



# Introduction

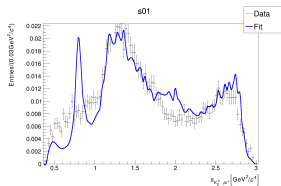
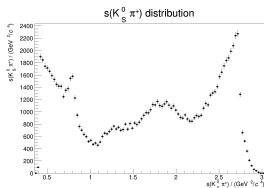
We perform a “Self Fit” for two particular models (“myBelle” and “timBelle”). The purpose of this is to establish a “baseline” fit for a given model.

# Procedure

The “SelfFit” Procedure is

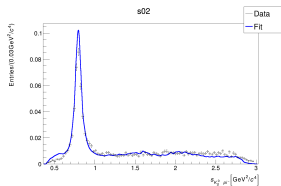
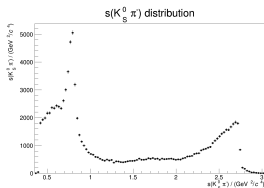
- ▶ Generate a toy MC sample,  $\mathcal{G}$  from a given model,  $\mathcal{M}$
- ▶ Fit  $\mathcal{G}$  using the same model,  $\mathcal{M}$  and obtain a “fitted” model,  $\mathcal{M}'$
- ▶ Regenerate another toy sample,  $\mathcal{G}'$  from this “new” model,  $\mathcal{M}'$

# $m_+^2$ for Belle Model (Tim)



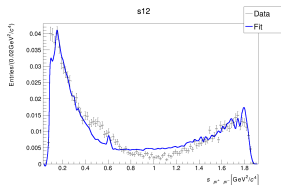
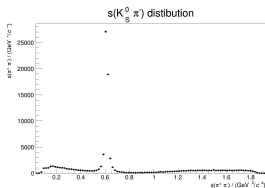
Left “Regenerated Model”, right “Original Model (with fit line)”

# $m_{\pi^0}$ for Belle Model (Tim)



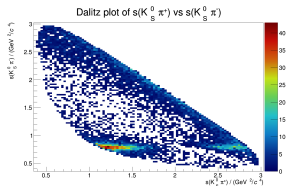
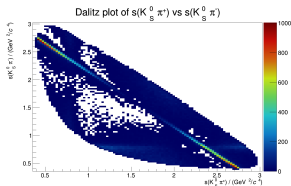
Left “Regenerated Model”, right “Original Model (with fit line)”

# $m_0^2$ for Belle Model (Tim)



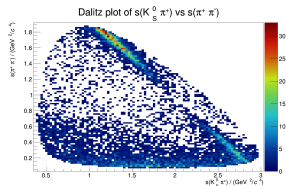
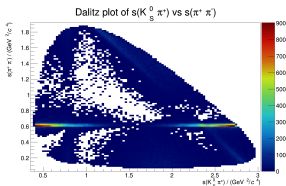
Left “Regenerated Model”, right “Original Model (with fit line)”

# $m_+^2$ vs $m_-^2$ for Belle Model (Tim)



Left “Regenerated”, right “Original”

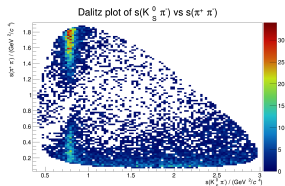
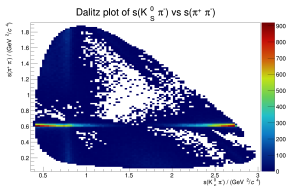
# $m_+^2$ vs $m_0^2$ for Belle Model (Tim)



Left “Regenerated”, right “Original”



# $m_-^2$ vs $m_0^2$ for Belle Model (Tim)



Left “Regenerated”, right “Original”