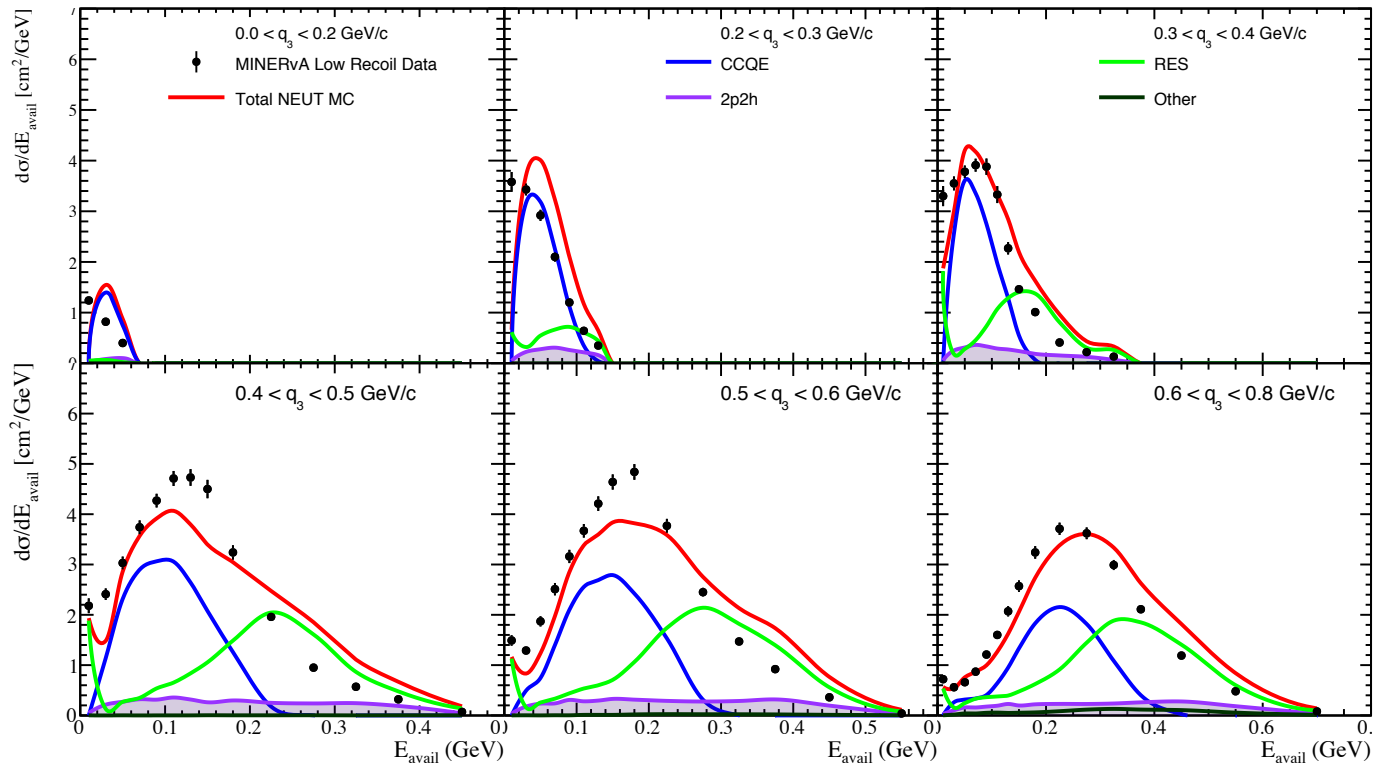


Tuning generators to the global neutrino cross-section dataset

Rodrigues et al, Phys. Rev. Lett. 116, 071802 (2016)



Patrick Stowell

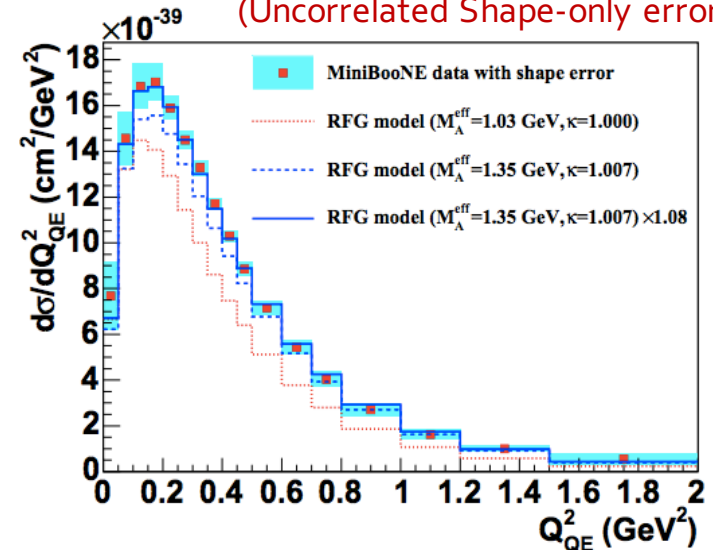


Historic Data

- T2K Neutrino Interactions Working Group is trying to make sense of the entire collection of neutrino cross-section datasets.
- Publications spanning ~40 years so some datasets have only limited information.

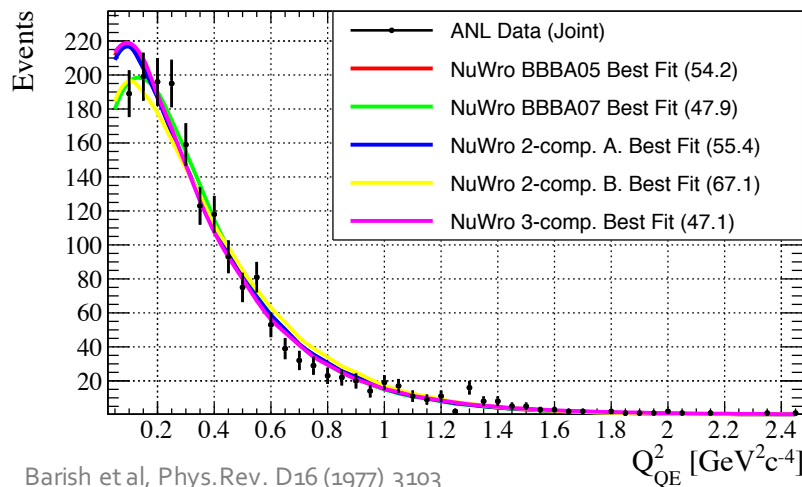
MiniBooNE

(Uncorrelated Shape-only errors)

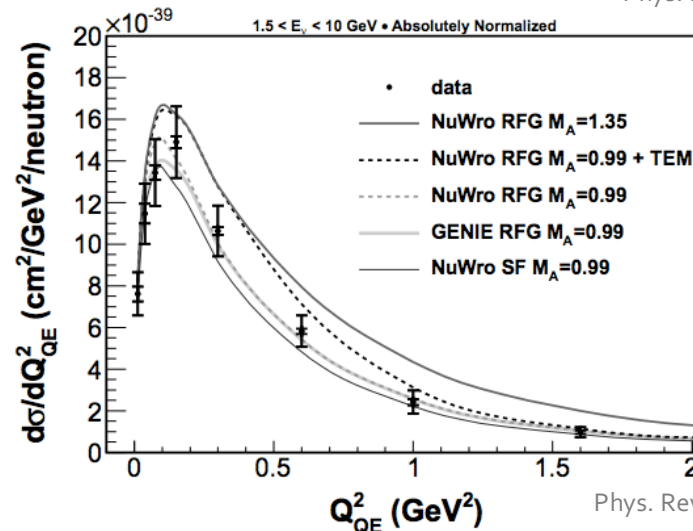


A.A. Aguilar-Arevalo et al,
Phys. Rev. D81, 092005 (2010)

ANL Bubble Chamber (Binned Event Rates)



Barish et al, Phys.Rev. D16 (1977) 3103



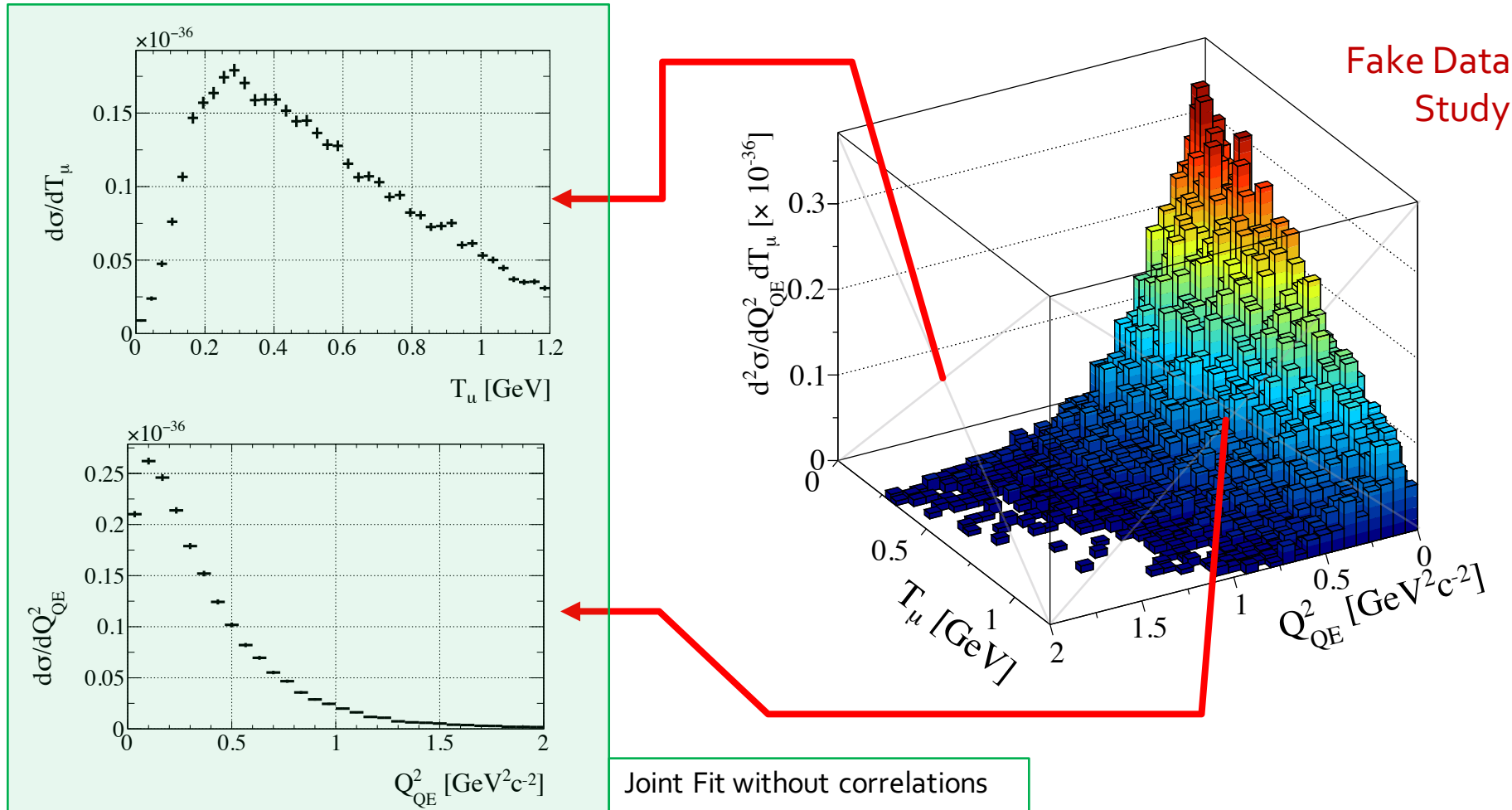
MINERvA CCQE
(Full Correlations)

Fiorentini et al,
Phys. Rev. Lett. 111, 022502 (2013)

Problem?

An experiment publishes multiple sets of one-dimensional histograms without correlations.

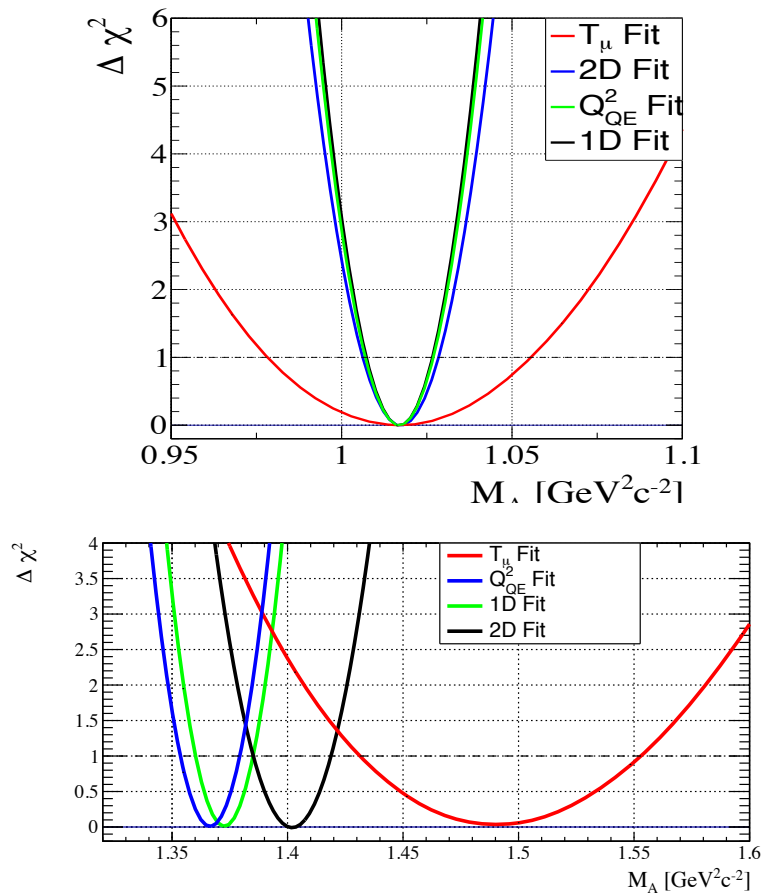
Can we fit to more than one kinematic distribution to obtain a better model constraint?



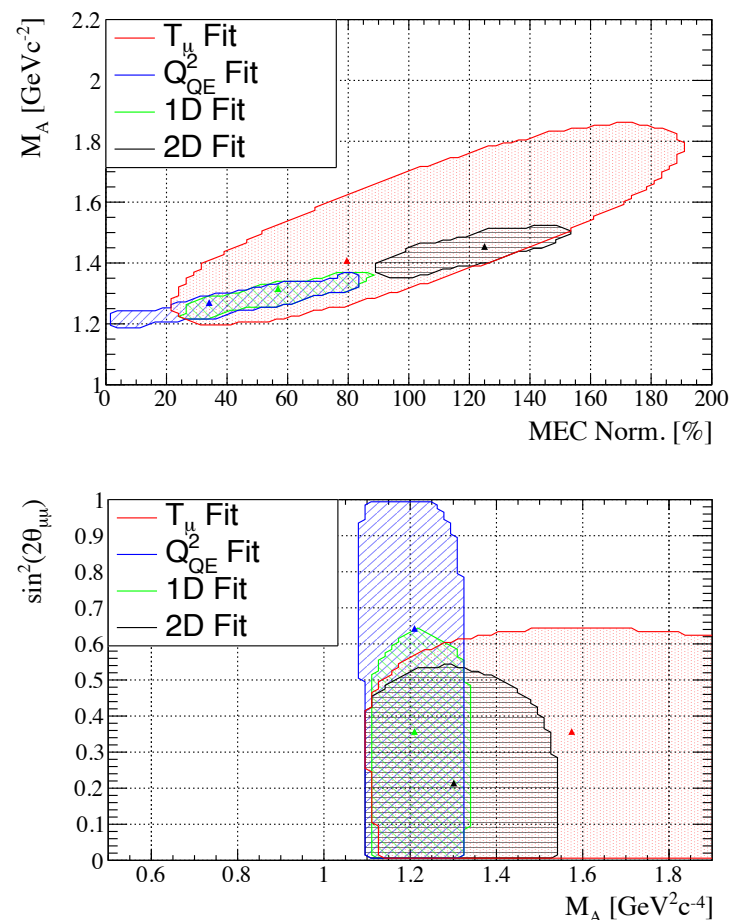
Poster Discussion

- Very early fake data studies on this.
- Comments/suggestions would be appreciated!

Asimov Study



2D Parameter Scans



RPA Biased Asimov Study