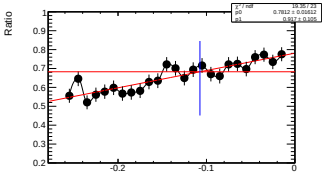




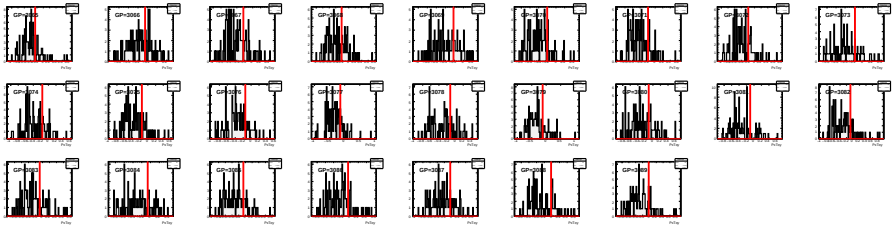


Done

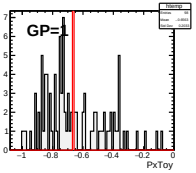
Done

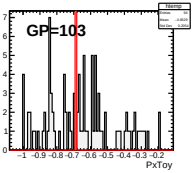


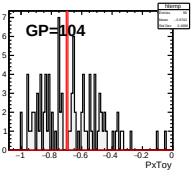
Bin 3 region 0: P_1 positive

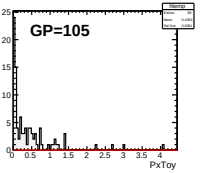


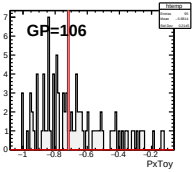
Bin 3 region 1: P_1 negative

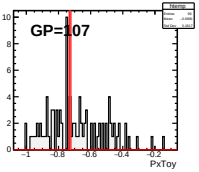


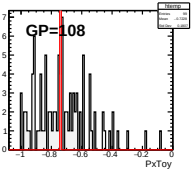


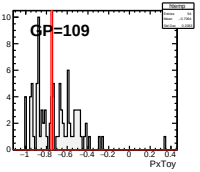


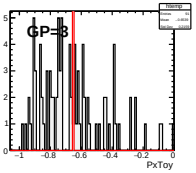




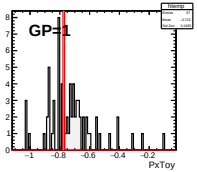


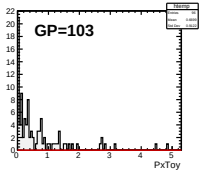


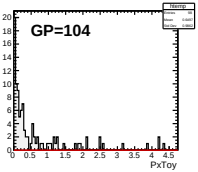


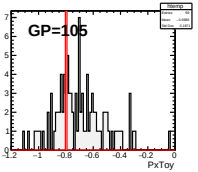


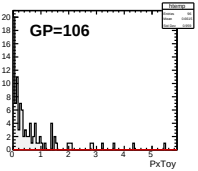
Bin 3 region 2: P_5' negative

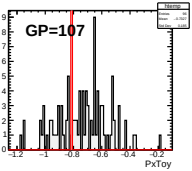


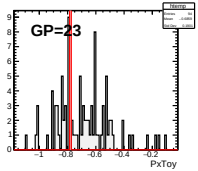


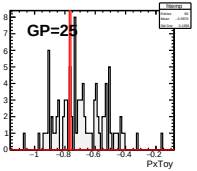


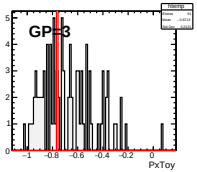




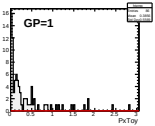


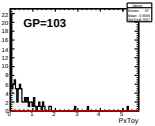


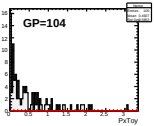


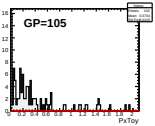


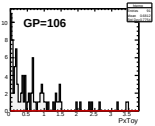
Bin 3 region 3: P_5' positive

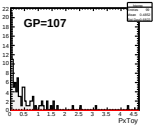


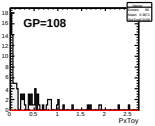


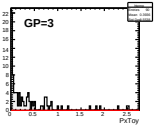


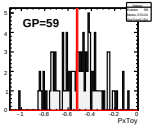


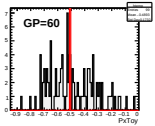


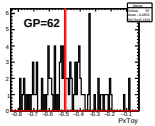


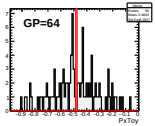




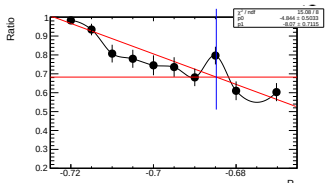


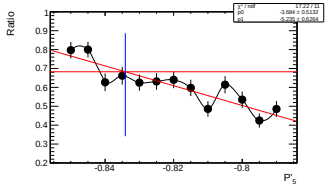






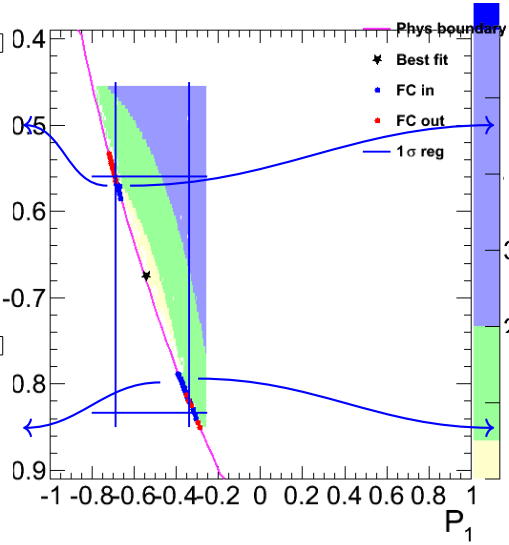
Bin 5

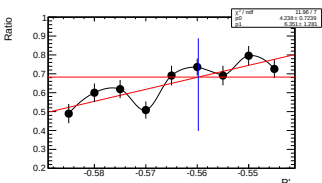




Done

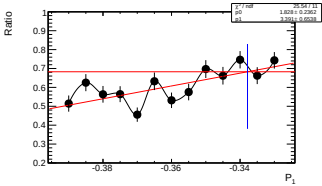
Done



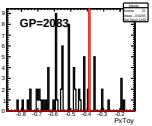


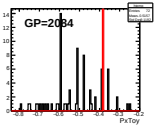
Done

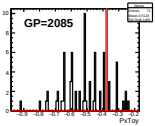
Done

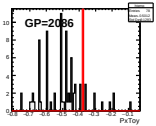


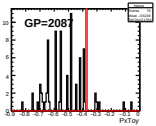
Bin 5 region 0: P_1 positive

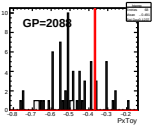


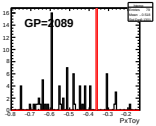


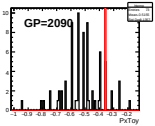


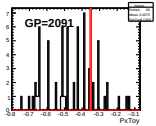


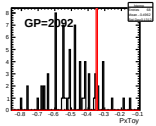


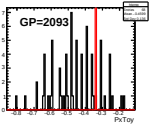


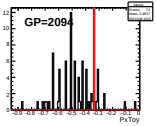


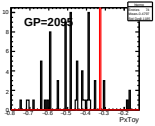




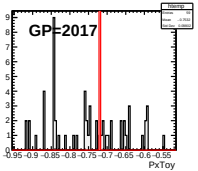


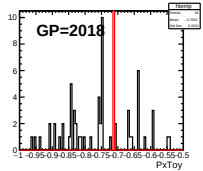


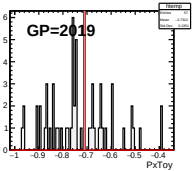


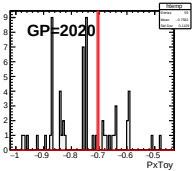


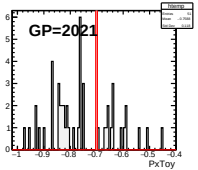
Bin 5 region 1: P_1 negative

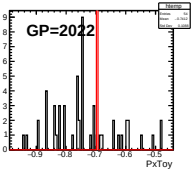


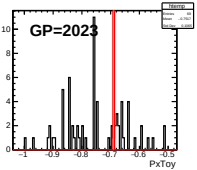


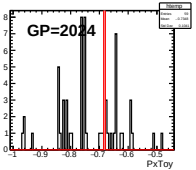


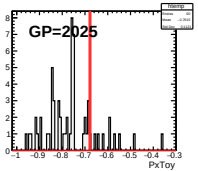




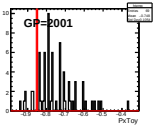


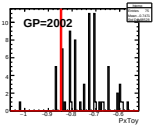


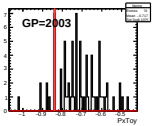


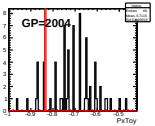


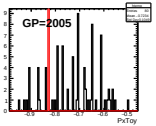
Bin 5 region 2: P_5' negative

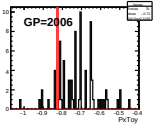


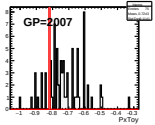


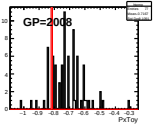


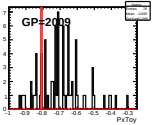


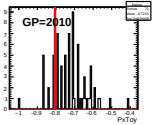


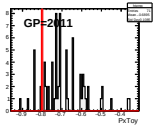


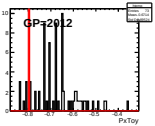


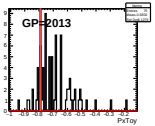




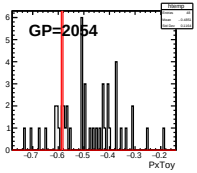


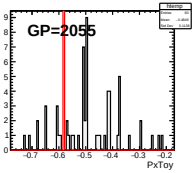


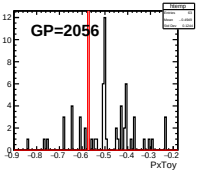


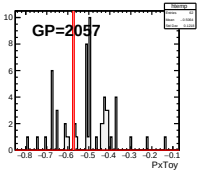


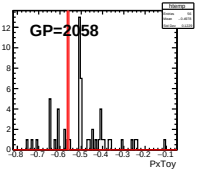
Bin 5 region 3: P_5' positive

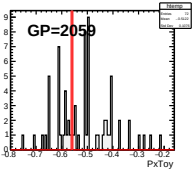


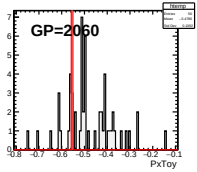


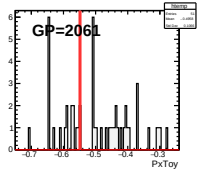


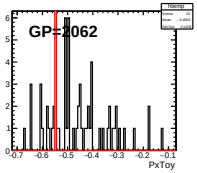




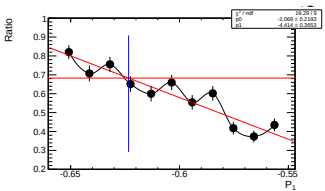


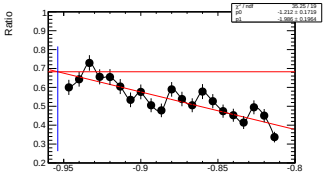


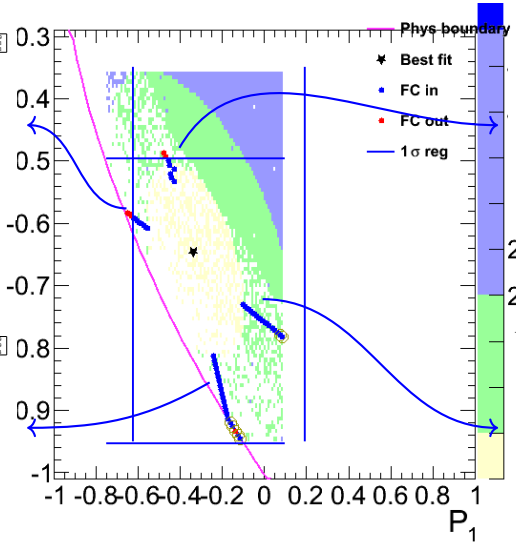


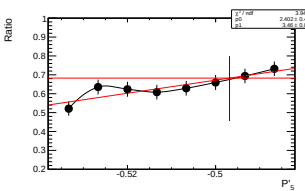


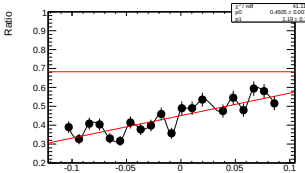
Bin 7











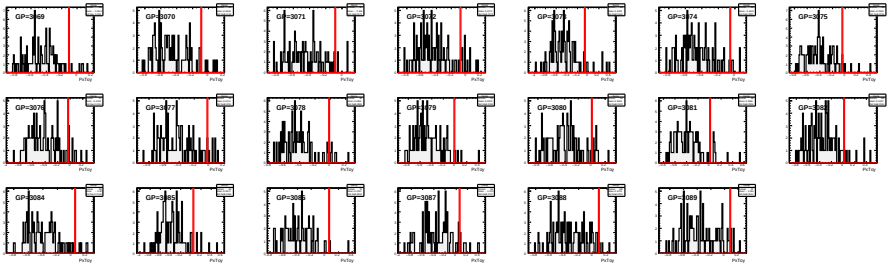
Done

Maybe?

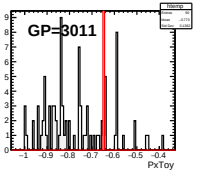
Done

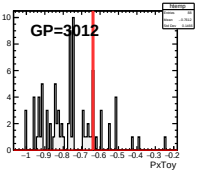
No

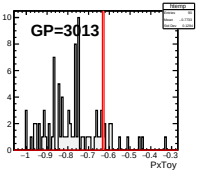
Bin 7 region 0: P_1 positive

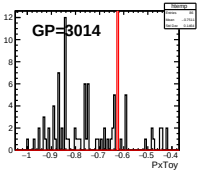


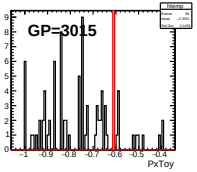
Bin 7 region 1: P_1 negative

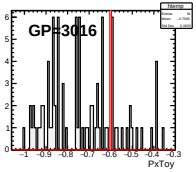


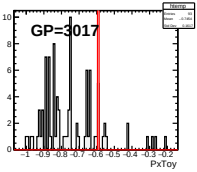


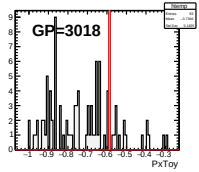


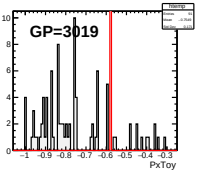


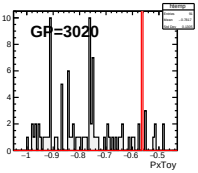


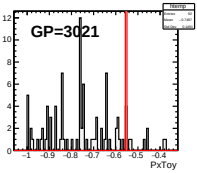




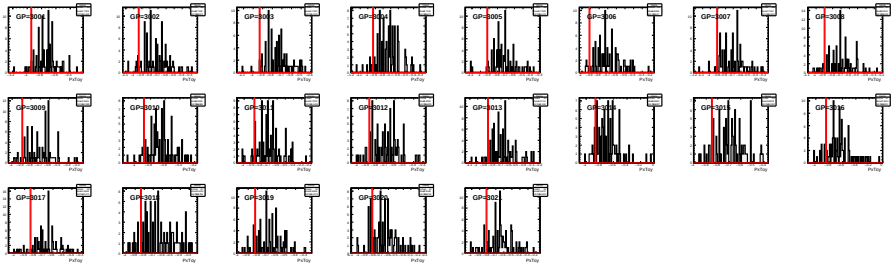




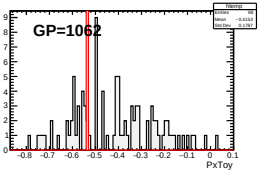


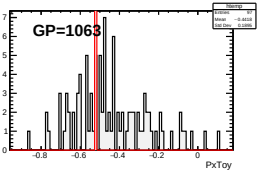


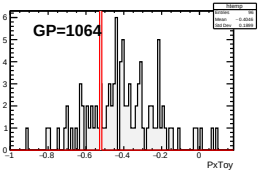
Bin 7 region 2: P_5' negative

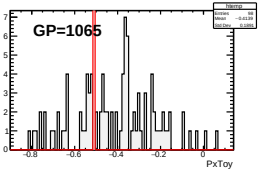


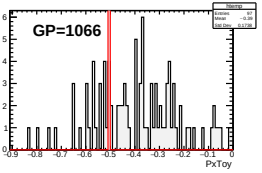
Bin 7 region 3: P_5' positive

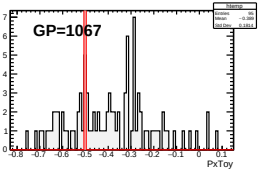


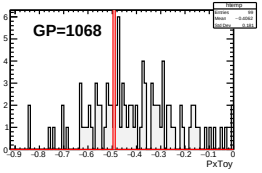


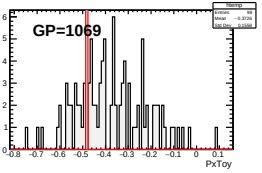




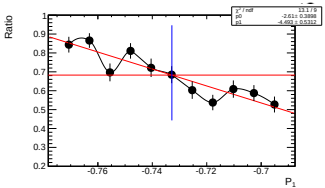


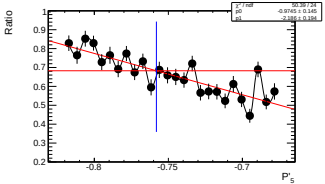






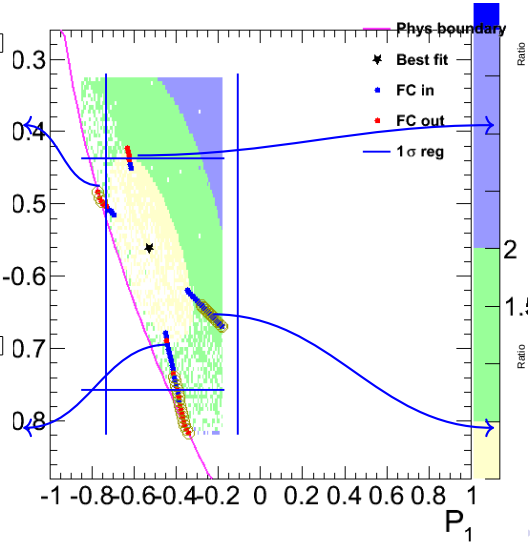
Bin 8

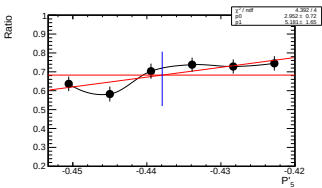




Done

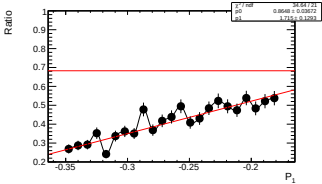
Done



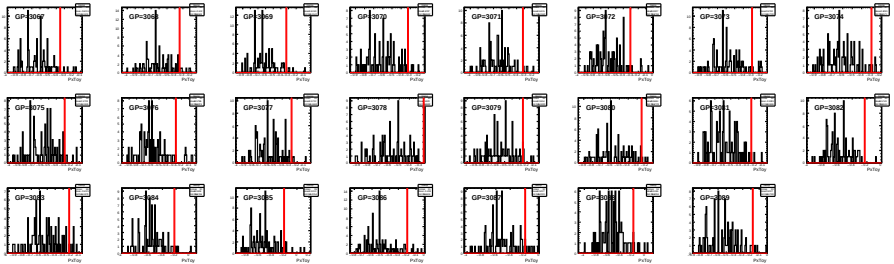


Done

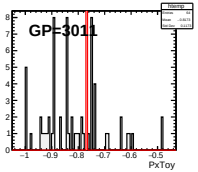
No

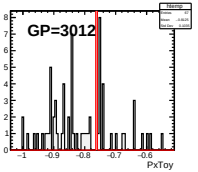


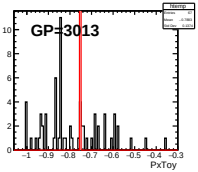
Bin 8 region 0: P_1 positive

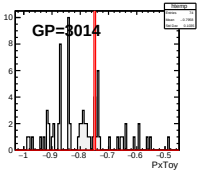


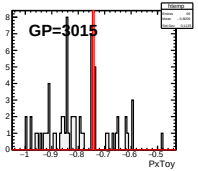
Bin 8 region 1: P_1 negative

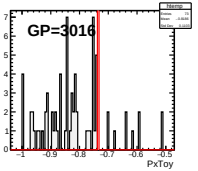


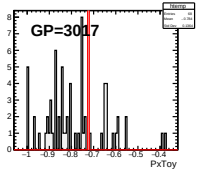


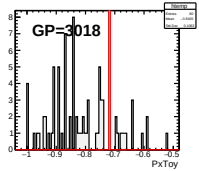


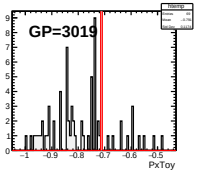


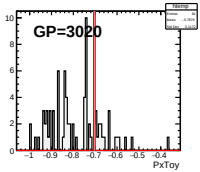


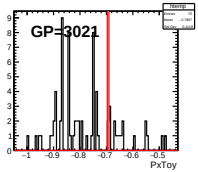




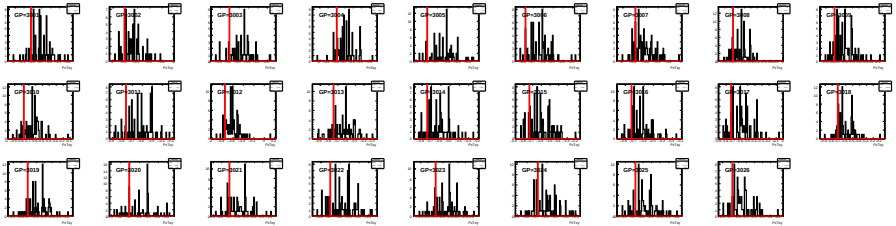








Bin 8 region 2: P_5' negative



Bin 8 region 3: P_5' positive

GP=2067

GP=2068

GP=2069

GP=2070

GP=2071

GP=2072

Additional stuff

Additional or backup slides

Bibliography I