

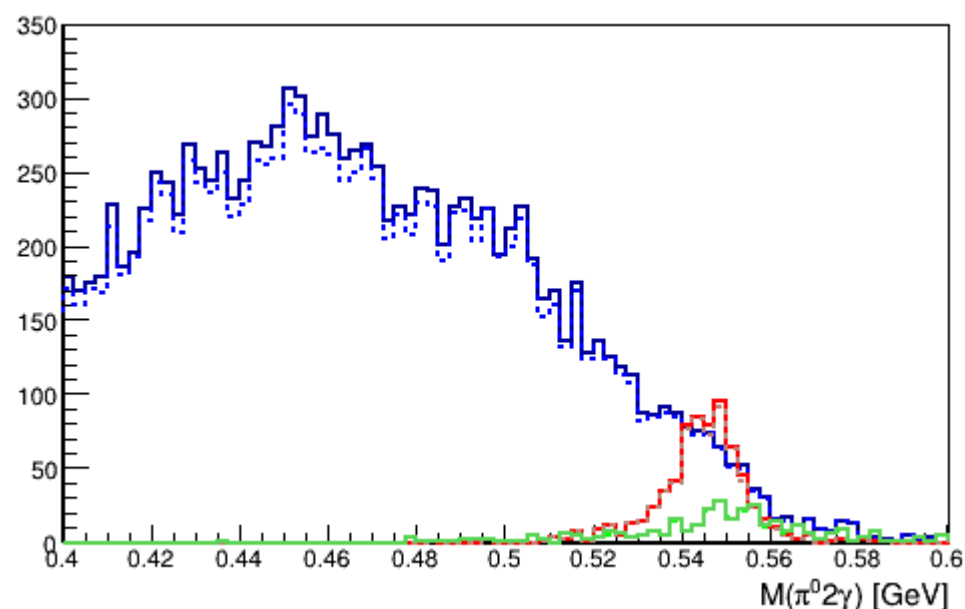
Impact of ITOF veto on $\eta \rightarrow \pi^0 \gamma \gamma$ analysis

- Used Run 71638 for run conditions (folding in randoms)
- Reconstruct showers with Island algorithm with χ^2 margin=12.5
 - FCAL threshold = 0.1 GeV, BCAL threshold = 0.05 GeV
- Simulate ITOF hits due to interactions with η decay products + secondaries
 - EM background not superimposed for ITOF
 - Veto event if ITOF fired (no threshold)

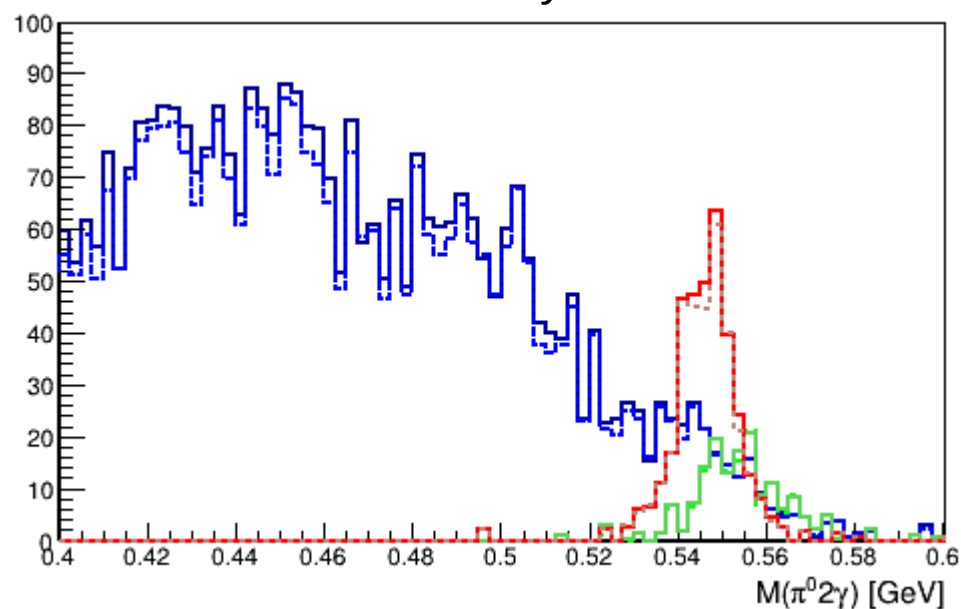
	Events
$\eta \rightarrow \pi^0 \gamma \gamma$	6479
$\eta \rightarrow 3\pi^0$	8.3M
$\eta \rightarrow 2\gamma$	10M

Dashed lines with ITOF veto applied

Photons in BCAL+FCAL



FCAL only



No ITOF veto	With ITOF veto	Ratio
341	326	0.96
151	143	0.95
747	716	0.96

Integration range:
0.5-0.6 GeV