FCAL energy calibration QC

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Thomas Jefferson National Accelerator Facility

for the GlueX Collaboration

October 6, 2023
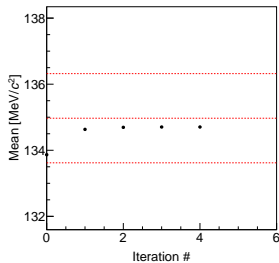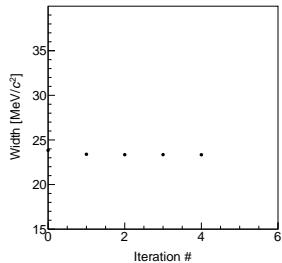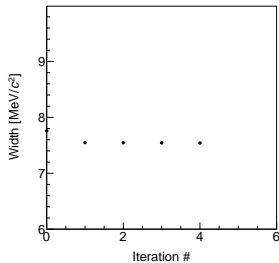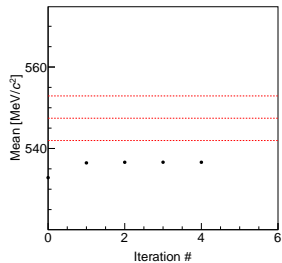2022-08-period-43-iteration-5-method-2

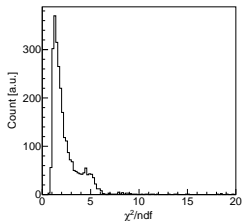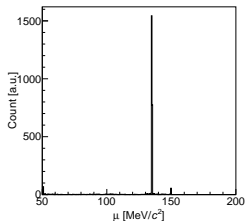# Table of contents

Overall QC vs iteration
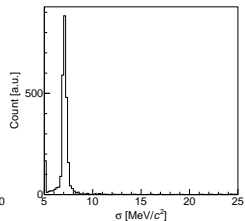
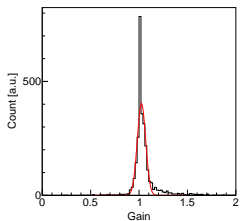# Overall QC, summary distributions
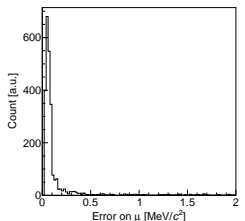
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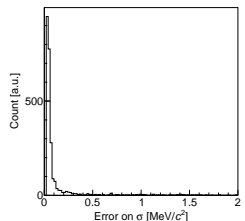- Fitted peak distribution

- Fitted width distribution

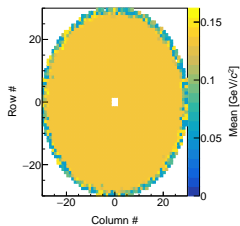- Gain distribution
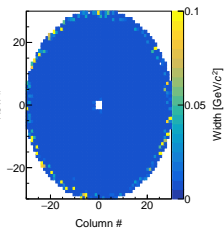
- Fitted peak error distribution

- Fitted width error distribution

Overall QC, summary maps

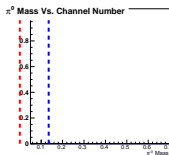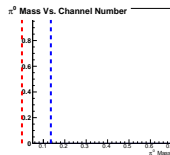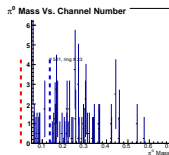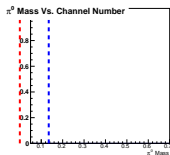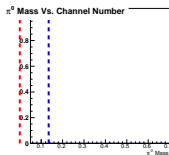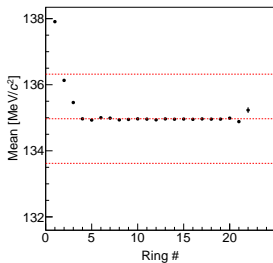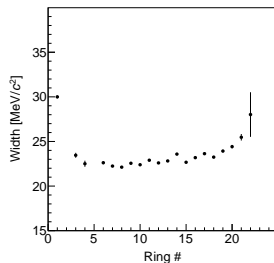● Fitted peak map   ● Fitted width map   ● Gain map

Overall QC, bad channels
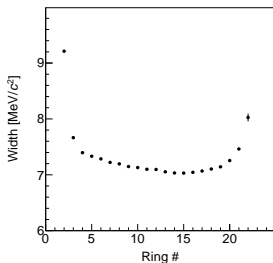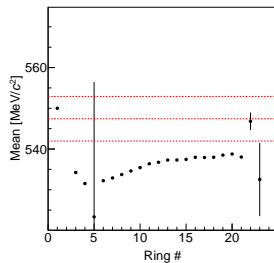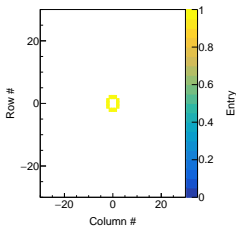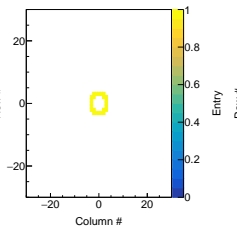
QC per rings

If radius divided by 5 cm, there is 24 rings

- π^0

- η

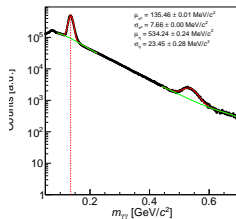# QC per rings

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 1
- Ring 2
- Ring 3

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 4
- Ring 5
- Ring 6

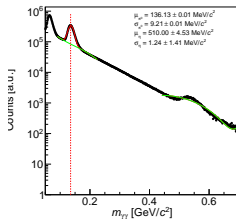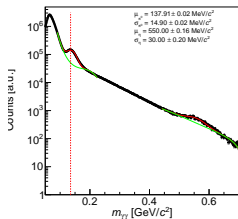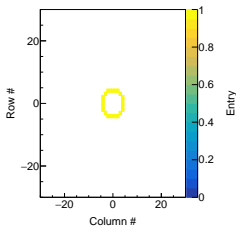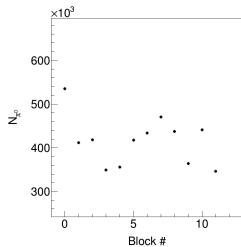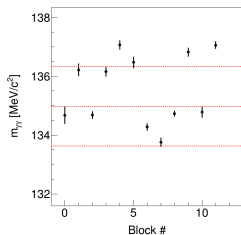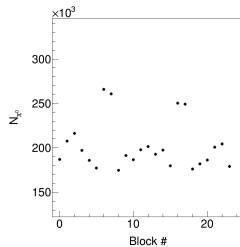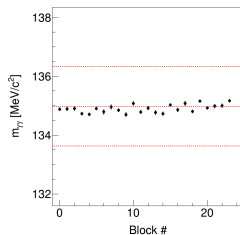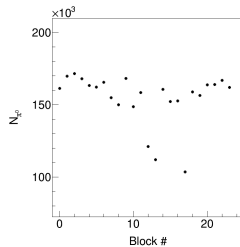# QC per rings

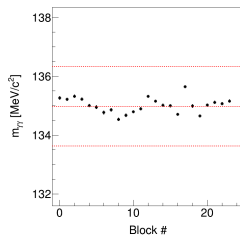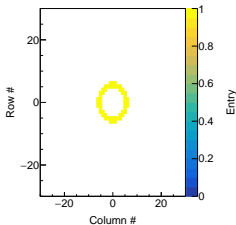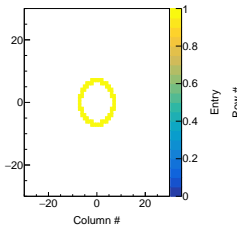If radius divided by 5 cm, there is 24 rings

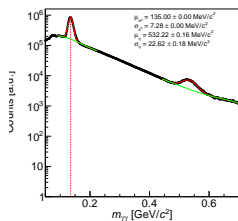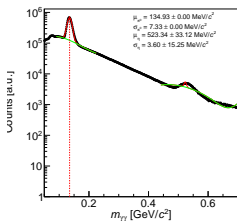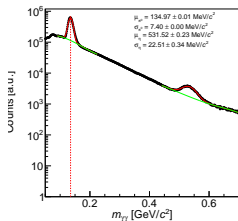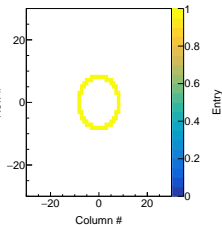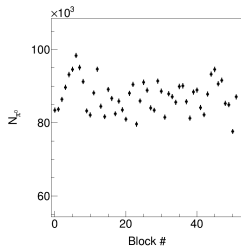- Ring 4
- Ring 5
- Ring 6

QC per rings

If radius divided by 5 cm, there is 24 rings
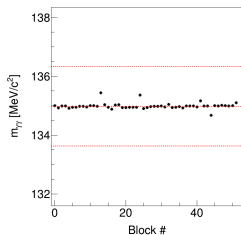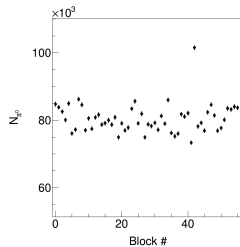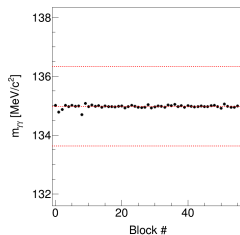
- Ring 7
- Ring 8
- Ring 9

QC per rings

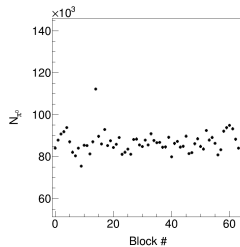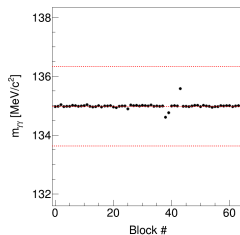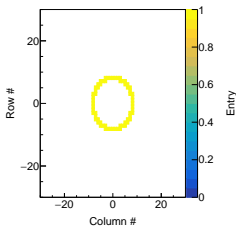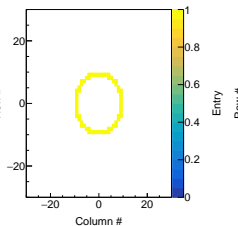If radius divided by 5 cm, there is 24 rings

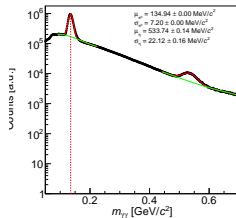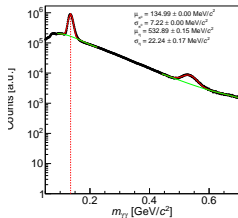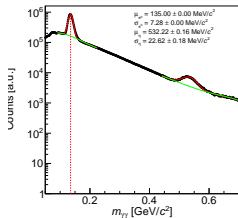- Ring 7
- Ring 8
- Ring 9

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 11
- Ring 12
- Ring 13

QC per rings
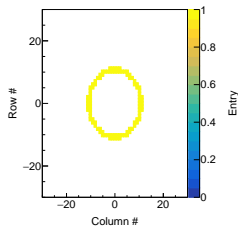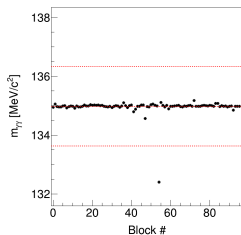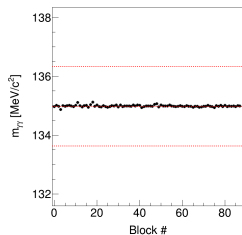
If radius divided by 5 cm, there is 24 rings

● Ring 11　　　　　　● Ring 12　　　　　　● Ring 13

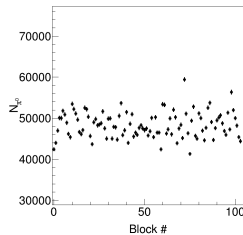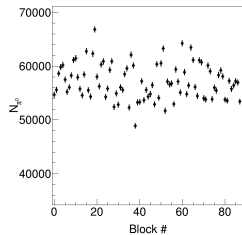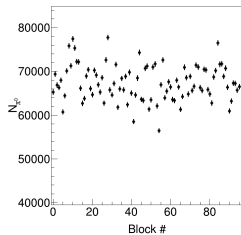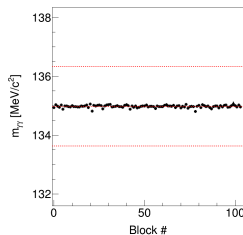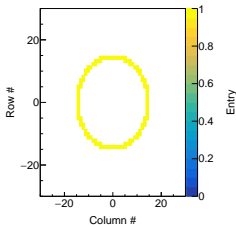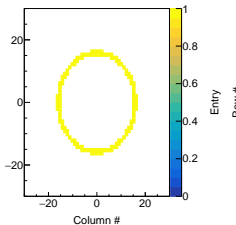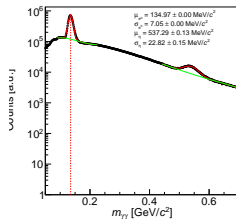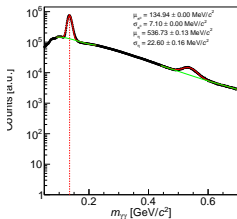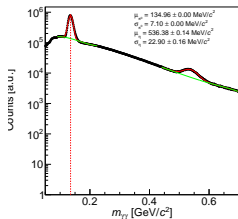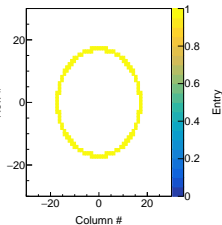# QC per rings

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 14　　　　　　　● Ring 15　　　　　　　● Ring 16

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 17
- Ring 18
- Ring 19

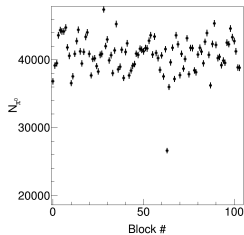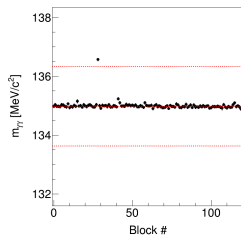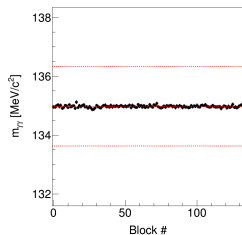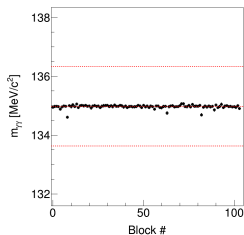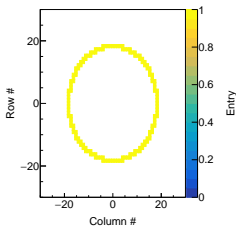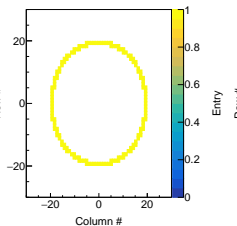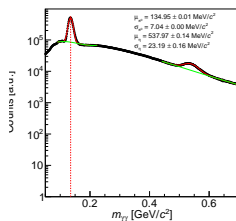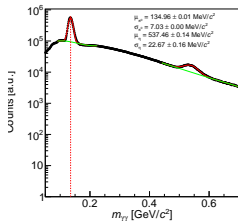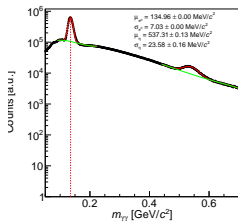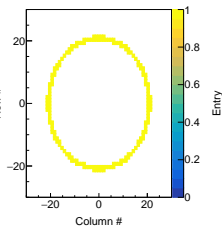# QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 17
- Ring 18
- Ring 19

QC per rings

If radius divided by 5 cm, there is 24 rings

- Ring 20

- Ring 21
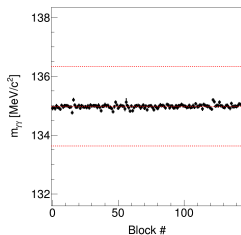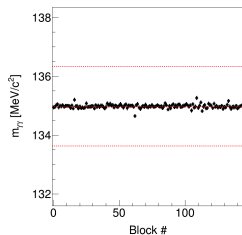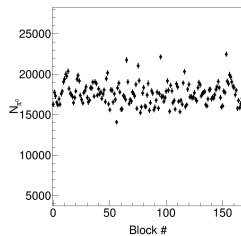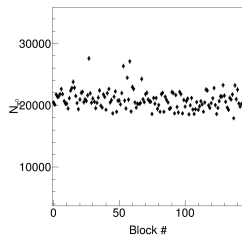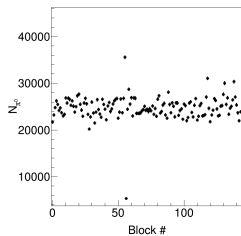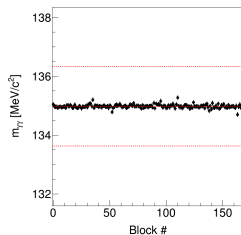
- Ring 22

QC per rings

If radius divided by 5 cm, there is 24 rings
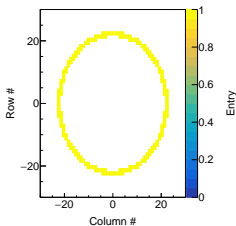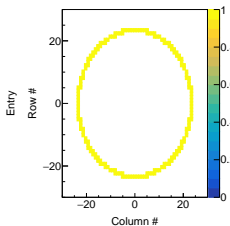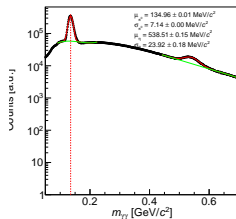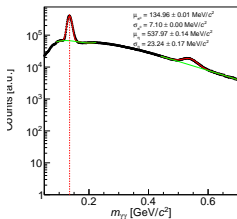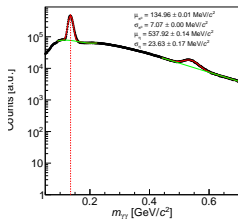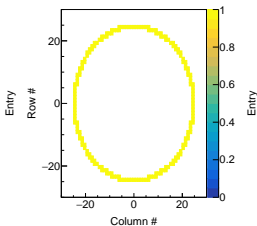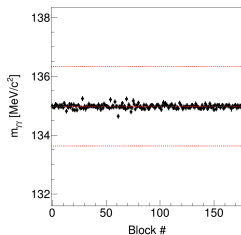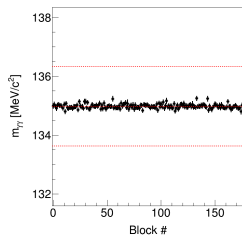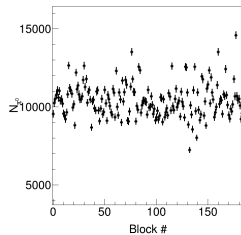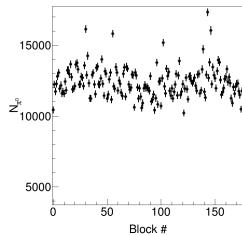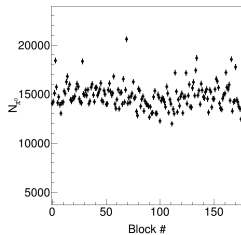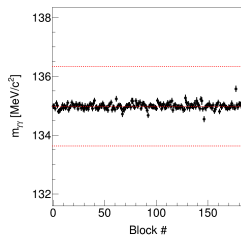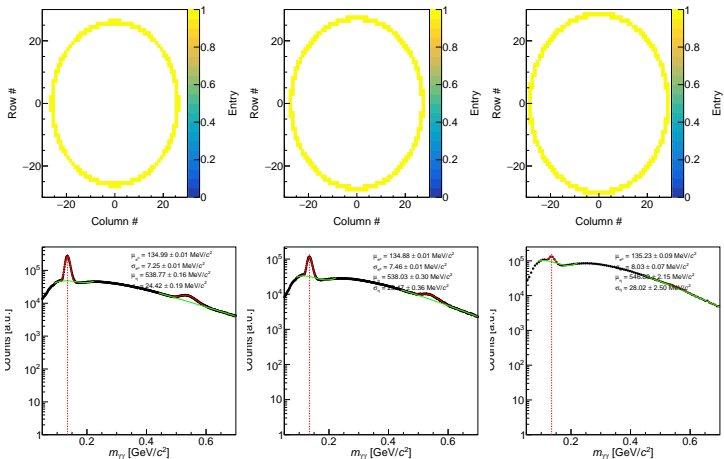
- Ring 20
- Ring 21
- Ring 22

QC per rings

If radius divided by 5 cm, there is 24 rings
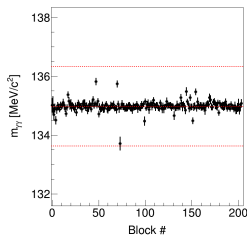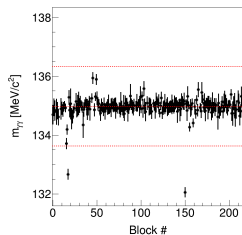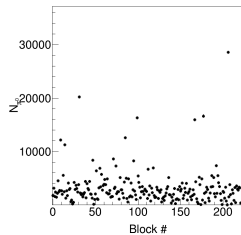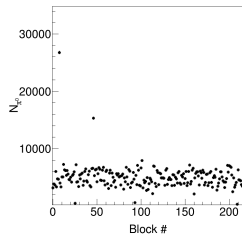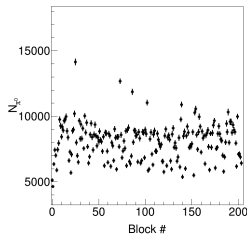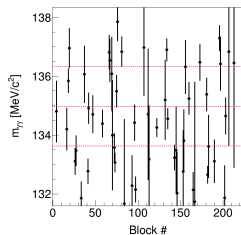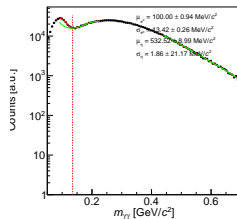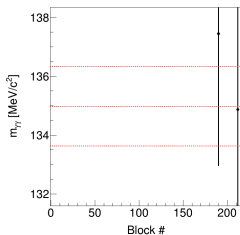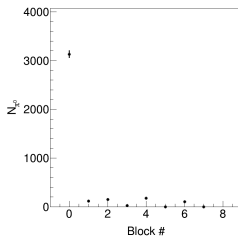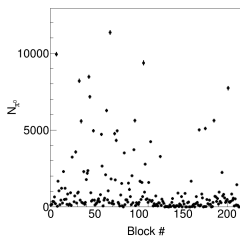

Ring 23

QC per rings
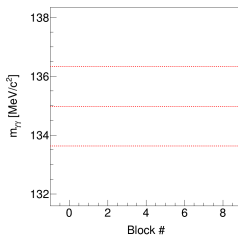
If radius divided by 5 cm, there is 24 rings

- Ring 23

- Ring 24

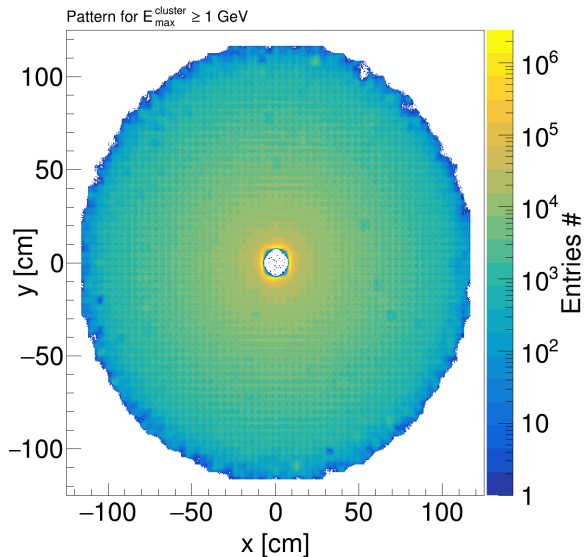# FCAL pattern

Pattern for $E_{max}^{cluster} \geq 0$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 1$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 2$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 3$ GeV

FCAL pattern

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 5$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 6$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 7$ GeV

FCAL pattern

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 9$ GeV

FCAL pattern

Pattern for $E_{max}^{cluster} \geq 10$ GeV