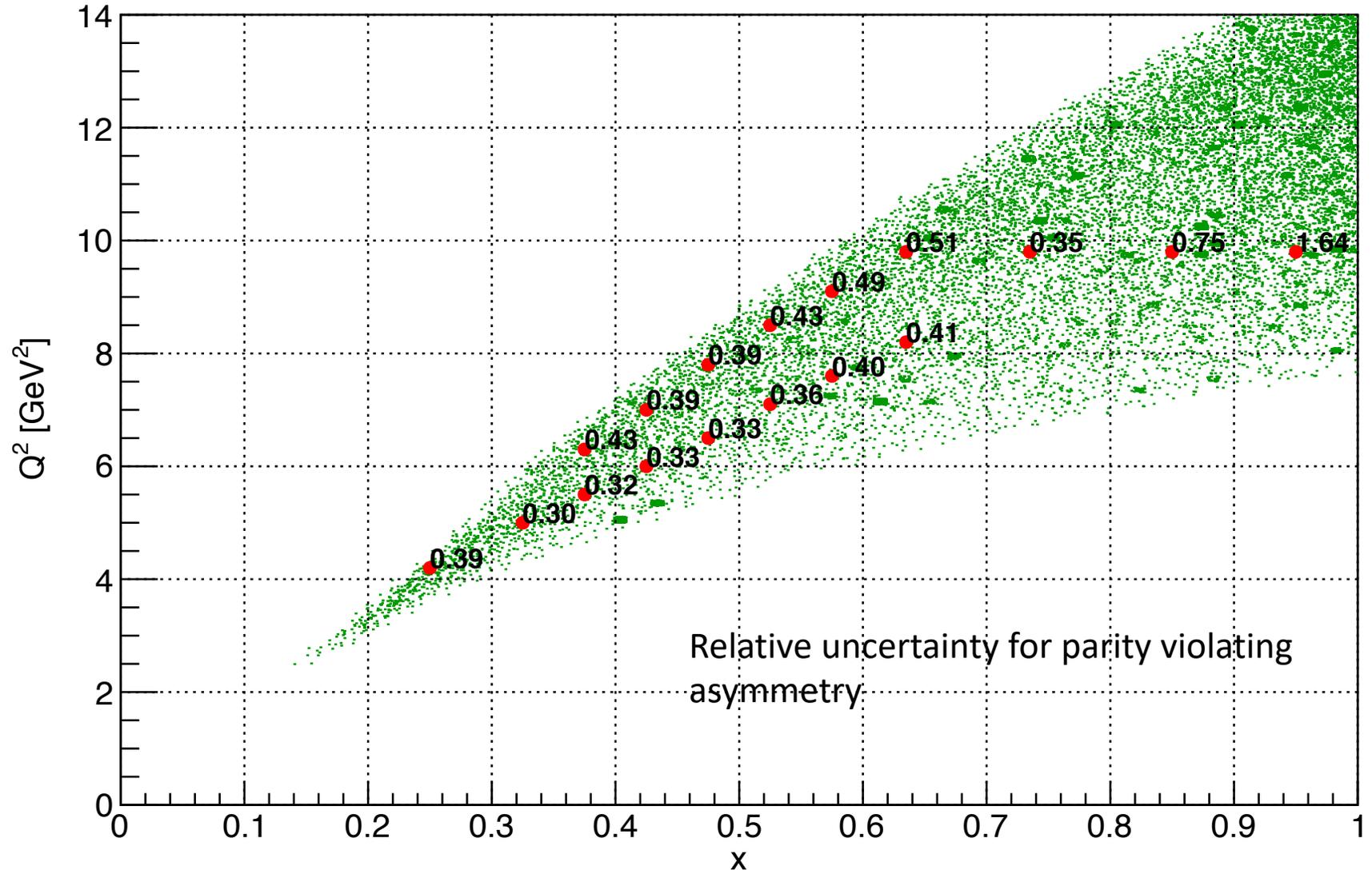


# Expected rate and statistical uncertainty

All accepted events regardless of W

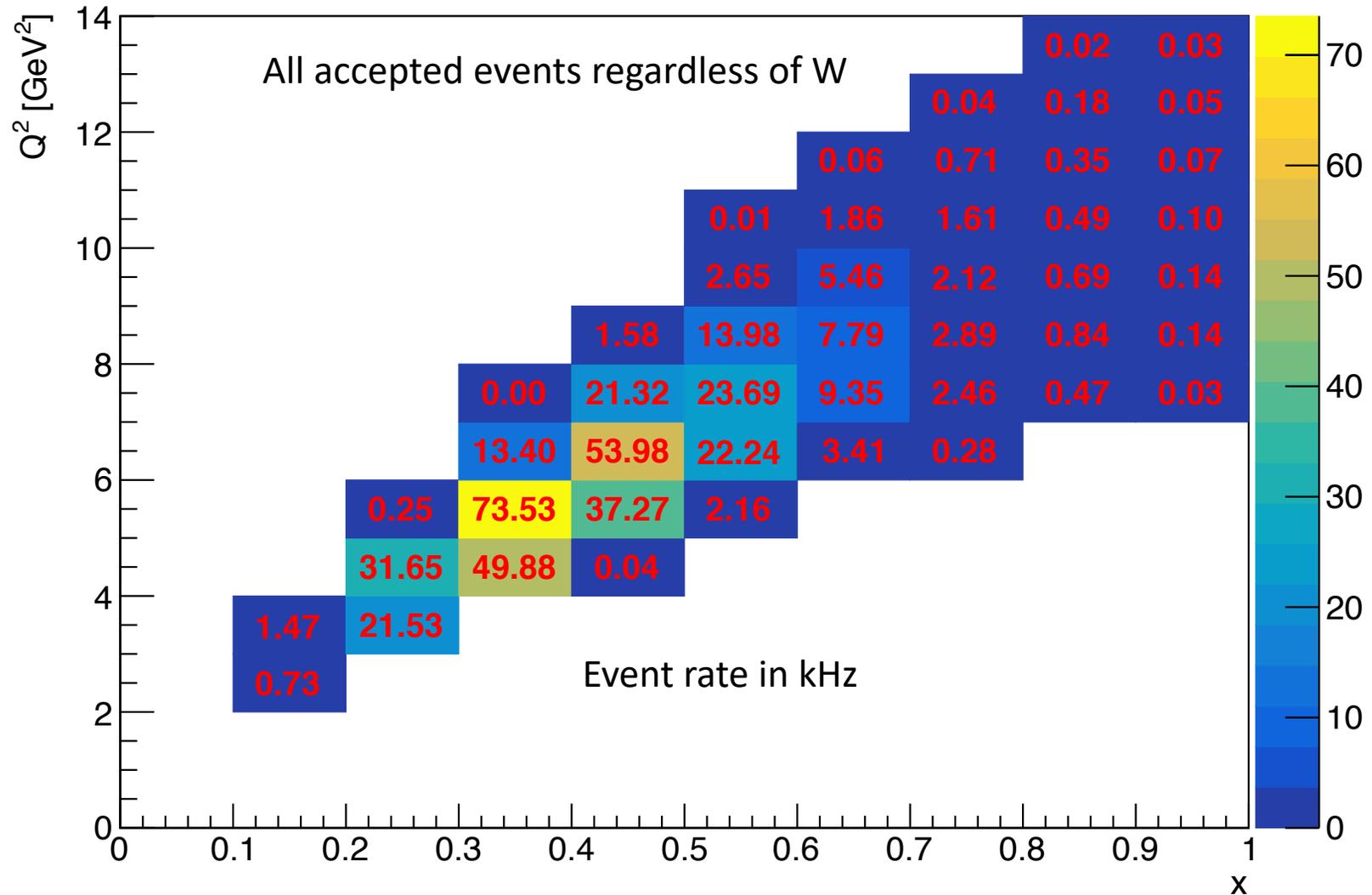


- Assuming 120 days on deuterium target with 11 GeV beam
- Using F1F2\_21 fit for the eAll generator
- Include acceptance and trigger efficiency effects
- All numbers in percentage

# Expected rate and statistical uncertainty

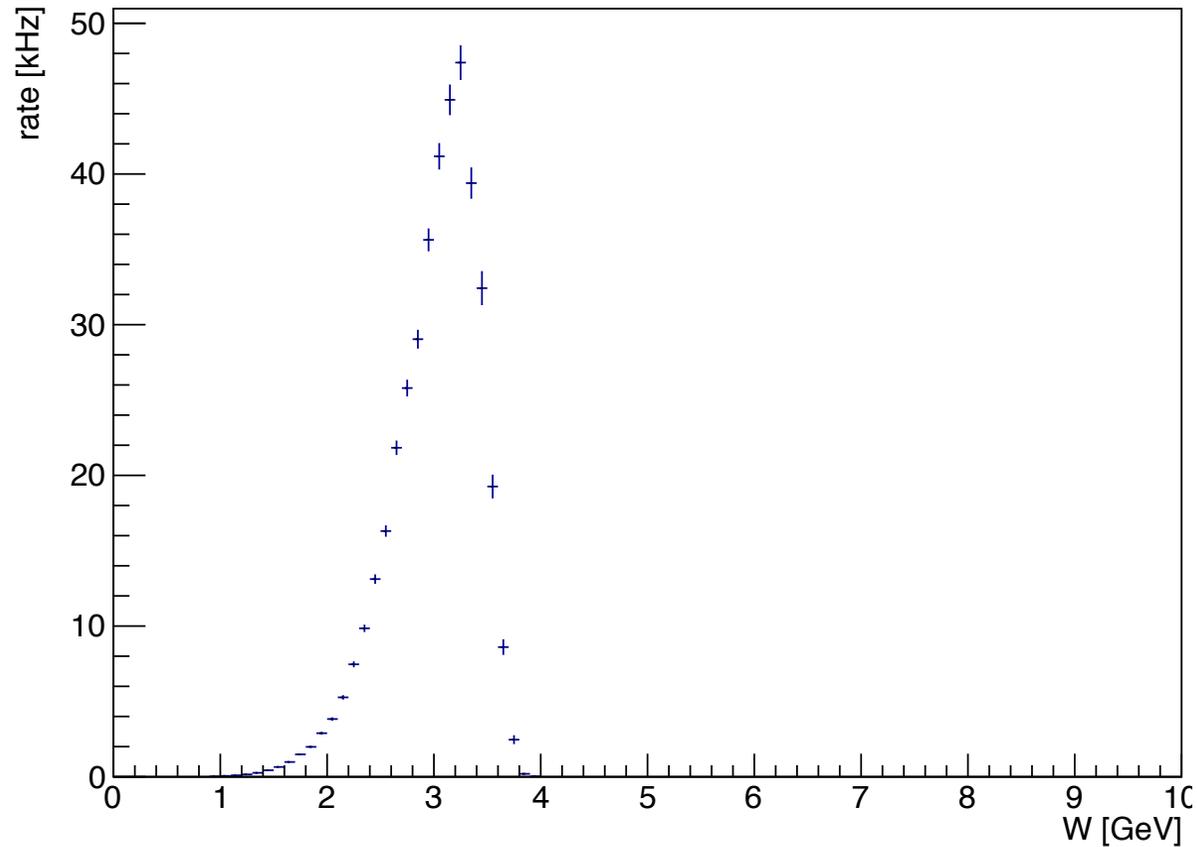
rate\_Q2x

- Assuming 120 days on deuterium target with 11 GeV
- Using F1F2\_21 fit for the eAll generator
- Include acceptance and trigger efficiency effects
- Binning: 0.1 for x and 1 GeV<sup>2</sup> for Q<sup>2</sup>
- All numbers in kHz

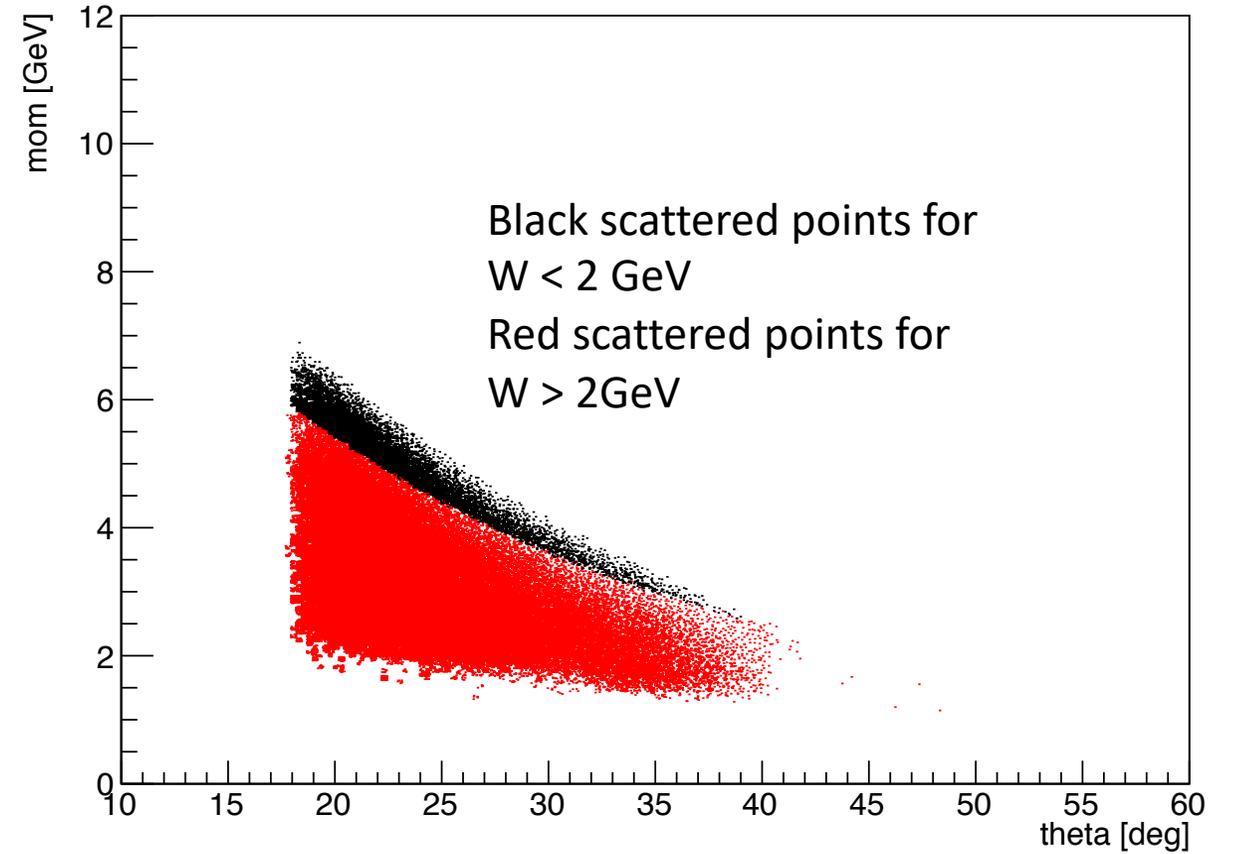


# Expected rate and statistical uncertainty

W\_dist



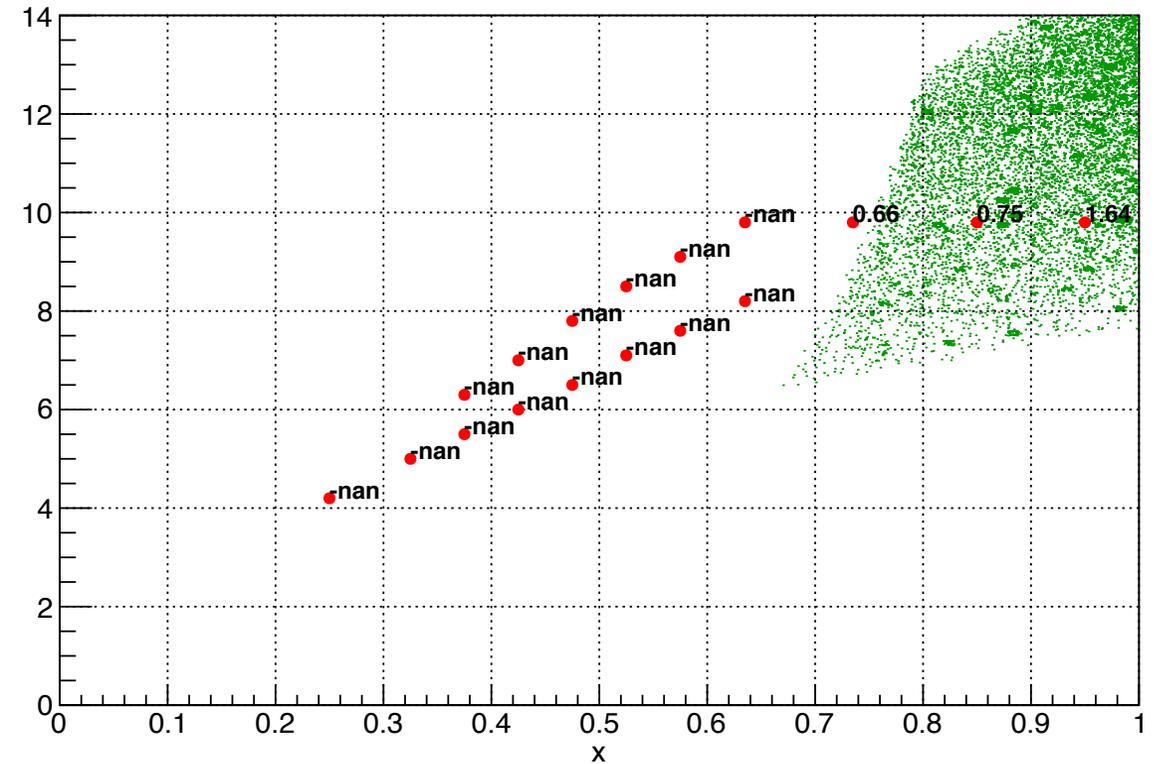
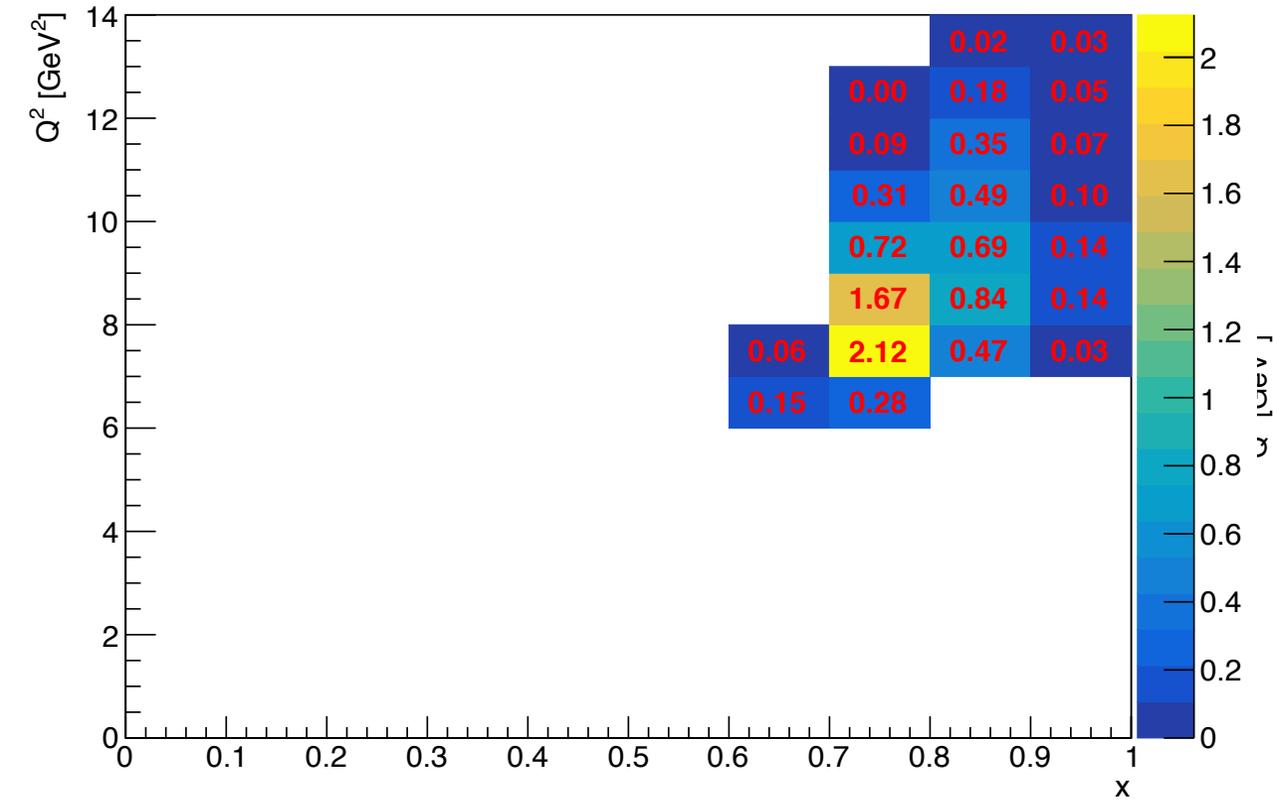
mom\_vs\_theta\_2



# Expected rate and statistical uncertainty

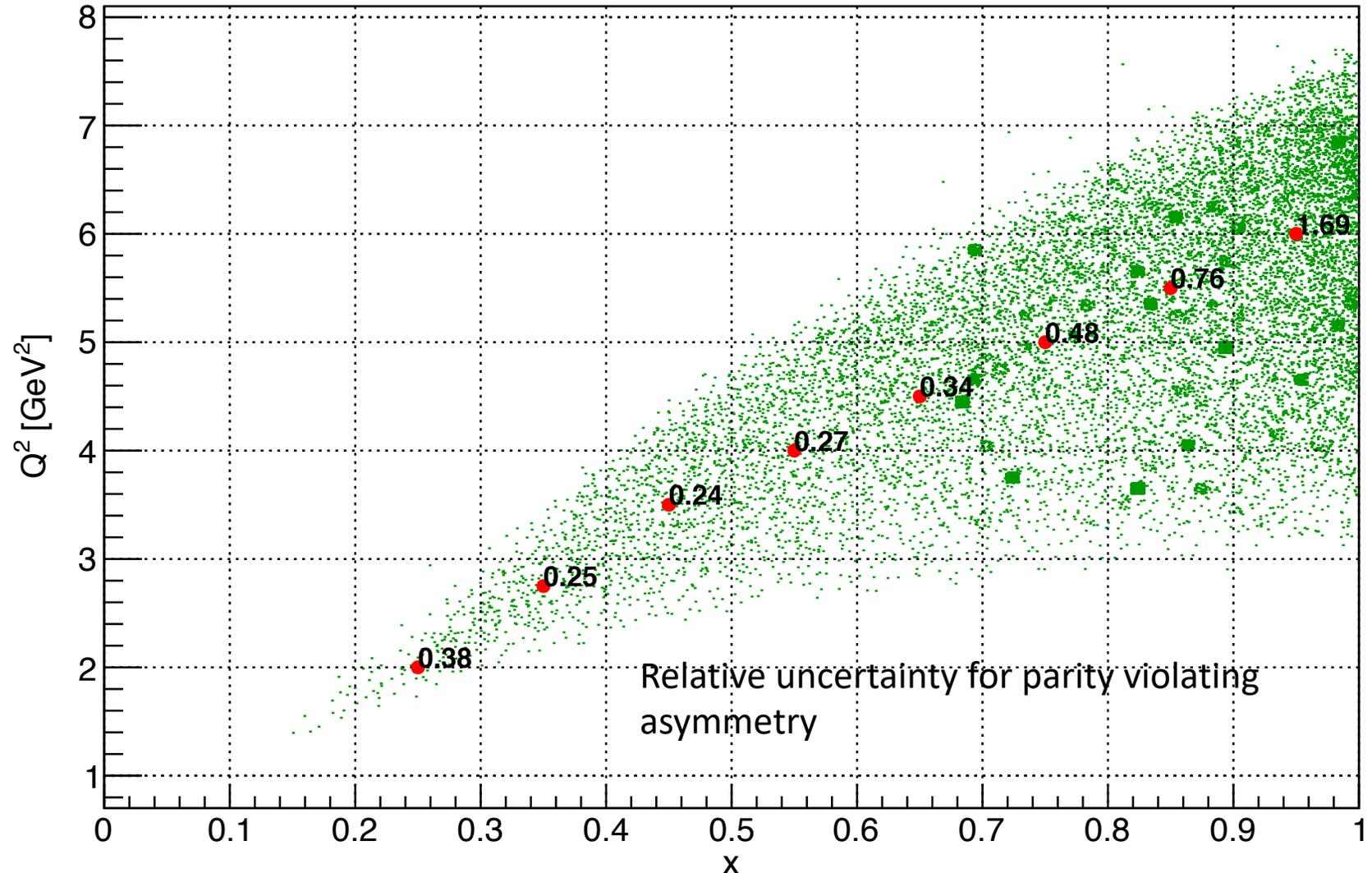
Only for events with  $W < 2\text{GeV}$

rate\_Q2x



# Expected rate and statistical uncertainty

All accepted events regardless of W

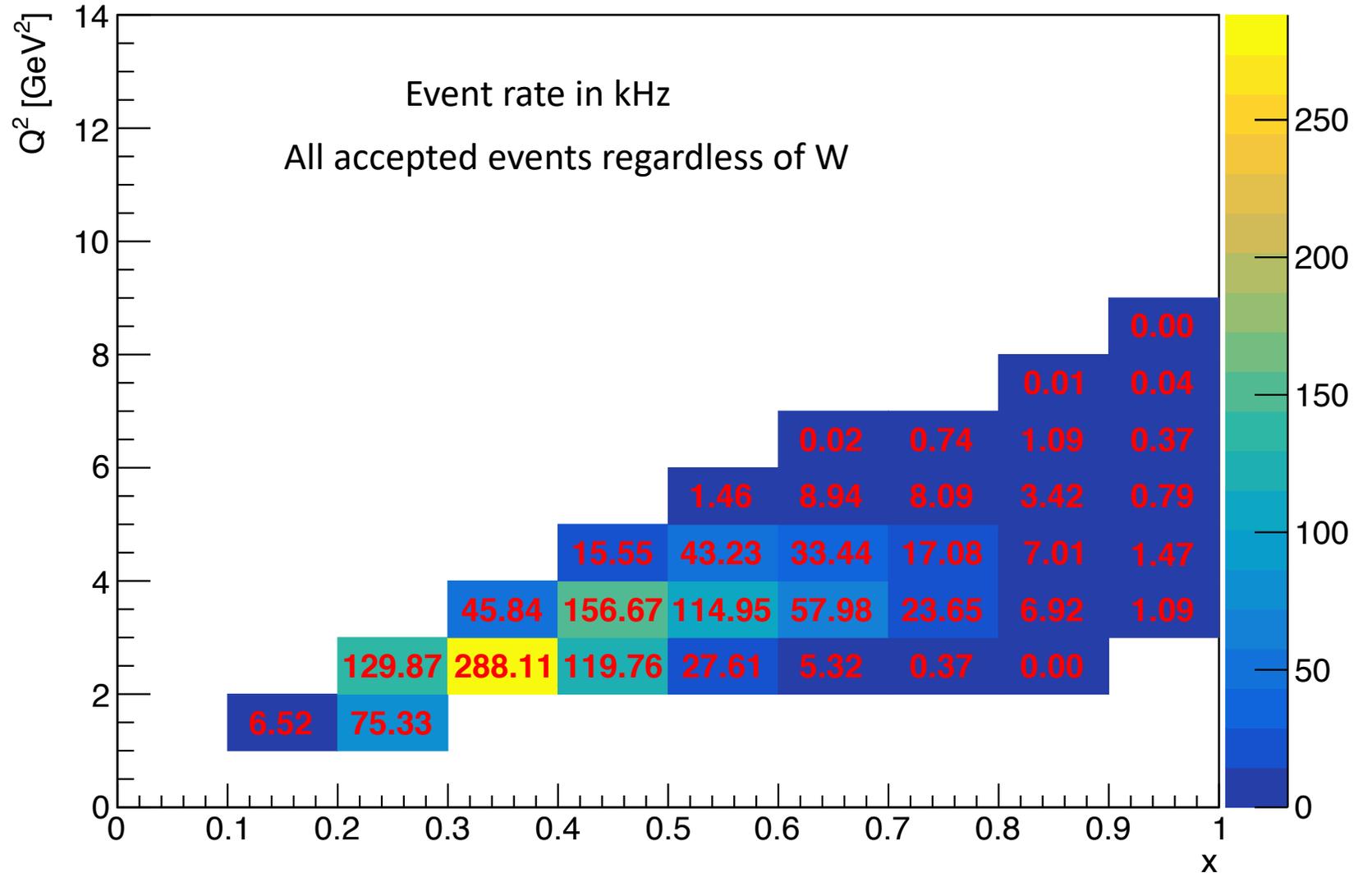


- Assuming 120 days on deuterium target with 6.6 GeV beam
- Using F1F2\_21 fit for the eAll generator
- Include acceptance but NO trigger efficiency effect
  - Typically the trigger efficiency has larger effect on low  $x$ , so high  $x$  or low  $W$  region should be ok
- All numbers in percentage

# Expected rate and statistical uncertainty

rate\_Q2x

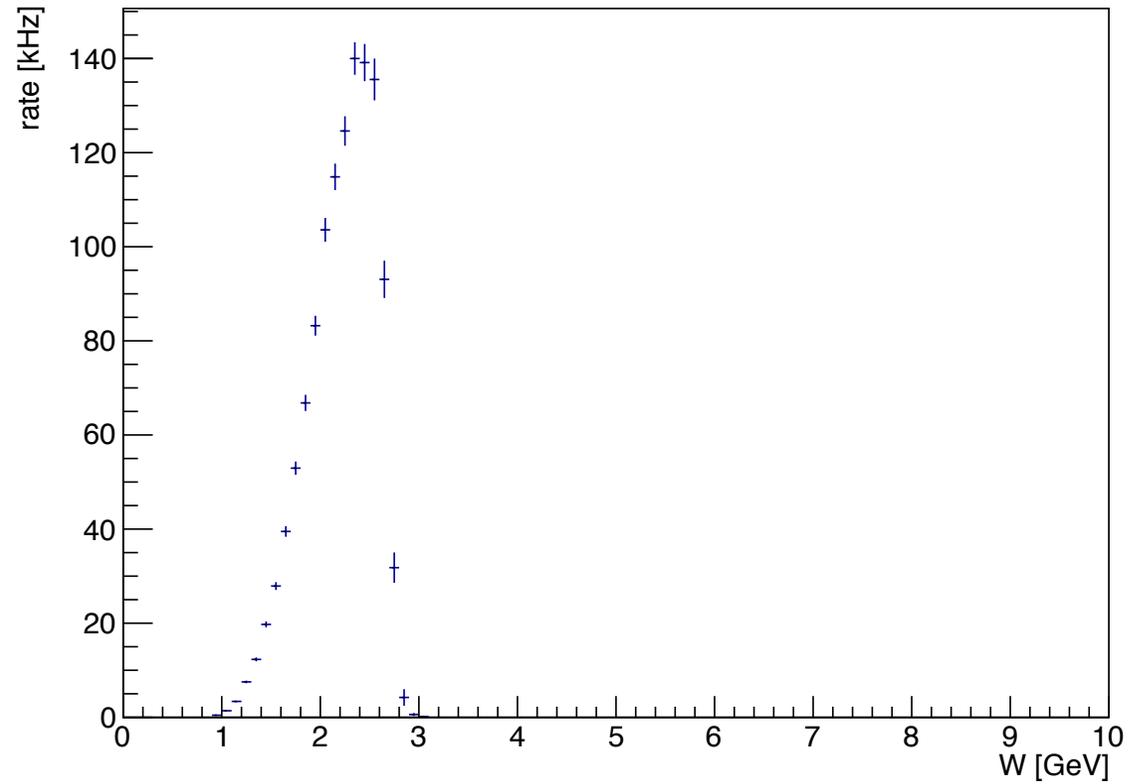
- Assuming 120 days on deuterium target with 6.6 GeV beam
- Using F1F2\_21 fit for the eAll generator
- Include acceptance but NO trigger efficiency effects
  - Typically the trigger efficiency has larger effect on low x, so high x or low W region should be ok



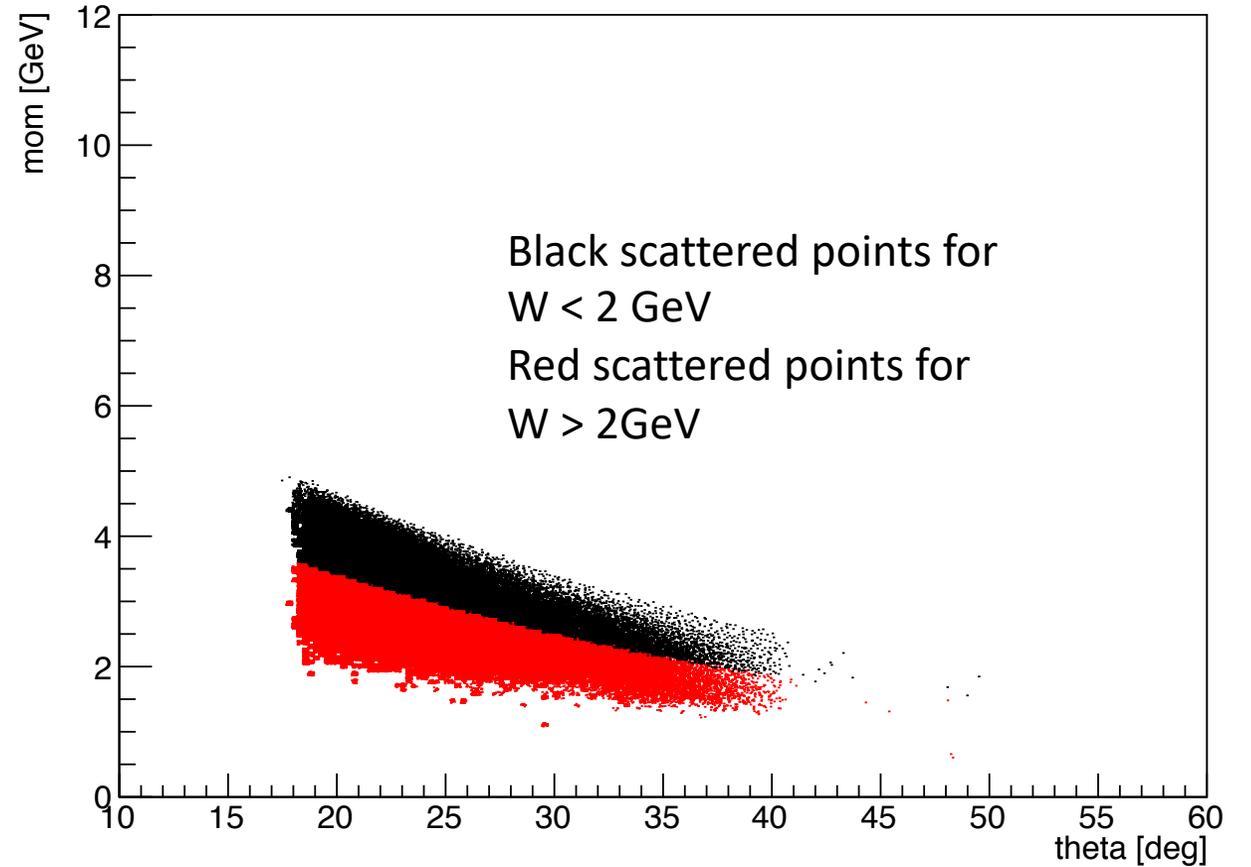
- Binning: 0.1 for x and 1 GeV<sup>2</sup> for Q<sup>2</sup>

# Expected rate and statistical uncertainty

W\_dist



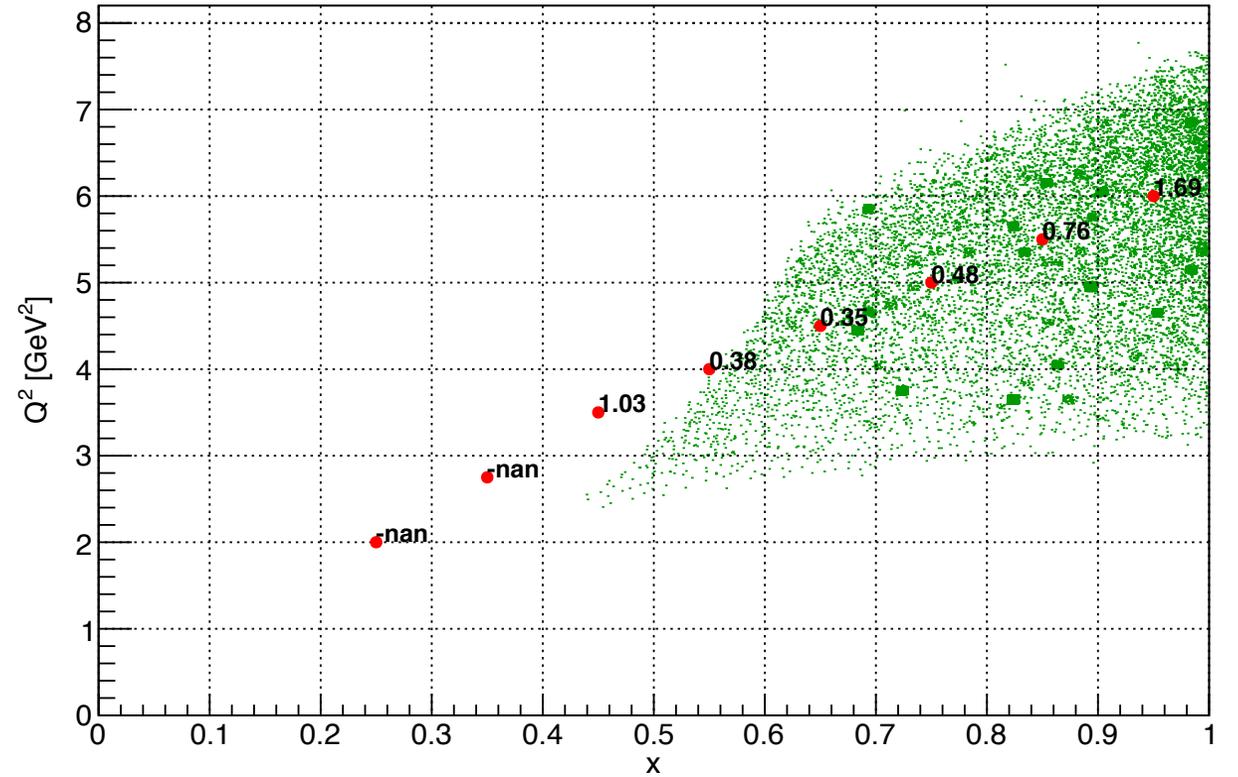
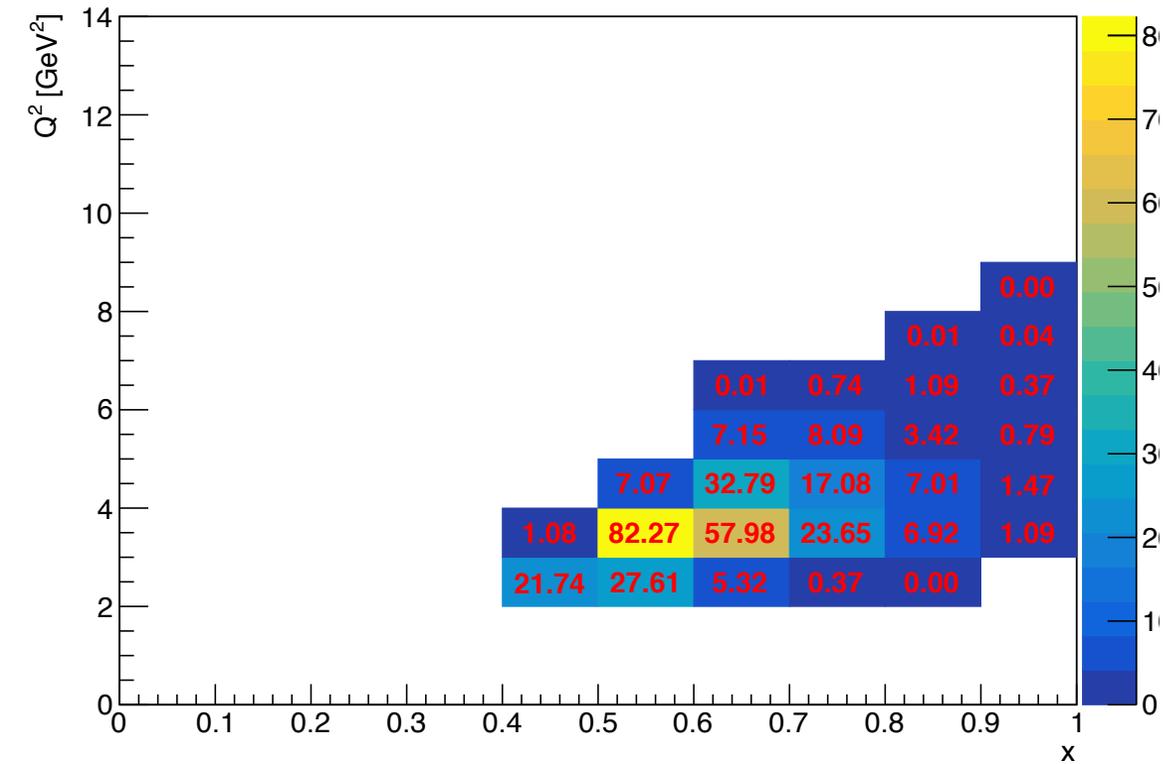
mom\_vs\_theta\_2



# Expected rate and statistical uncertainty

Only for events with  $W < 2\text{GeV}$

rate\_Q2x



# Difference between F1F2\_09 and F1F2\_21 fit

rate\_Q2x

- There are indeed some significant difference between the 09 and 21 fits
- In particular in the low x region, the difference can be larger than 1.5
- However, in high x or low W region, the results are very close

