

FI study with PEPSI and detector response

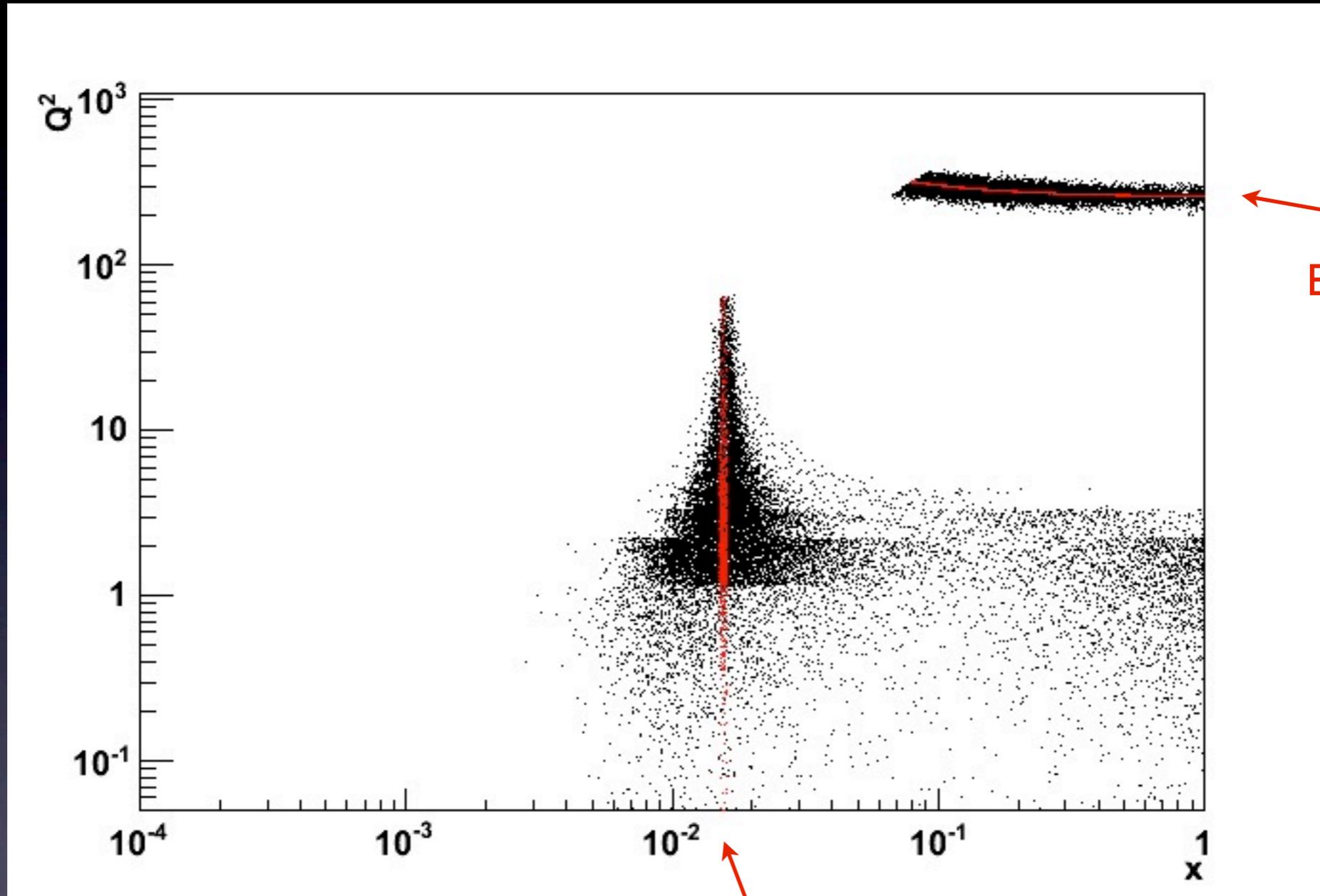
R. Debbe BNL

I'm now introducing detector response (resolutions) into the output of PEPSI. I based my first version of detector response on HI NIMA386 310-347 (1997)

$$\Delta p/p^2 \sim 0.003 \text{ GeV}^{-1}$$

$$\Delta\Theta = 3 \text{ mrad}$$

Q^2 vs x for 4X250 runs

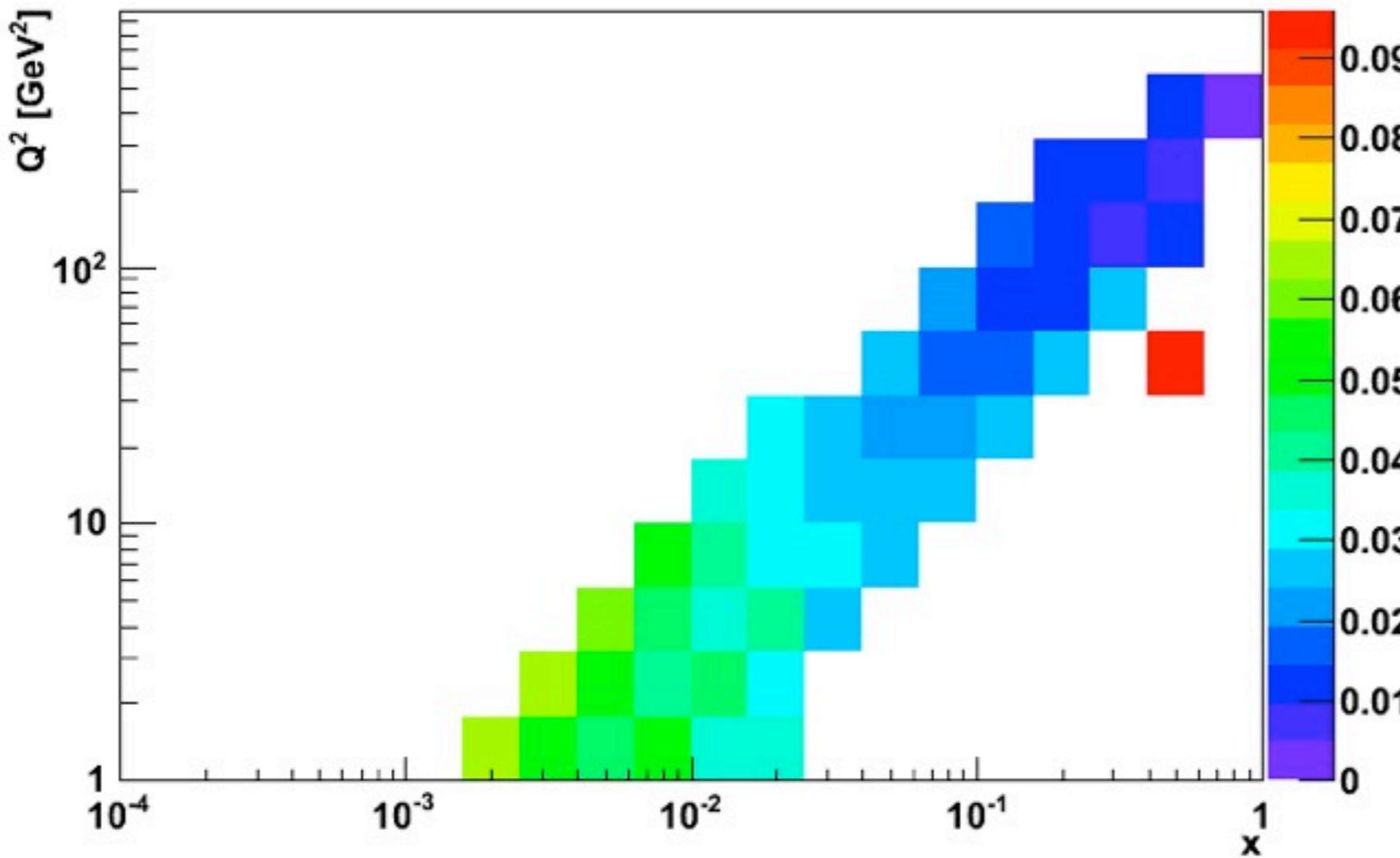


$E_{\text{electron out}} = 20 \text{ GeV}$

Black markers show events where the electron parameters were measured with detector resolutions similar to H1.

$E_{\text{electron out}} = 4 \text{ GeV}$

F_L value, Rad. corr = 0



No radiative corrections
Detector resolution:
perfect.
Proper handling of # of
events under evaluation.

From now on we will be using a more
appropriate binning

To Do:

Continue setting detector responses.

Start to use the tree files with radiative corrections.

For all cases generate reduced cross sections and Fl.

Marco S. will then extract the relevant physics from this simulated functions.