

FCAL energy calibration QC

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Thomas Jefferson National Accelerator Facility

for the GlueX Collaboration

fcal2021method0period1

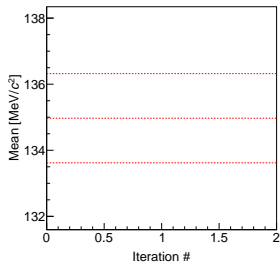


Table of contents

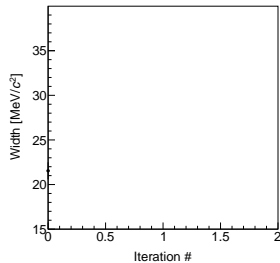
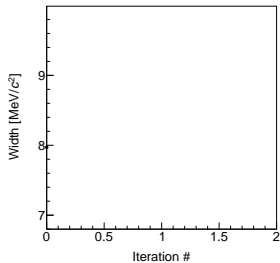
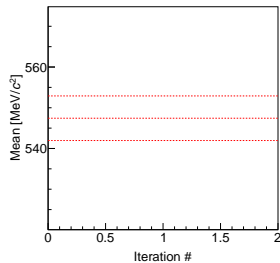
- 1 Overall QC
- 2 QC per rings

Overall QC vs iteration

● π^0

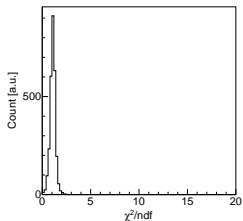


● η

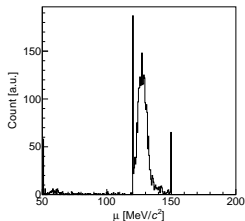


Overall QC, summary distributions

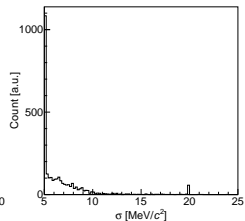
● χ^2 distribution



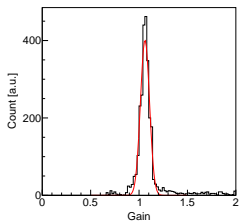
● Fitted peak distribution



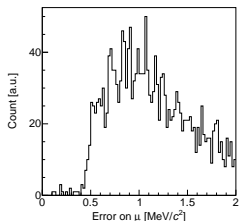
● Fitted width distribution



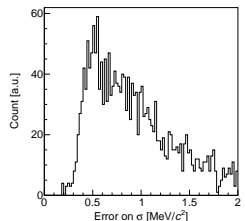
● Gain distribution



● Fitted peak error distribution

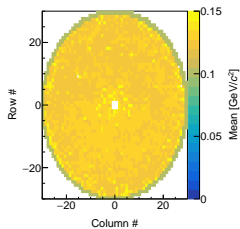


● Fitted width error distribution

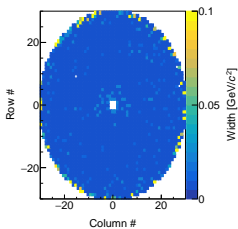


Overall QC, summary maps

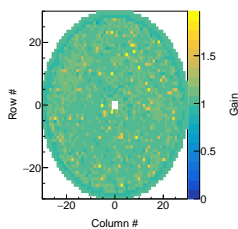
● Fitted peak map



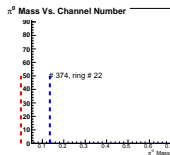
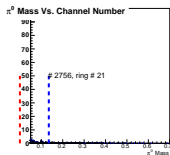
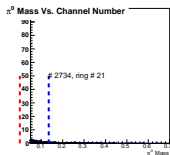
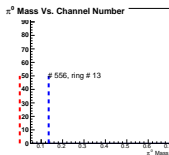
● Fitted width map



● Gain map



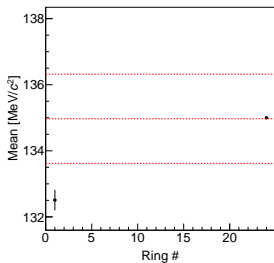
Overall QC, bad channels



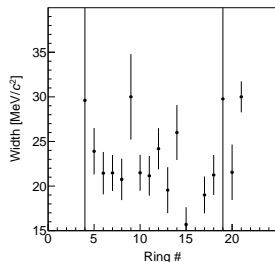
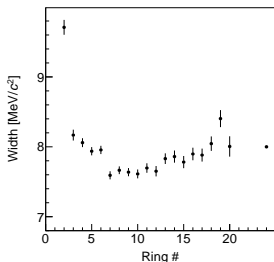
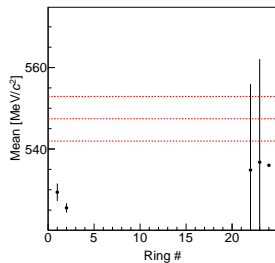
QC per rings

If radius divided by 5 cm, there is 24 rings

● π^0



● η



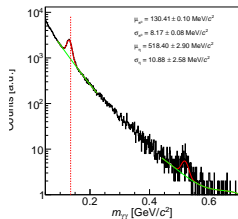
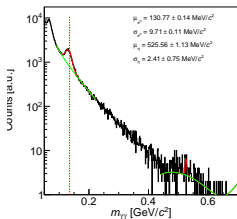
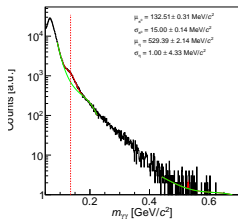
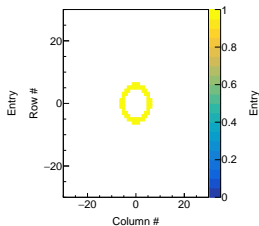
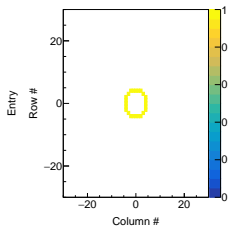
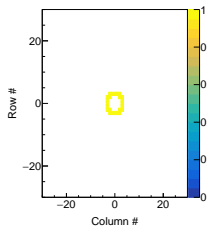
QC per rings

If radius divided by 5 cm, there is 24 rings

● Ring 1

● Ring 2

● Ring 3



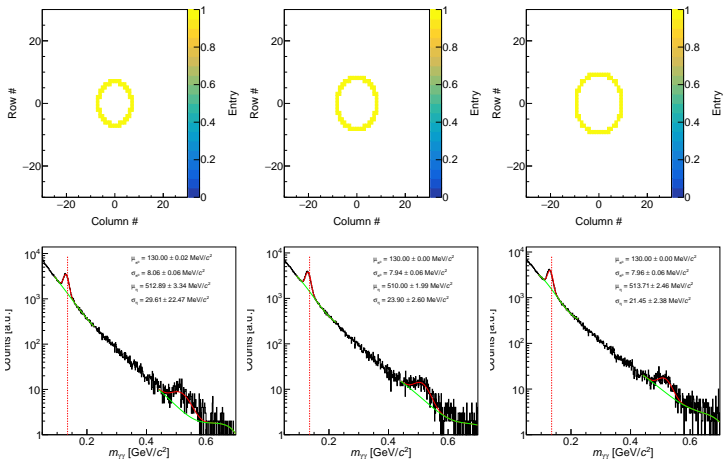
QC per rings

If radius divided by 5 cm, there is 24 rings

● Ring 4

● Ring 5

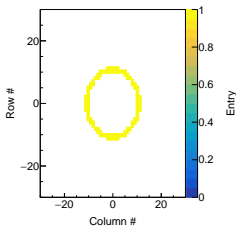
● Ring 6



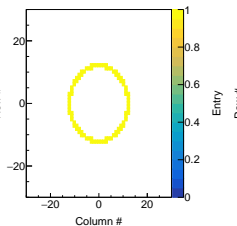
QC per rings

If radius divided by 5 cm, there is 24 rings

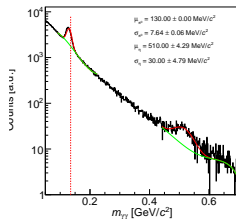
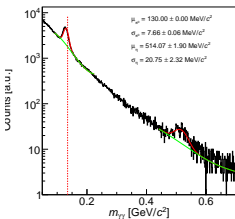
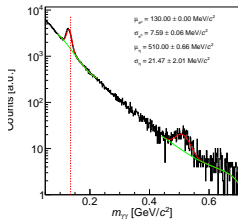
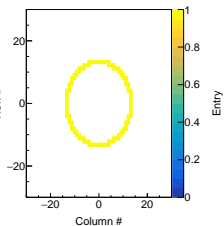
● Ring 7



● Ring 8



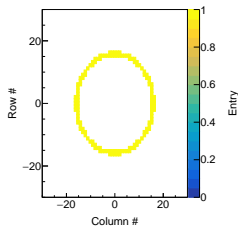
● Ring 9



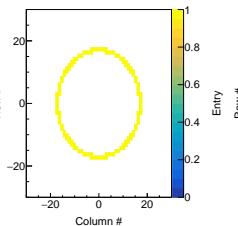
QC per rings

If radius divided by 5 cm, there is 24 rings

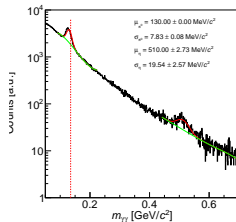
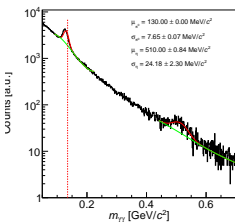
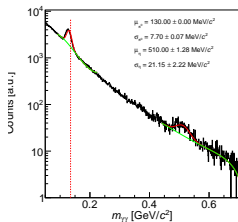
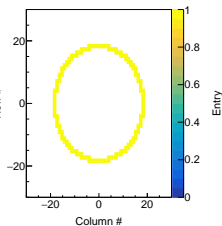
● Ring 11



● Ring 12



● Ring 13



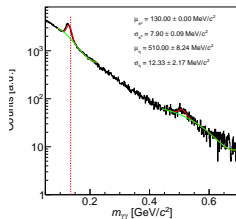
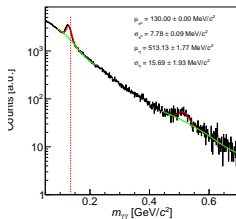
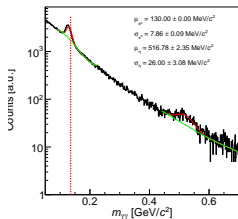
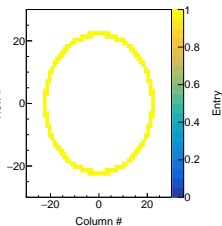
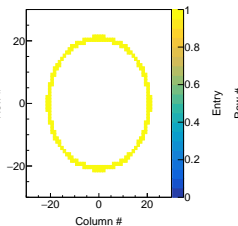
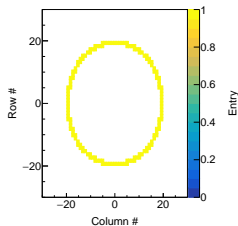
QC per rings

If radius divided by 5 cm, there is 24 rings

● Ring 14

● Ring 15

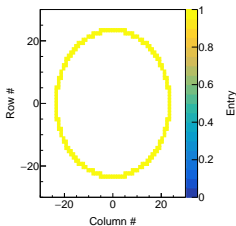
● Ring 16



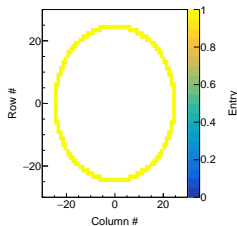
QC per rings

If radius divided by 5 cm, there is 24 rings

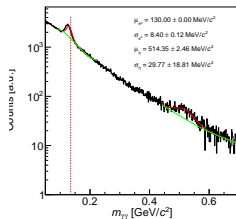
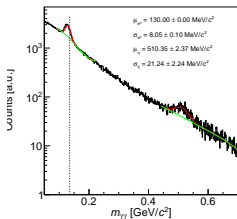
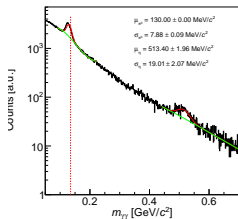
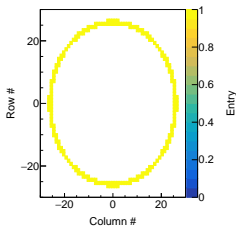
● Ring 17



● Ring 18



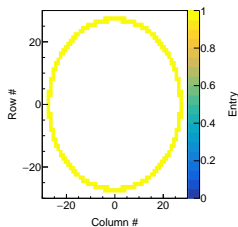
● Ring 19



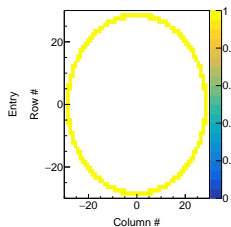
QC per rings

If radius divided by 5 cm, there is 24 rings

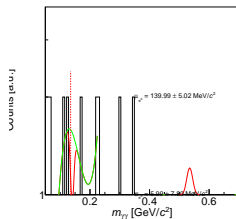
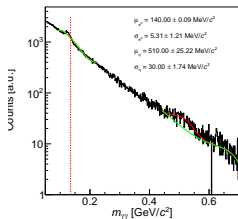
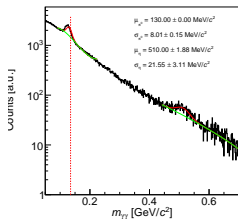
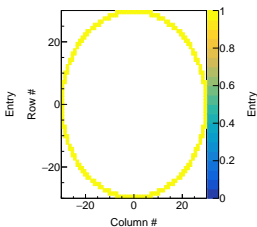
● Ring 20



● Ring 21



● Ring 22



QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 23

