

Update muX meeting 23/02

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Effect of binning – LL up to Hesse



Effect of binning – Effect on minos



Binning effect – 1 keV/bin



Binning effect – 2 keV/bin



Binning effect – 5 keV/bin



Binning effect – 10 keV/bin



Binning effect – 20 keV/bin



Binning effect – 50 keV/bin



Binning effect – 100 keV/bin



Binning effect – 200 keV/bin



Binning effect – 500 keV/bin



Binning effect – 1000 keV/bin



Binning effect – 2000 keV/bin



Binning effect – 5000 keV/bin



Binning effect – 10000 keV/bin



Binning effect – 20000 keV/bin



Binning effect – 50000 keV/bin



Problem: β and f_G

- Low energy peak is VERY gaussian
- Pulling β down, makes the tail a near Gaussian $\rightarrow f_G$ becomes very small
- Prior approach?
- Without constraining:
 - $\beta = 0.376(-9, +9)$
 - $f_G = 4 \times 10^{-8}(-0, +0.35)$ absolute error!
 - $\mu = 356.341(-156, +7)$

- Limiting f_G :
 - $\beta = 0.459(-13, +13)$
 - $f_G = 0.700(-0, +0.005)$ at limit
 - $\mu = 356.100(-0, +3)$ unreliable
- Limiting f_G and β :
 - $\beta = 0.5000(-0, +8)$
 - $f_G = 0.714(-36, +36)$ at limit
 - $\mu = 356.098(-8, +7)$ unreliable

