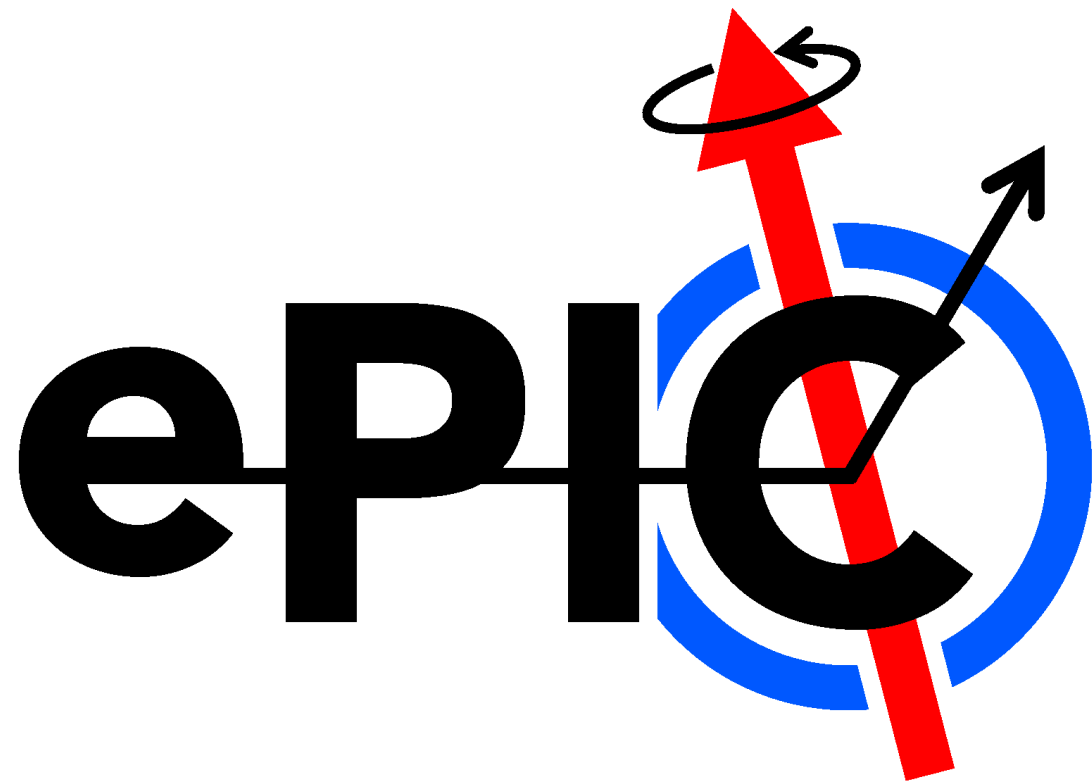


Inclusive PWG update

Tyler Kutz

ePIC analysis meeting

January 26, 2024

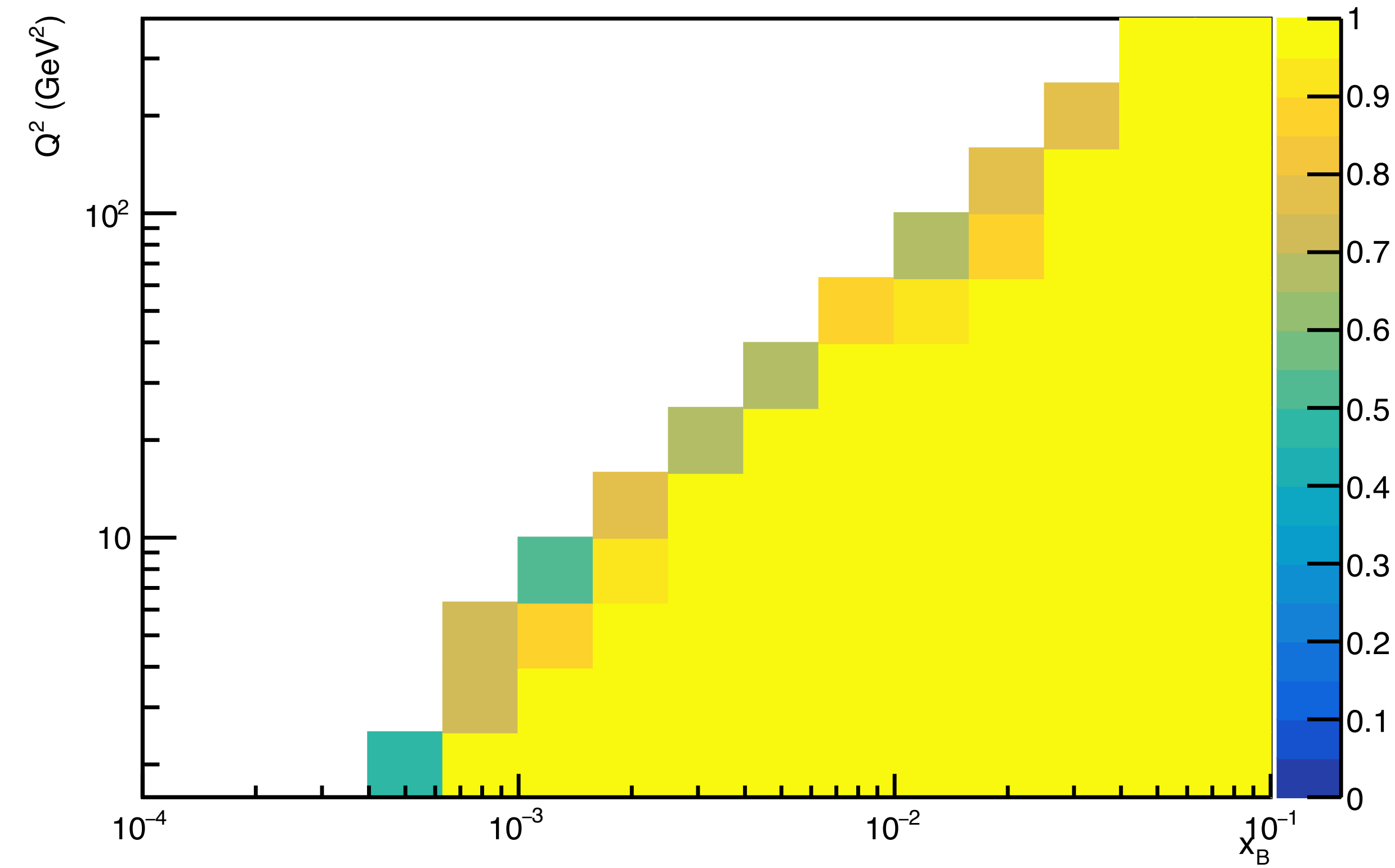


Near term goals

- Electron ID remains high priority
- In parallel, we are starting to produce physics plots
 - Neutral-current reduced cross sections
 - Double-spin asymmetries
 - Initially using electron reconstruction, include other methods ASAP

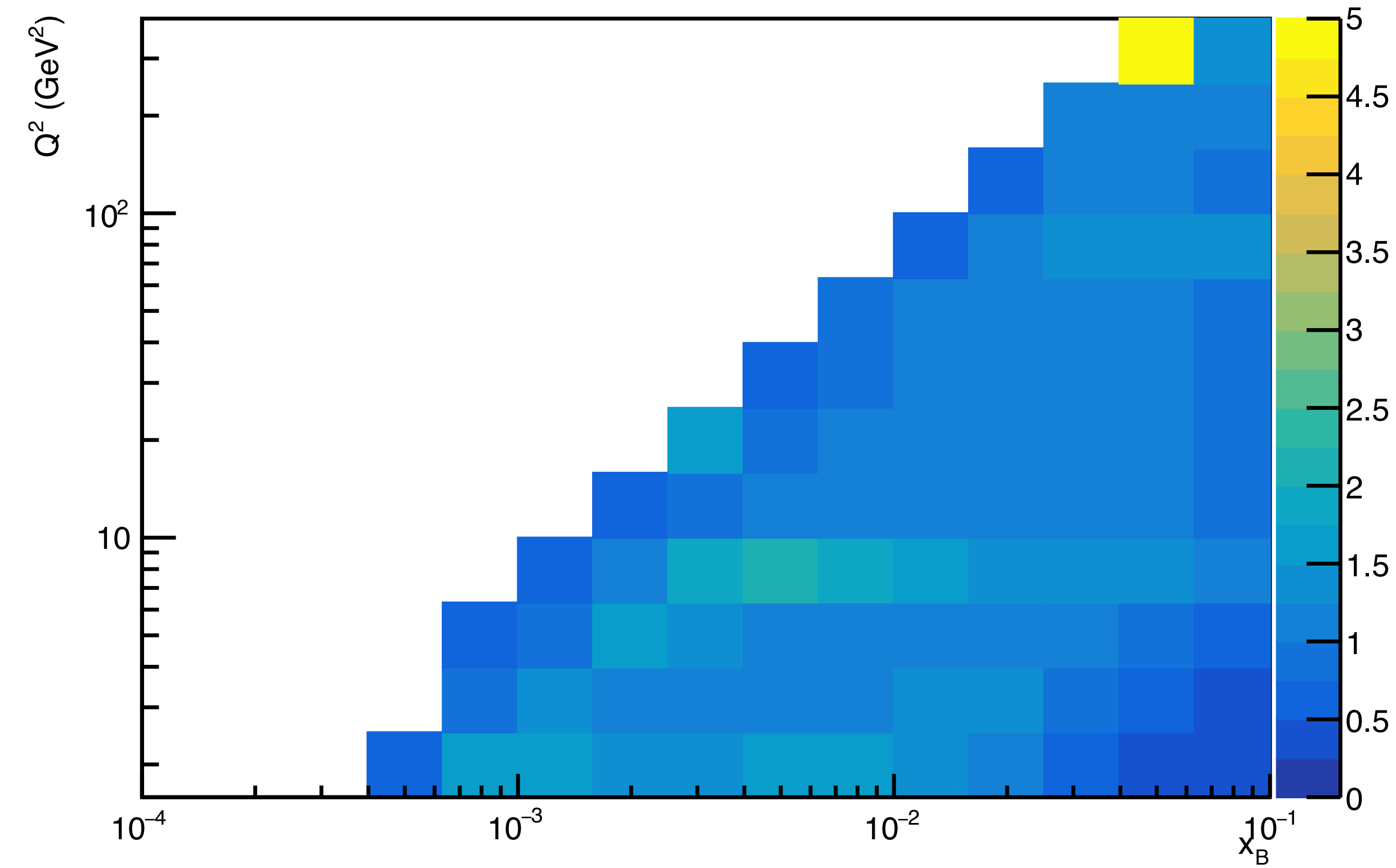
Acceptance and bin migration corrections

Acceptance



$$C_{acc} = \frac{N_{rec}(x_{gen}, Q_{gen}^2)}{N_{gen}(x_{gen}, Q_{gen}^2)}$$

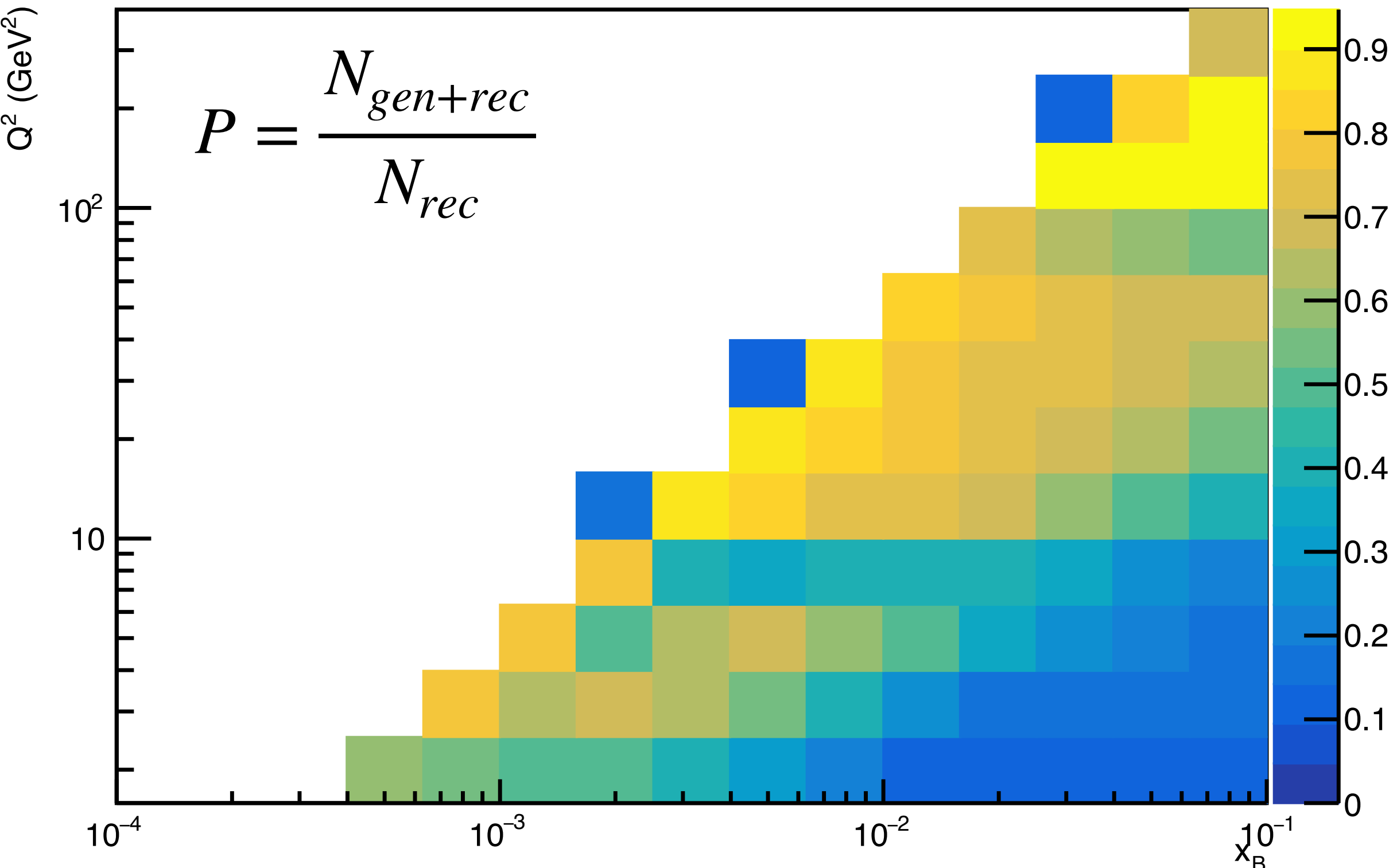
Bin migration



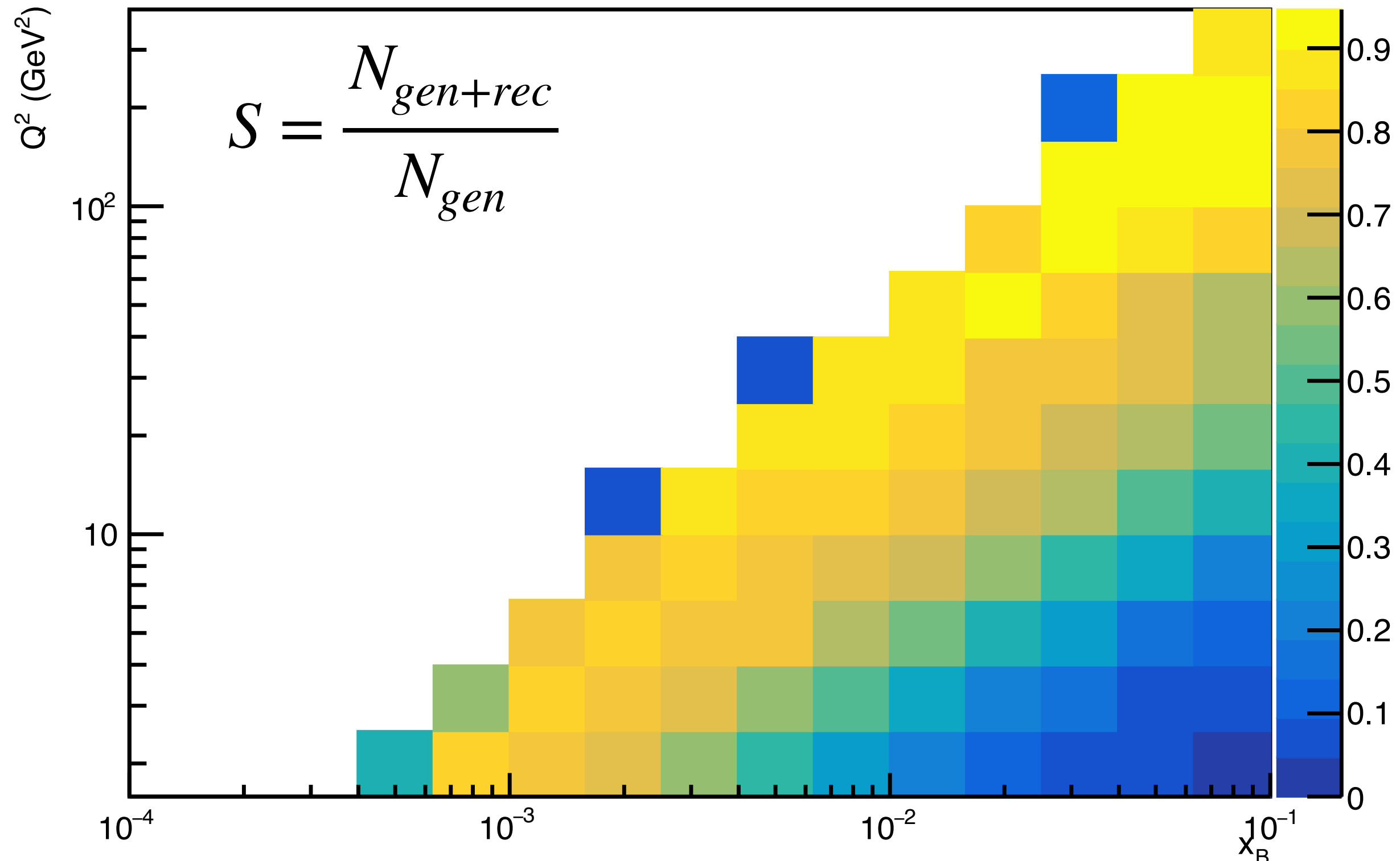
$$C_{bin} = \frac{N_{rec}(x_{rec}, Q_{rec}^2)}{N_{rec}(x_{gen}, Q_{gen}^2)}$$

Bin purity and stability

Bin purity

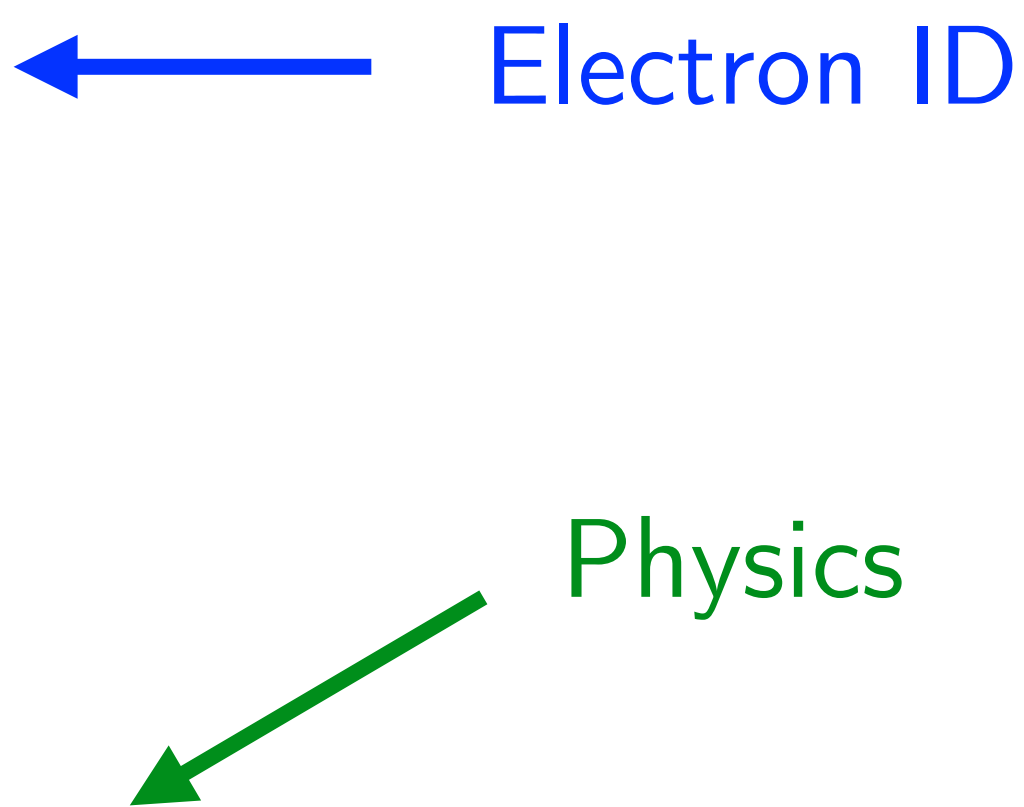


Bin stability



HERA requirement $P, S > 30\%$ (values typically $>60\%$)

Task list

- Debug track projections (Tyler, Daniel)
 - Track/cluster matching (Daniel, Tyler?)
 - Tuning cuts (Daniel, Tyler?)
 - Acceptance, bin migration correction (Tyler)
 - Binned resolution studies (Tyler, Anjelo?)
 - Projected statistics for cross section, asymmetry bins (Anjelo?)
 - Weight reconstructed events by model A_1^p for central value (Anjelo?)
 - Systematics
- 
- Electron ID
- Physics

Next regularly scheduled Inclusive PWG meeting superseded
by TDR workshop on February 5, 2024