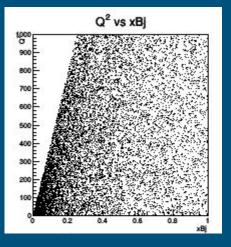
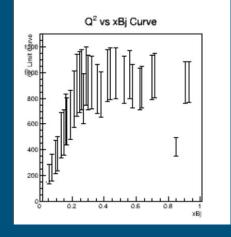
Simulations for Pion and Kaon Structure Function

Andres Vargas, Richard Trotta and Dr. Tanja Horn

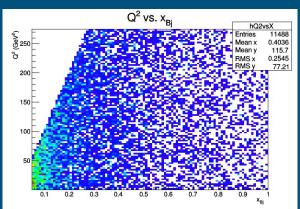
Q^2 vs x Plots

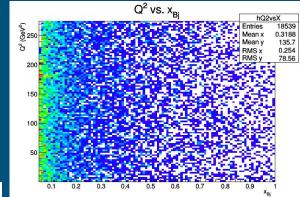


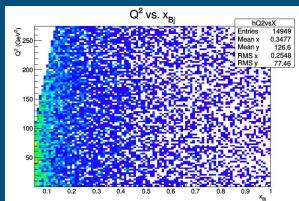


- Full plot distribution of Q^2 vs x for a particular energy scale
- Bin cut for fit separating the forbidden from the allowed Q² and x values
- Greater uncertainties and linearity decrease as x values increase (fitting expected behavior at high x)

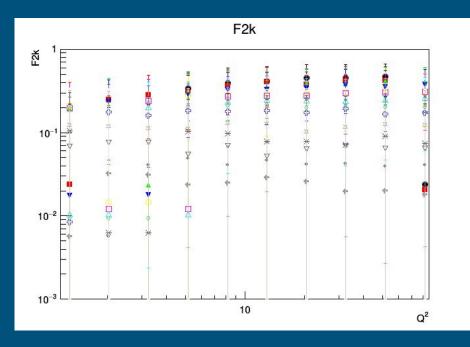
Changing Energy Scales for Q^2 vs x







Bin Cuts for Ranging x Values



- Low x
 - Quark sea and gluons are of interest
- Mid x
 - Begin testspf assumptions used in extraction of structure function
- High x

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- Differences in pion, kaon, and proton become aparent.
- Decreasing f2k values as x decrease.
- Linear distributions of Q^2 values for each