

# Acceptance Study Status

Chao Gu

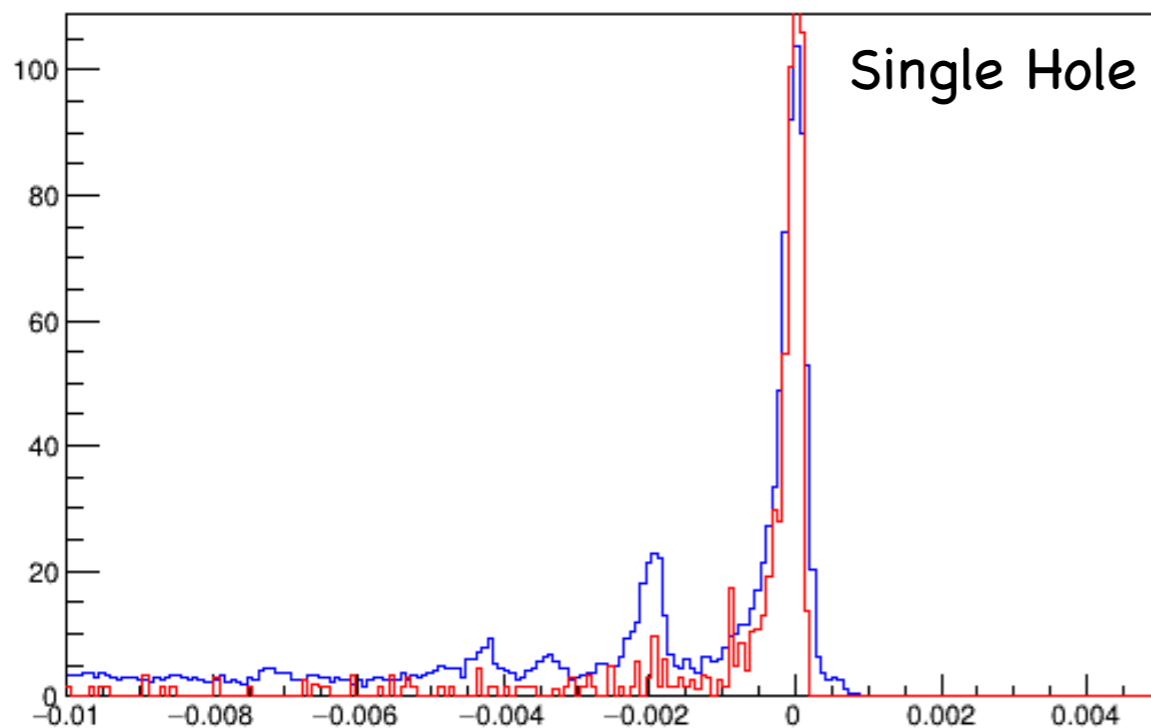
# Acceptance Study

- Method: convert the acceptance in the event generator to a effective  $\Delta E \Delta \Omega$  as the denominator of the cross-section with the help of a fine-tuned simulation
  - Key: get a fine-tuned simulation
- Compare sim result with data to tune the simulation
  - Data reconstruction need to be studied before tuning
  - The major effort is to tune the septum and HRS model part in the simulation to match the result since other parts of the simulation have be checked with data

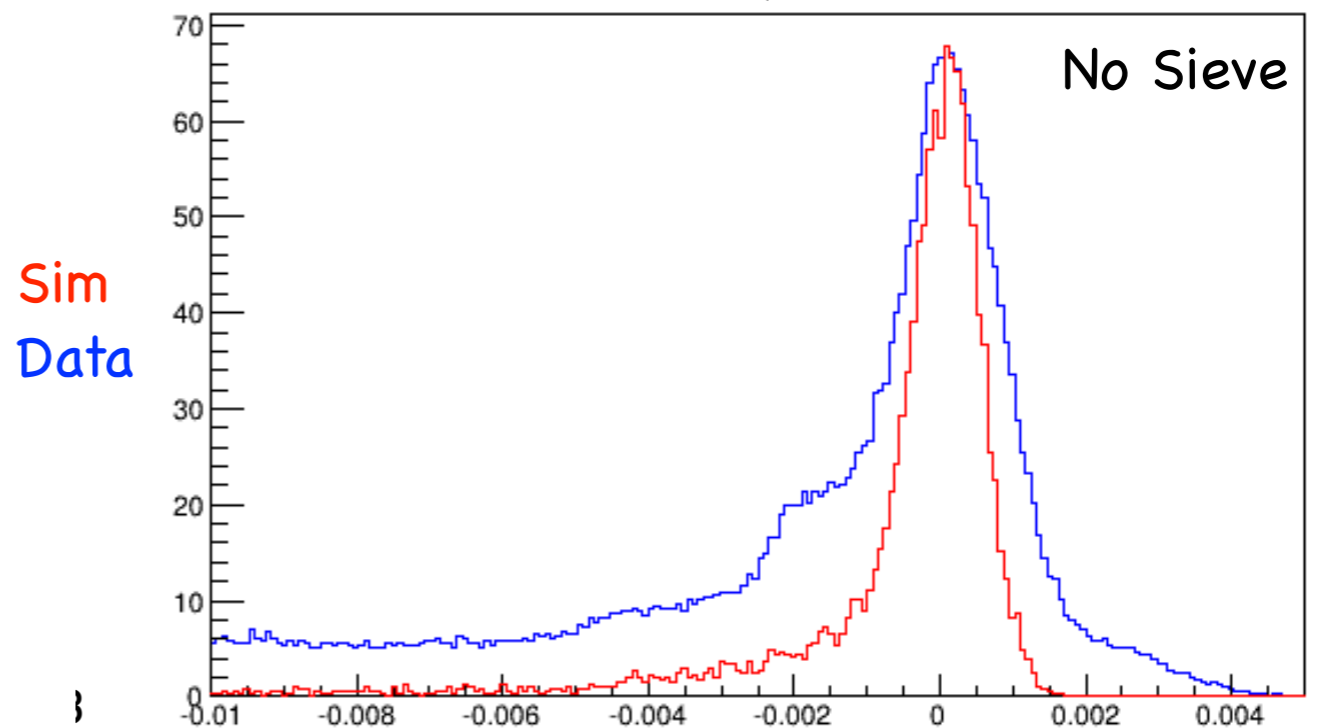
# Acceptance Study

- Status:
  - The reconstruction has already been tuned during the optics study
  - Use the width of the elastic peak to tune the resolution of the simulation package
  - The width of the elastic peak (dp plot) does not agree well

Elastic Peak



Elastic Spectrum



# Acceptance Study

- Status:
  - Sieve data: tuned the positions of the peak for central sieve holes, for the holes on the edge the positions are within the 1.5 mrad
  - Aperture study: it turns out the aperture does not influence the result a lot under the elastic situation
- Plan:
  - Finish tuning the simulation