Acceptance Study Status

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Acceptance Study

- Method: convert the acceptance in the event generator to an 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
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