



Online Software Trigger @ PANDA

DPM background generator

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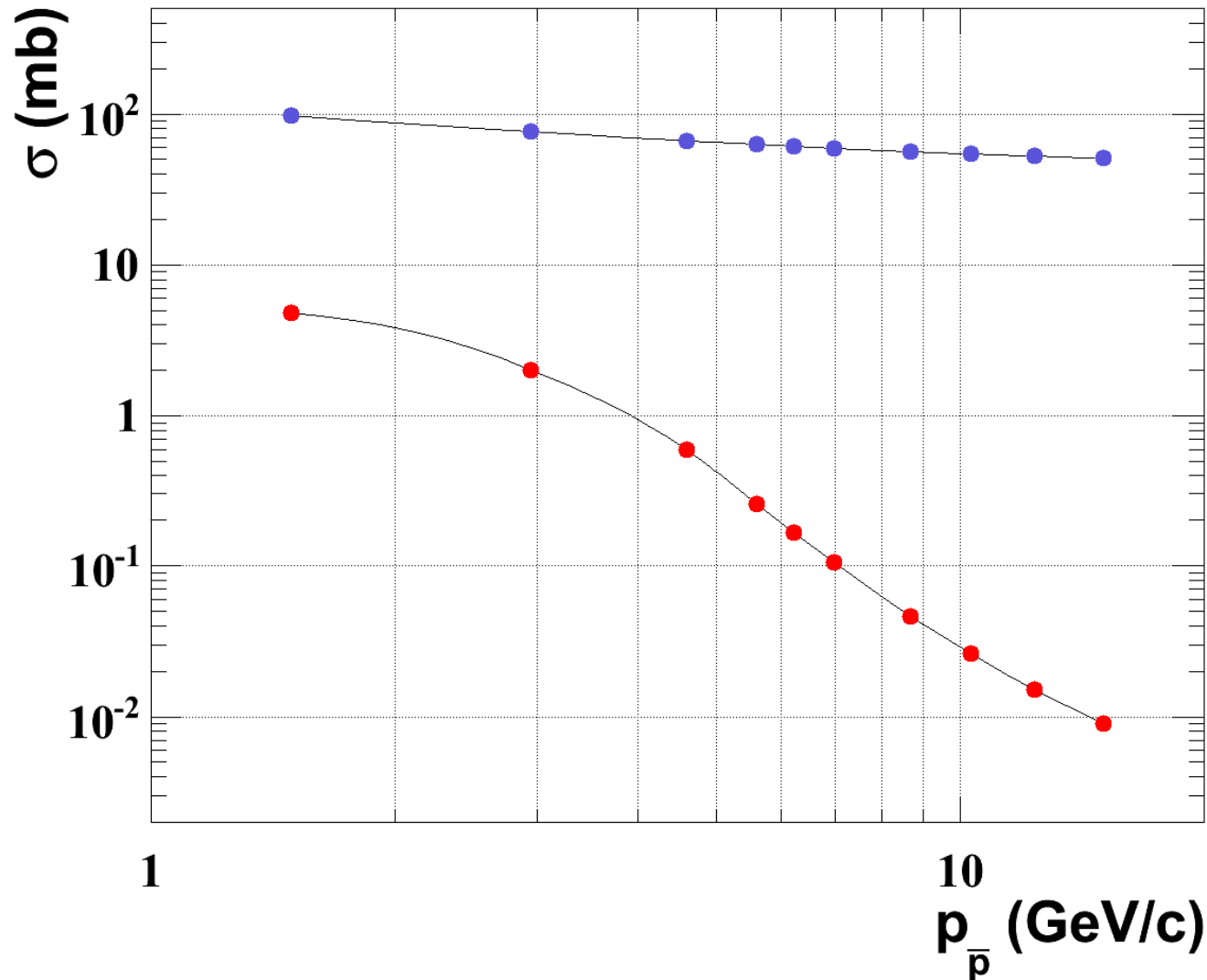


Background with DPM generator

Inelastic $\pi^+\pi^-\pi^+\pi^-$ event for each beam momentum are selected from DPM generation

- total cross section
- $\pi^+\pi^-\pi^+\pi^-$ cross section

statistics 10^6 events

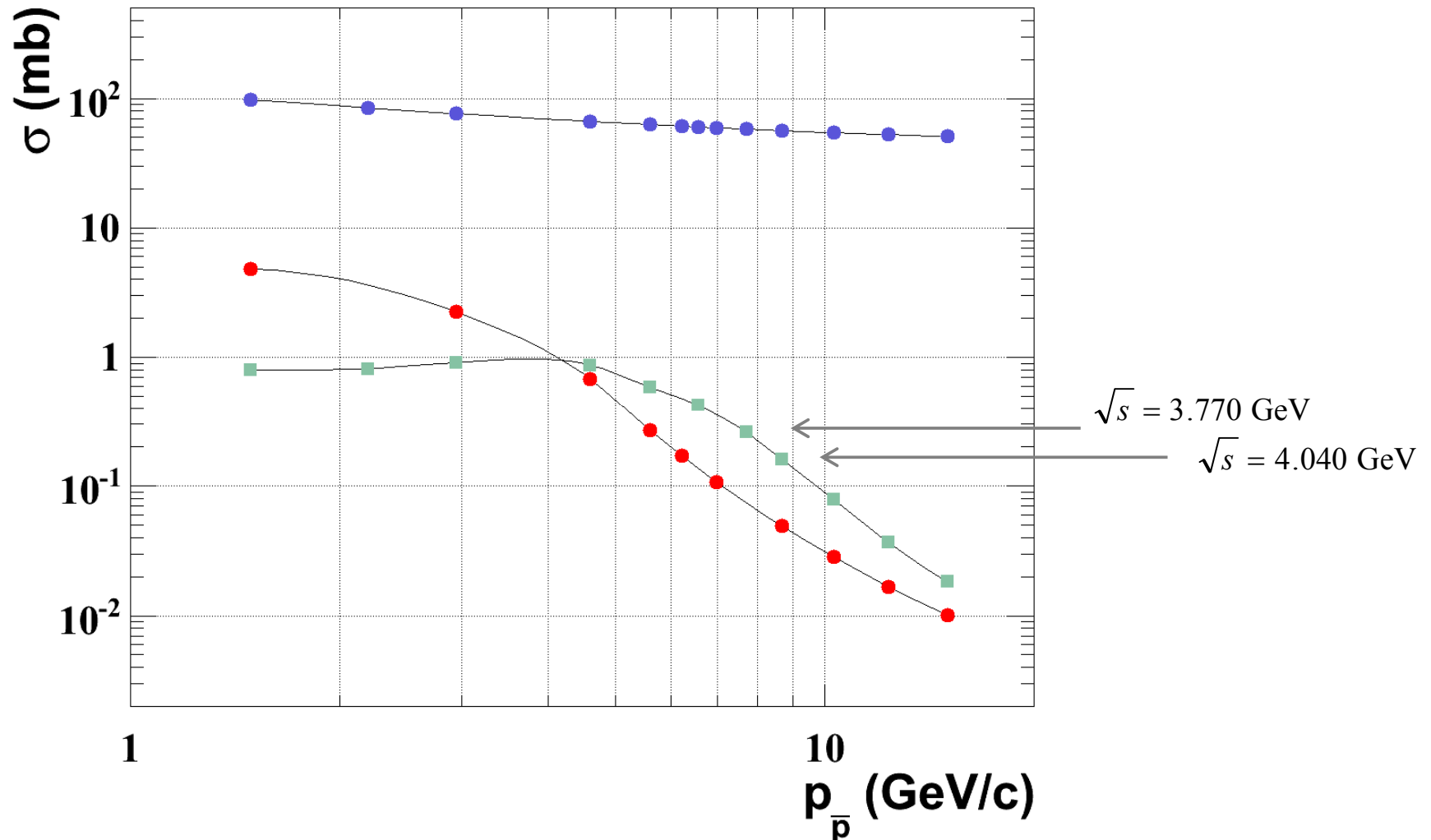




Background with DPM generator

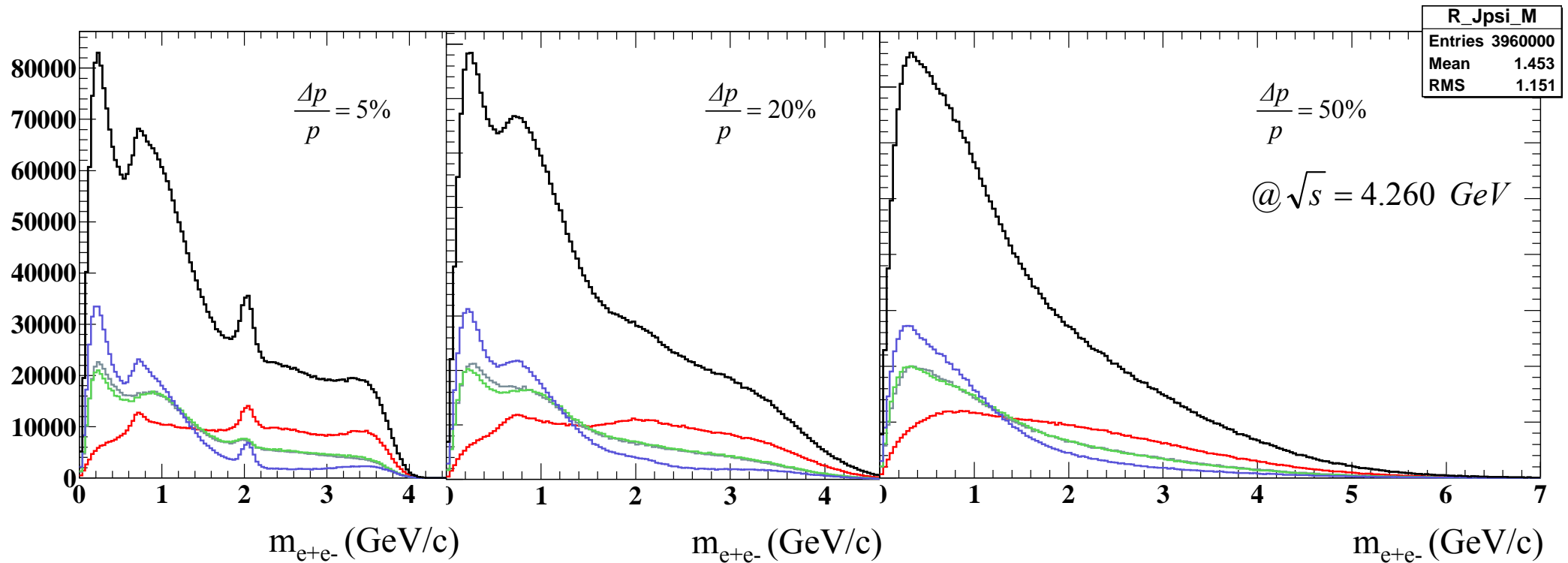
Inelastic $\pi^+\pi^-\pi^+\pi^-\pi^+\pi^-$ event for two beam momentum are selected from DPM generation

- **total cross section**
- $\pi^+\pi^-\pi^+\pi^-$ cross section
- $\pi^+\pi^-\pi^+\pi^-\pi^+\pi^-$ cross section





Background mass distribution with electron hypothesis (DPM)

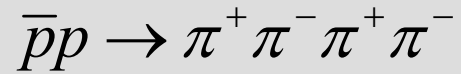


- different color mean different combinations from all π tracks
- no information about resonances and mother particles in DPM

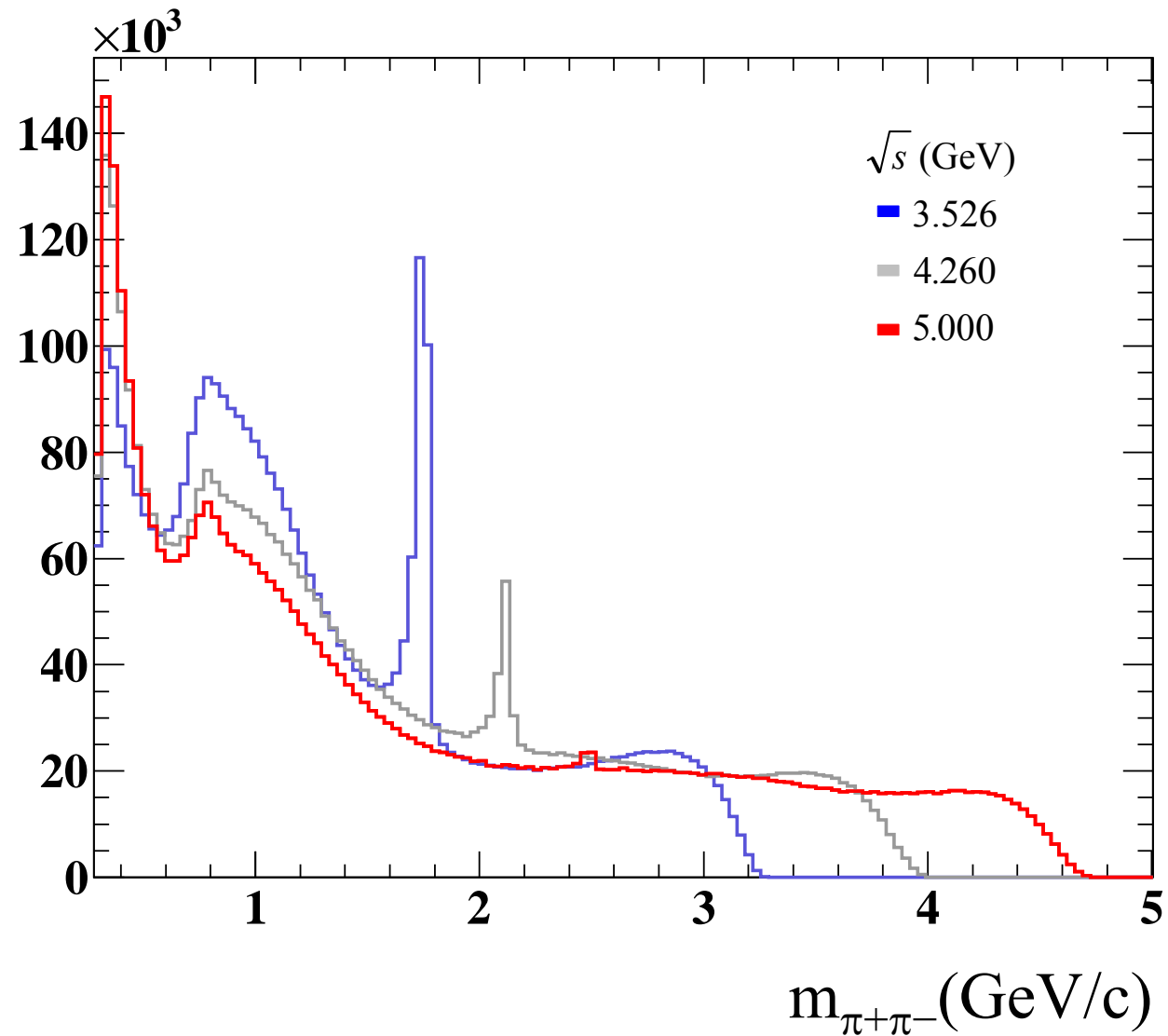


Background with DPM generator

DPM



π mass hypothesis

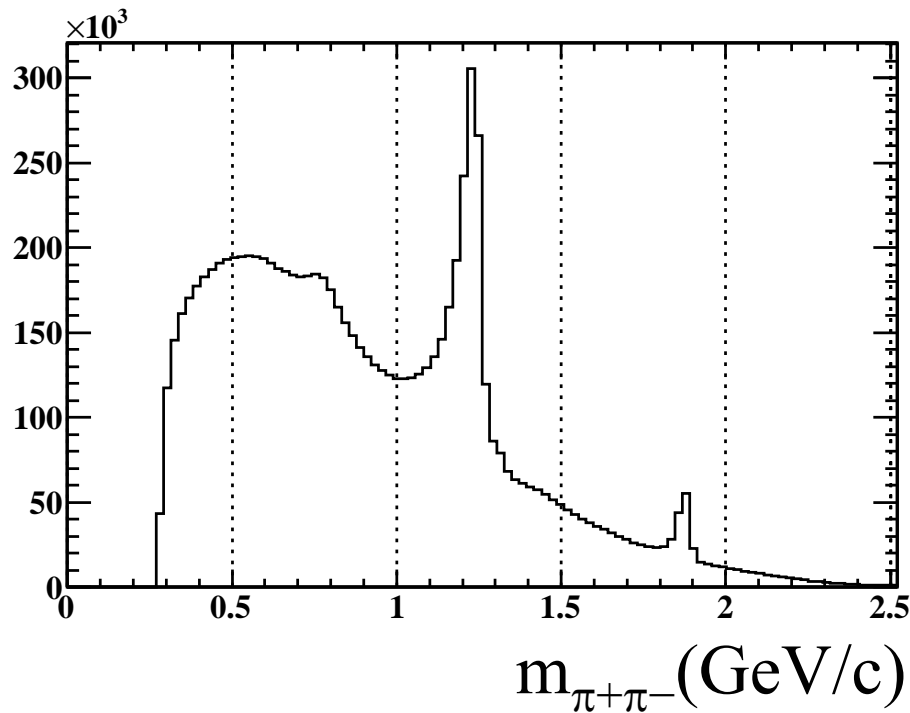




Background with DPM generator

DPM $\bar{p}p \rightarrow \pi^+ \pi^- \pi^+ \pi^- \pi^+ \pi^-$ π mass hypothesis

$$\sqrt{s} = 3.770 \text{ GeV}$$



$$\sqrt{s} = 4.040 \text{ GeV}$$

