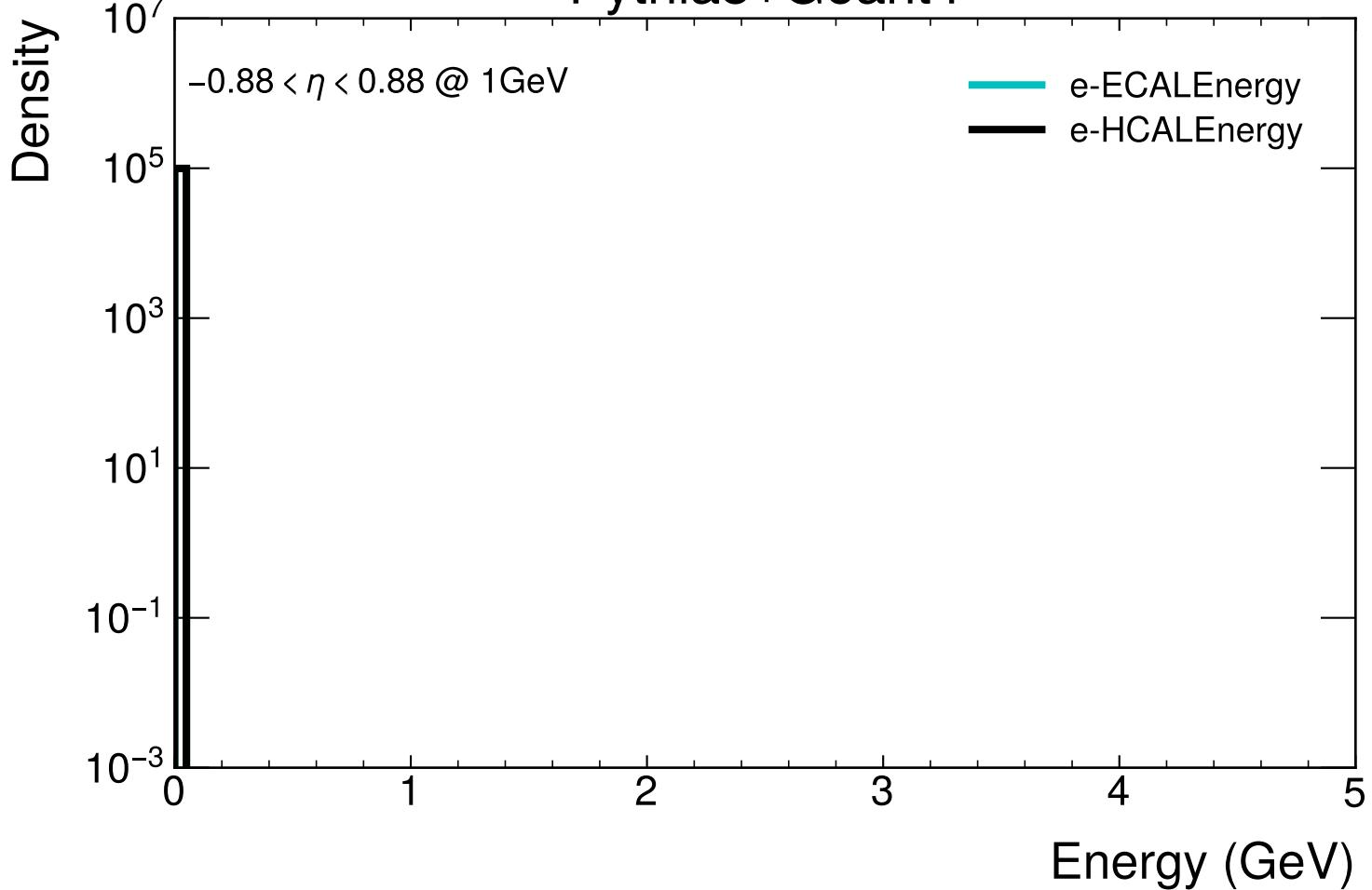


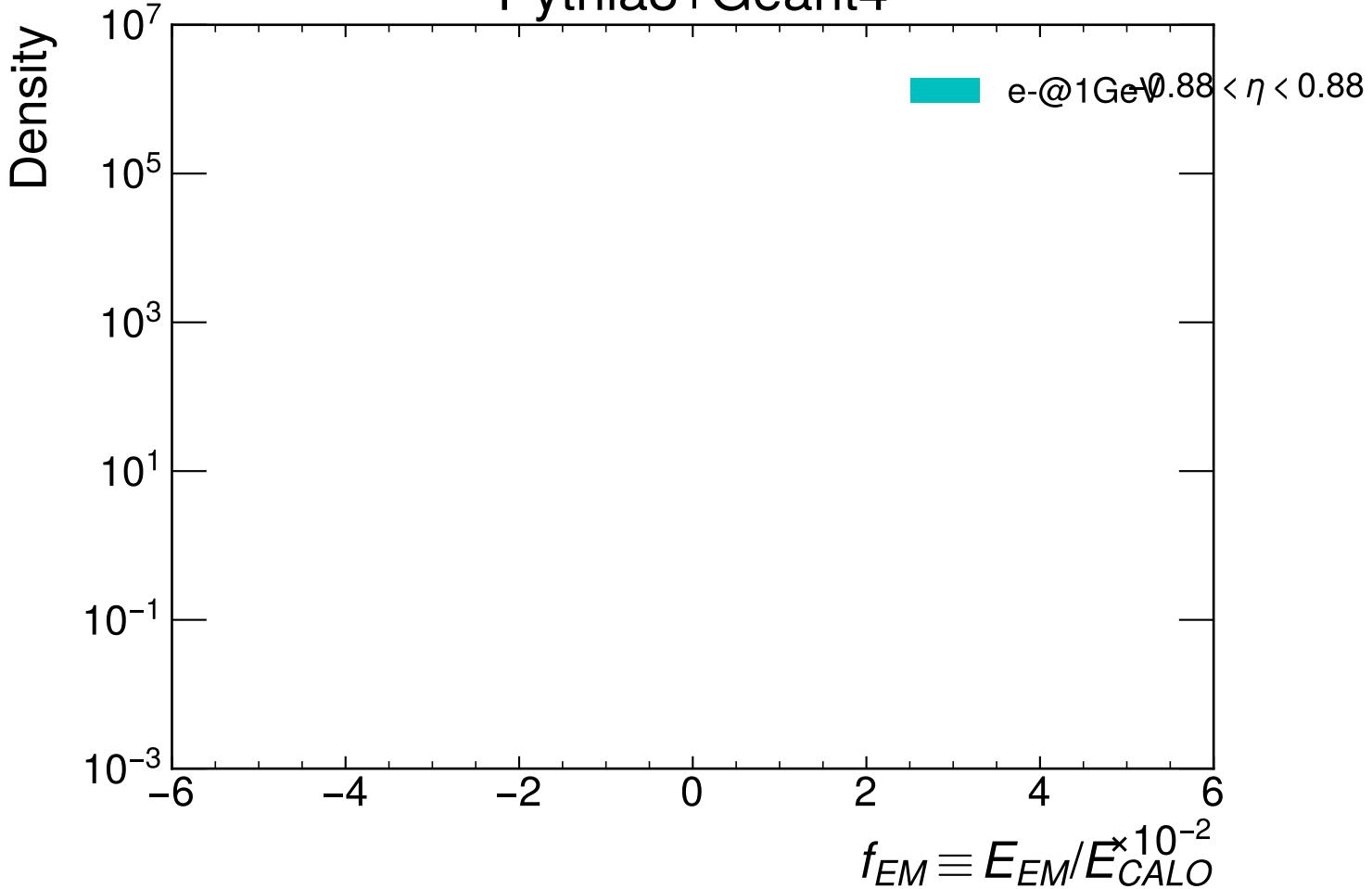
# ATHENA simulation [DD4hep]

## Pythia8+Geant4

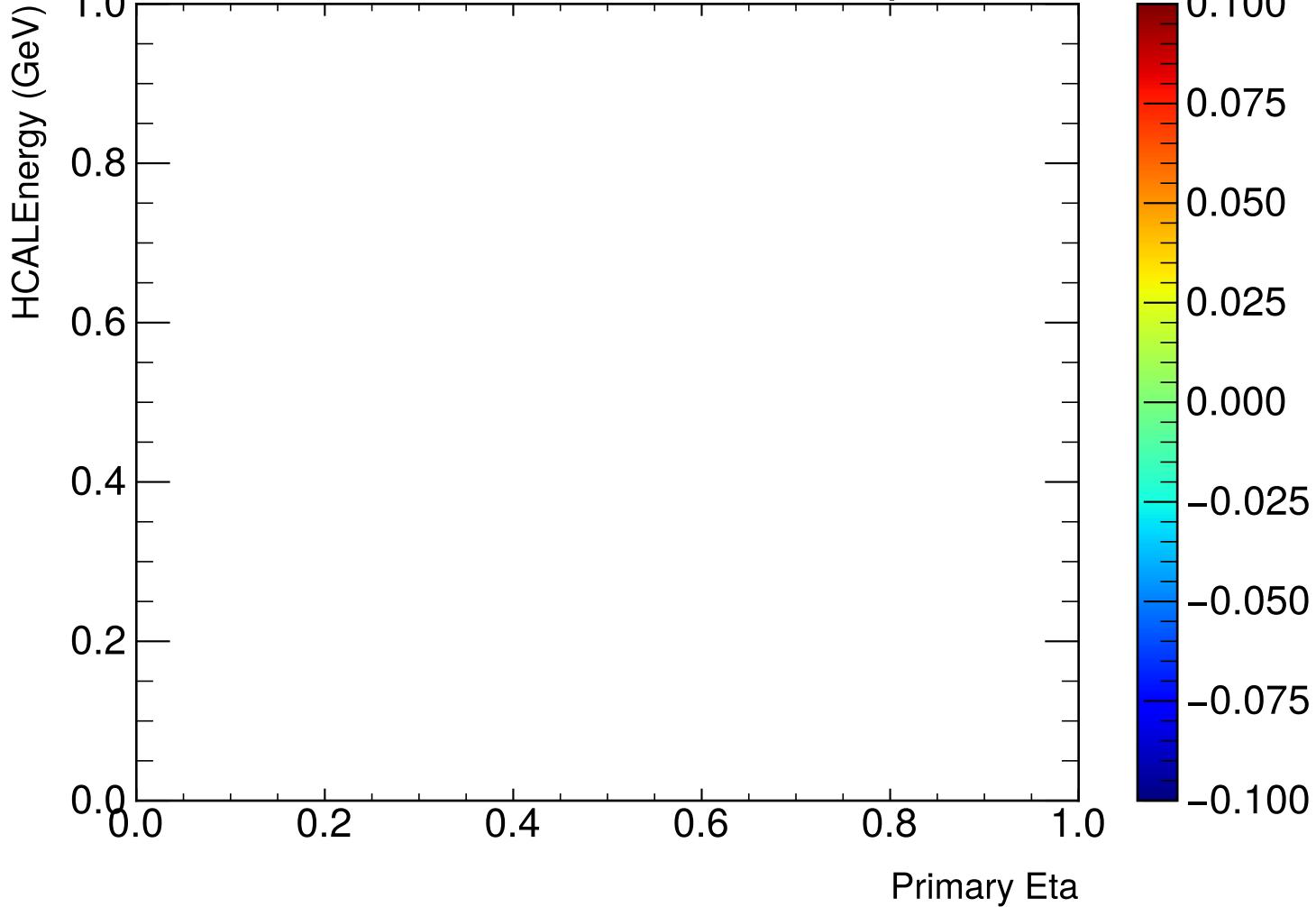


# ATHENA simulation [DD4hep]

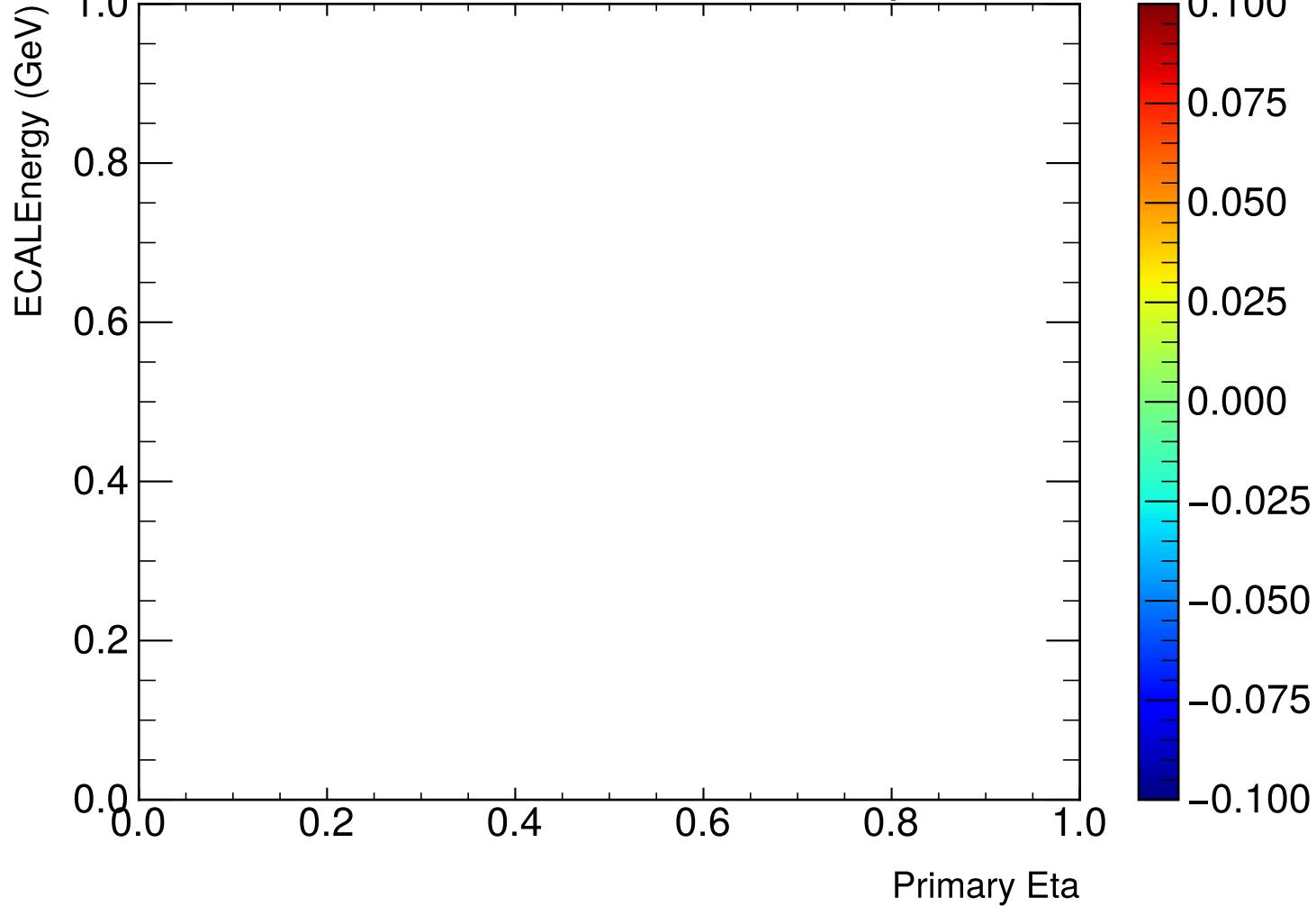
## Pythia8+Geant4



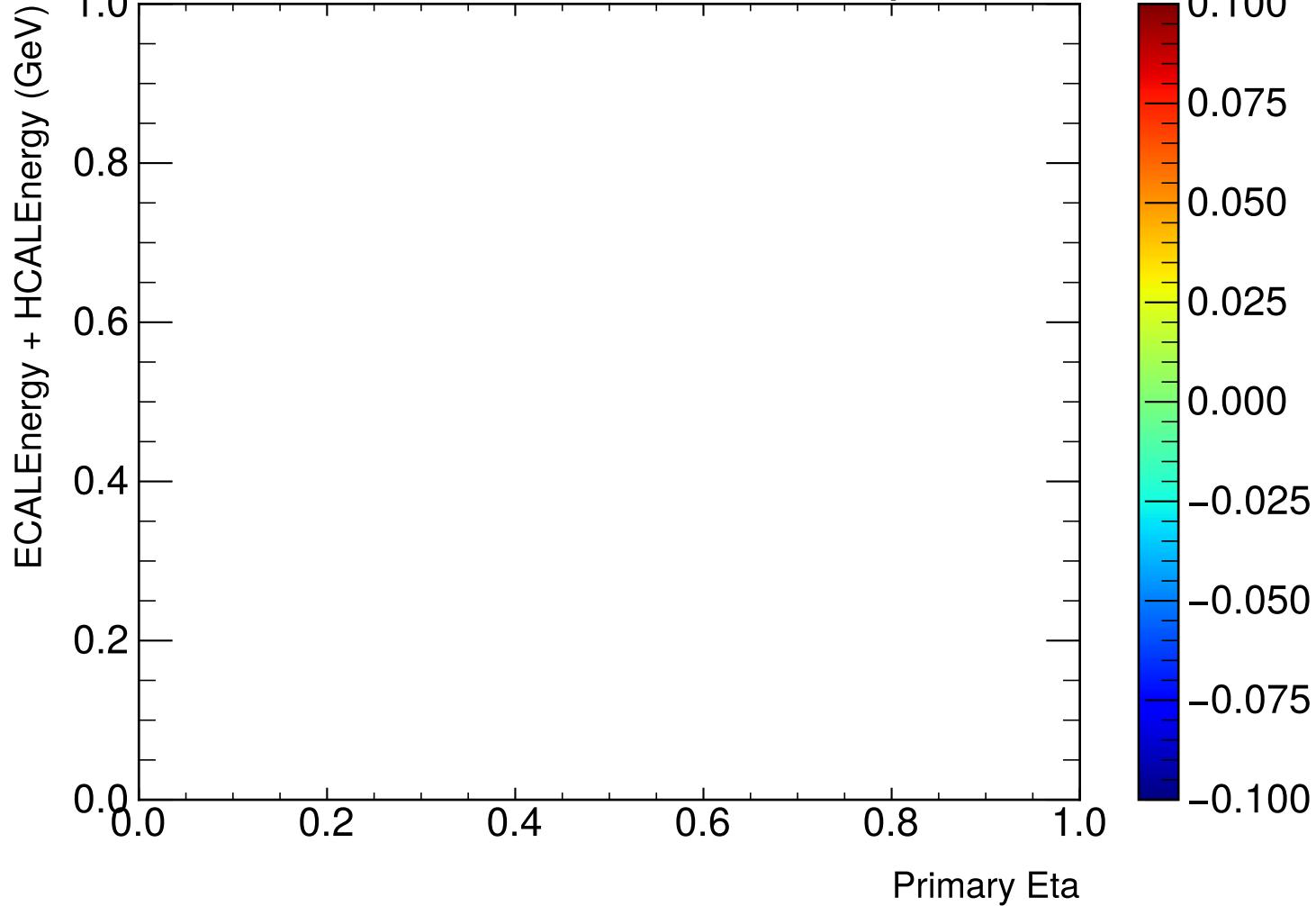
e-@1GeV spanning  $-0.88 < \eta < 0.88$



$e^-$ @1GeV spanning  $-0.88 < \eta < 0.88$

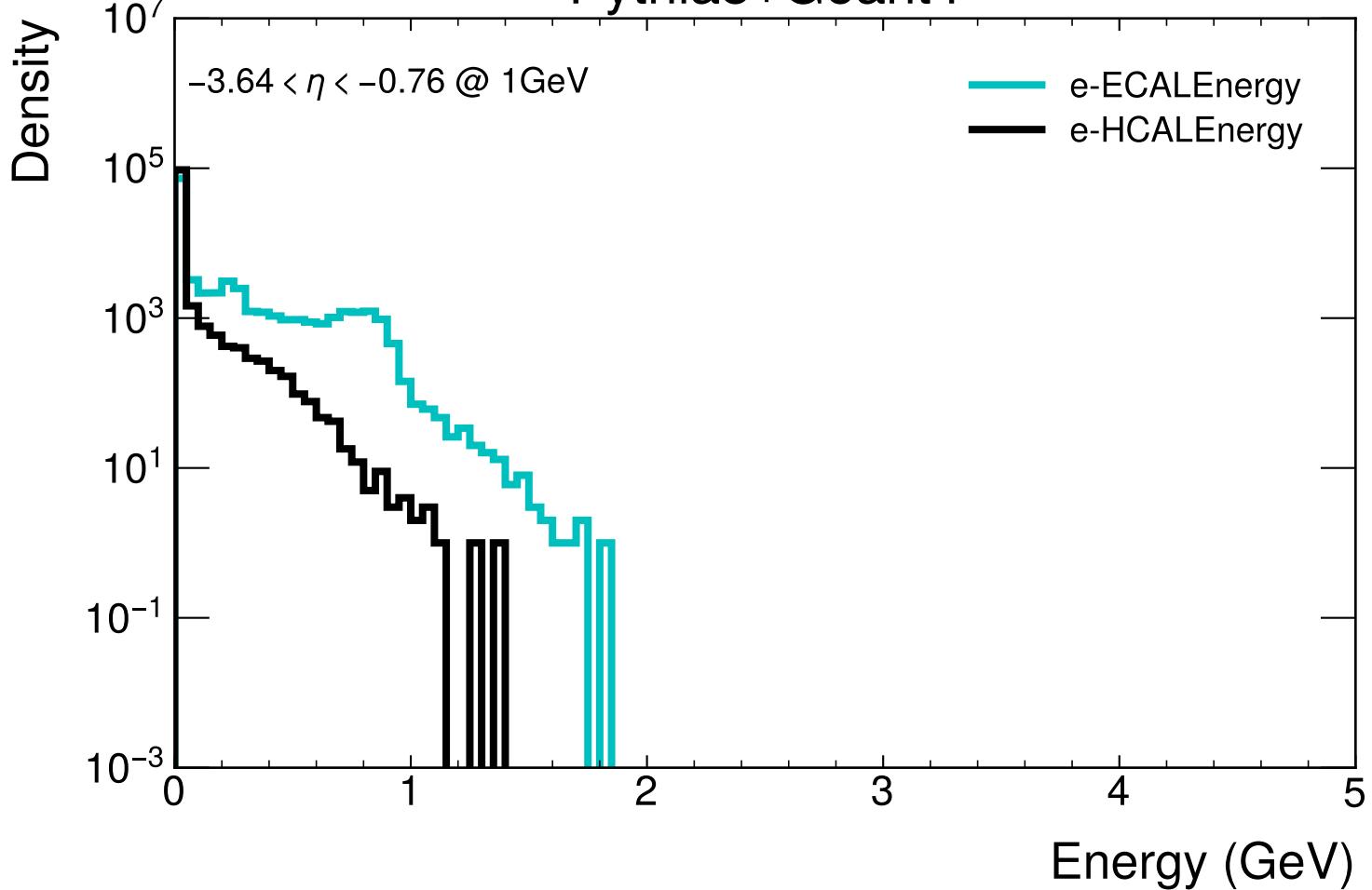


$e^-$ @1GeV spanning  $-0.88 < \eta < 0.88$

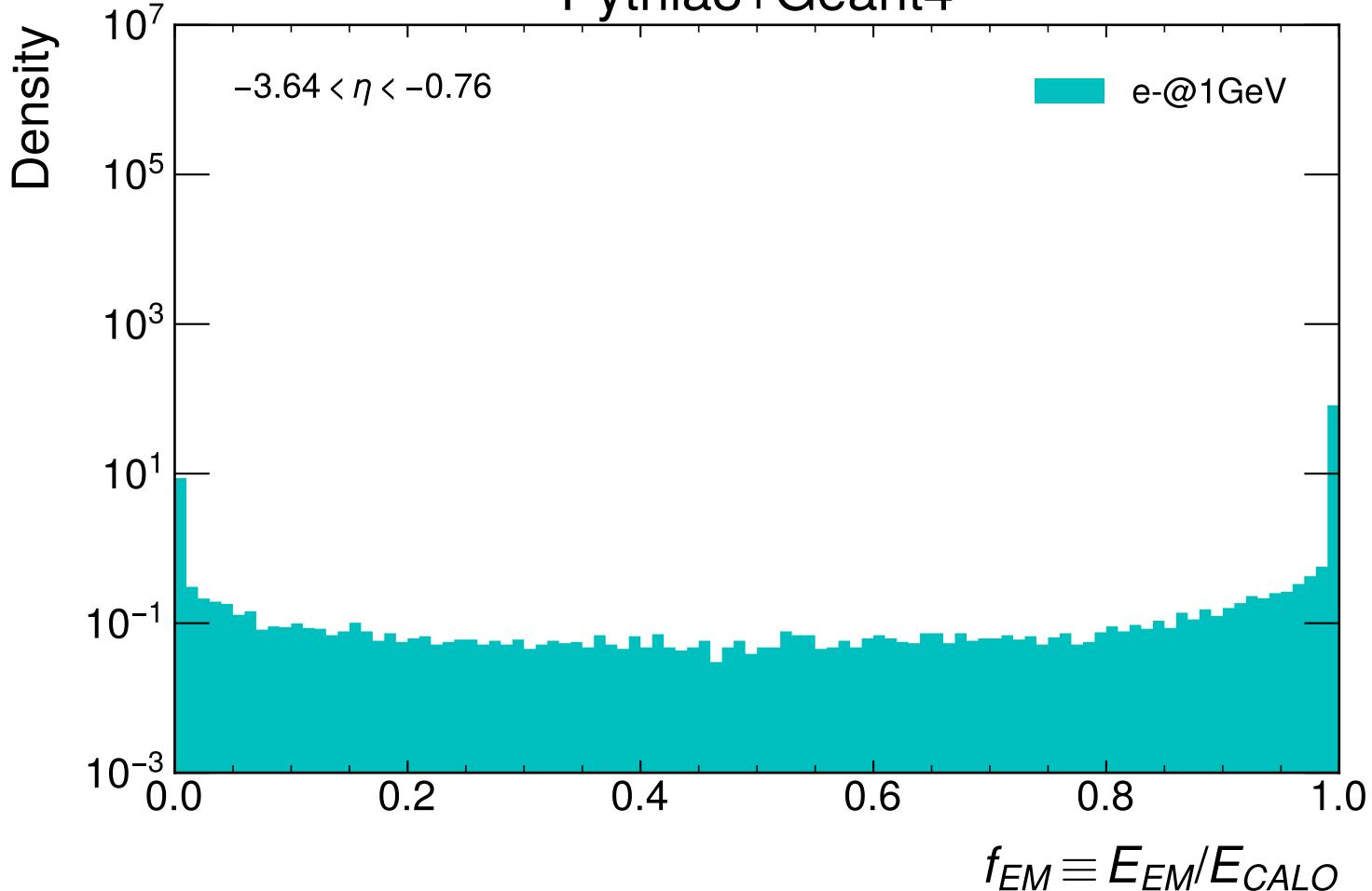


# ATHENA simulation [DD4hep]

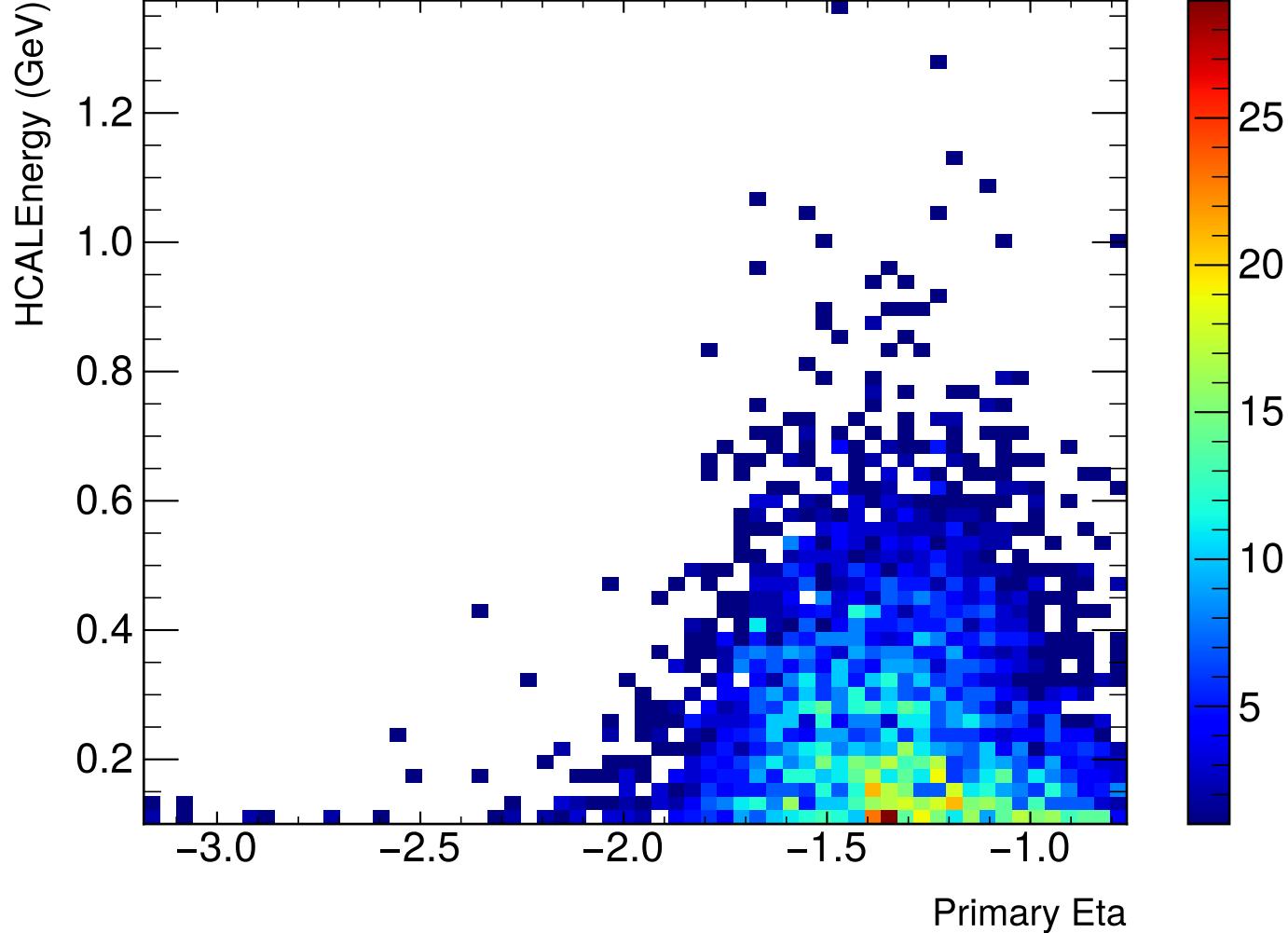
## Pythia8+Geant4



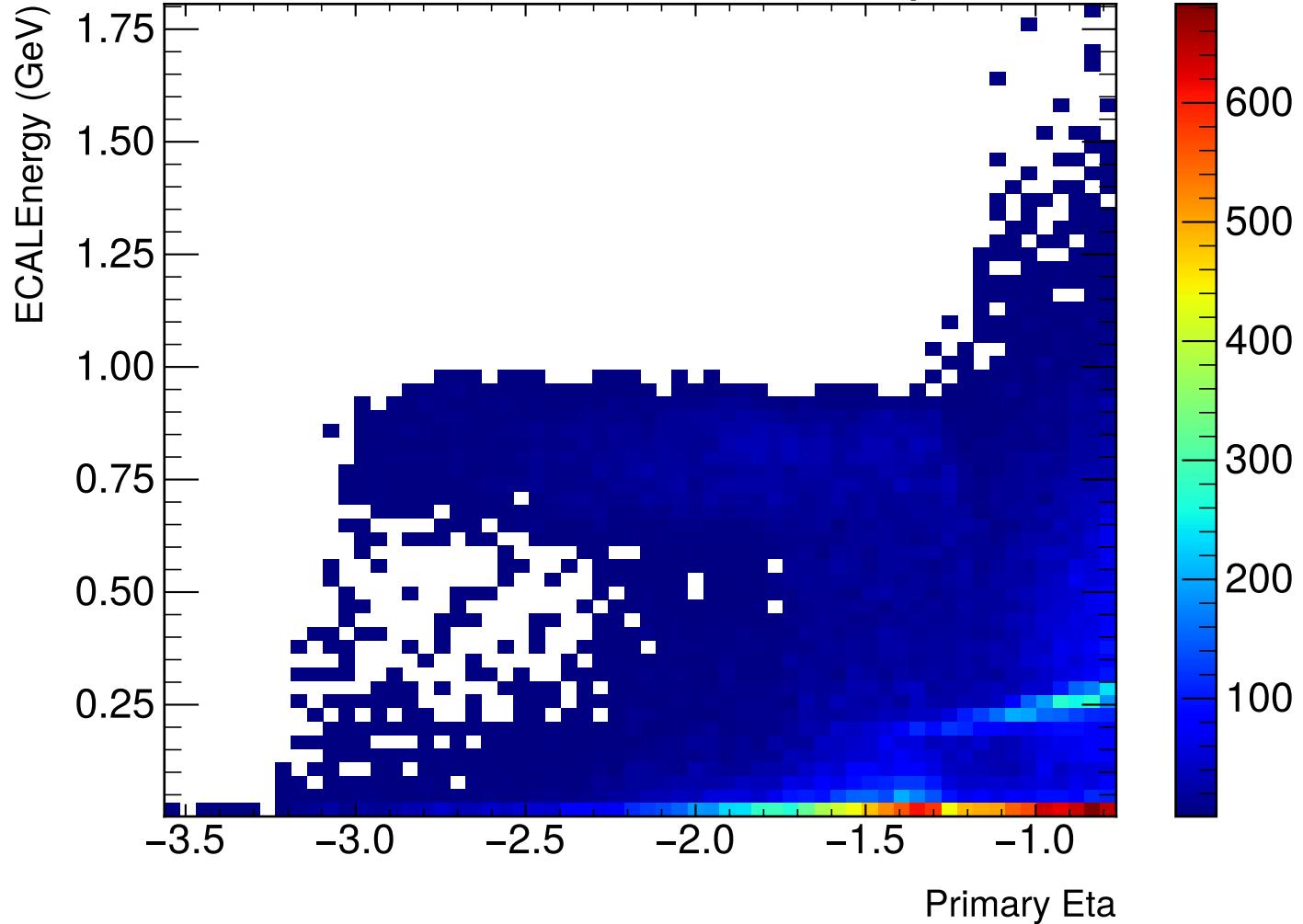
# ATHENA simulation [DD4hep] Pythia8+Geant4



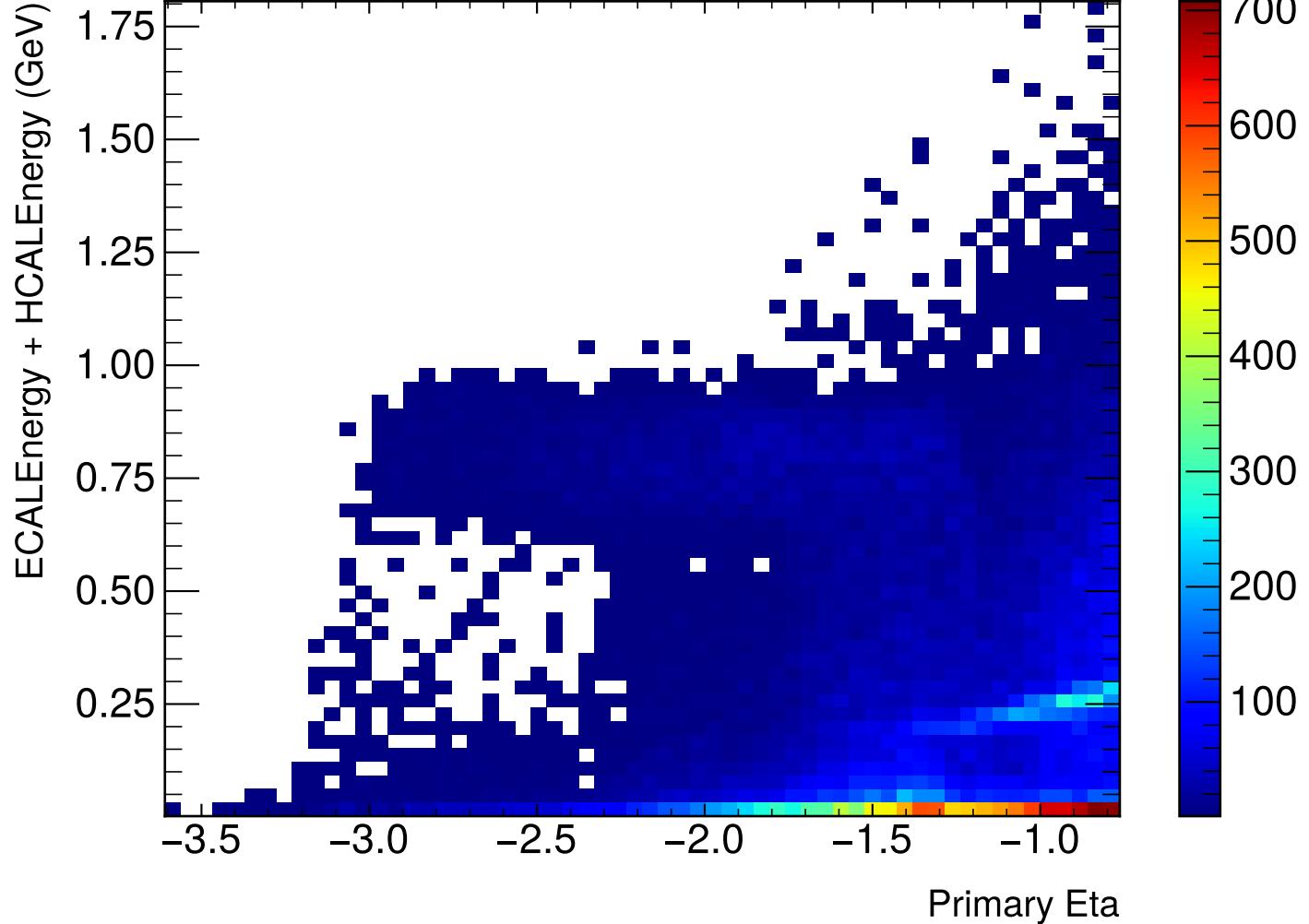
e-@1GeV spanning  $-3.64 < \eta < -0.76$



e-@1GeV spanning  $-3.64 < \eta < -0.76$

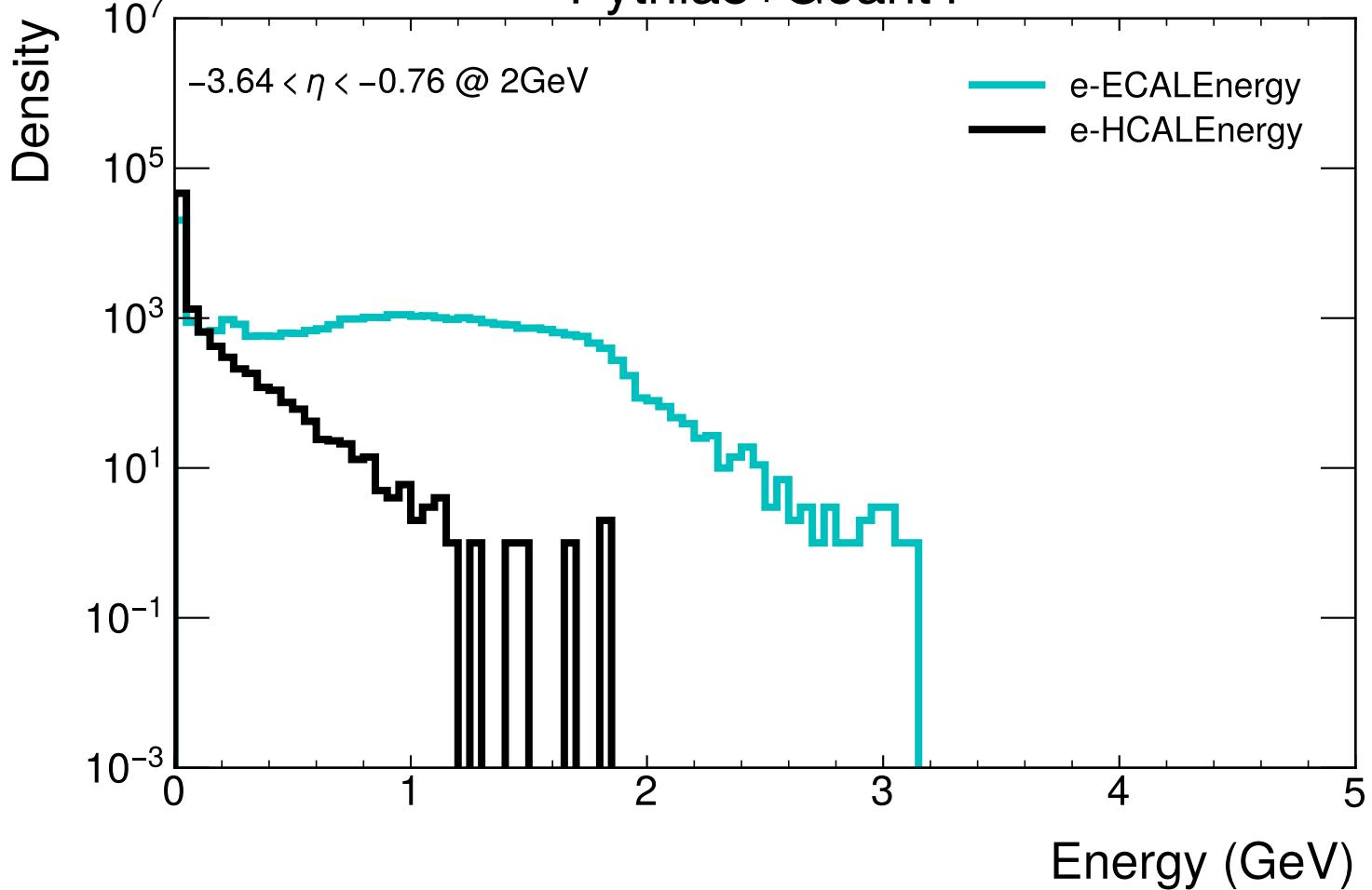


$e^-@1\text{GeV}$  spanning  $-3.64 < \eta < -0.76$

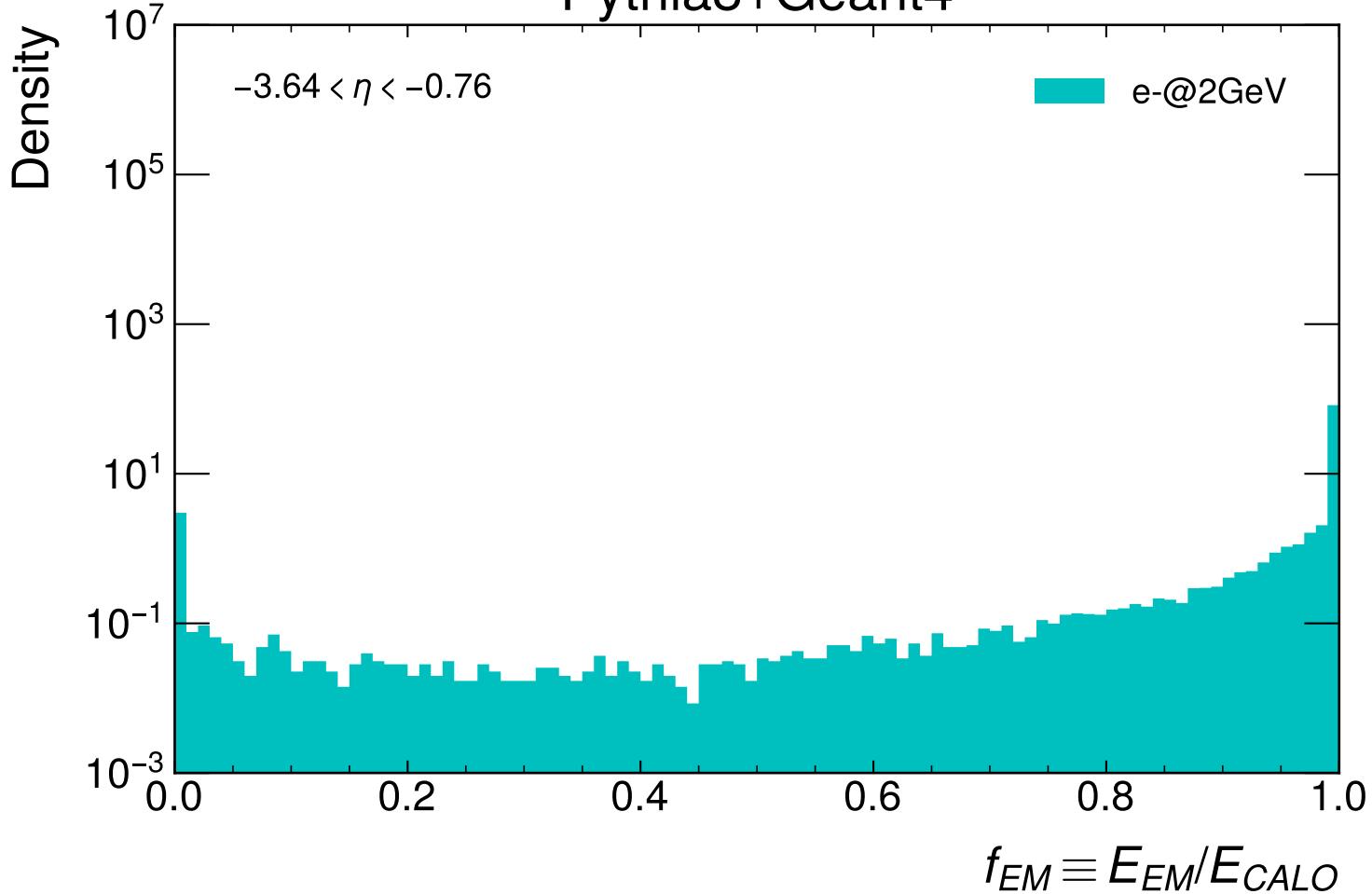


# ATHENA simulation [DD4hep]

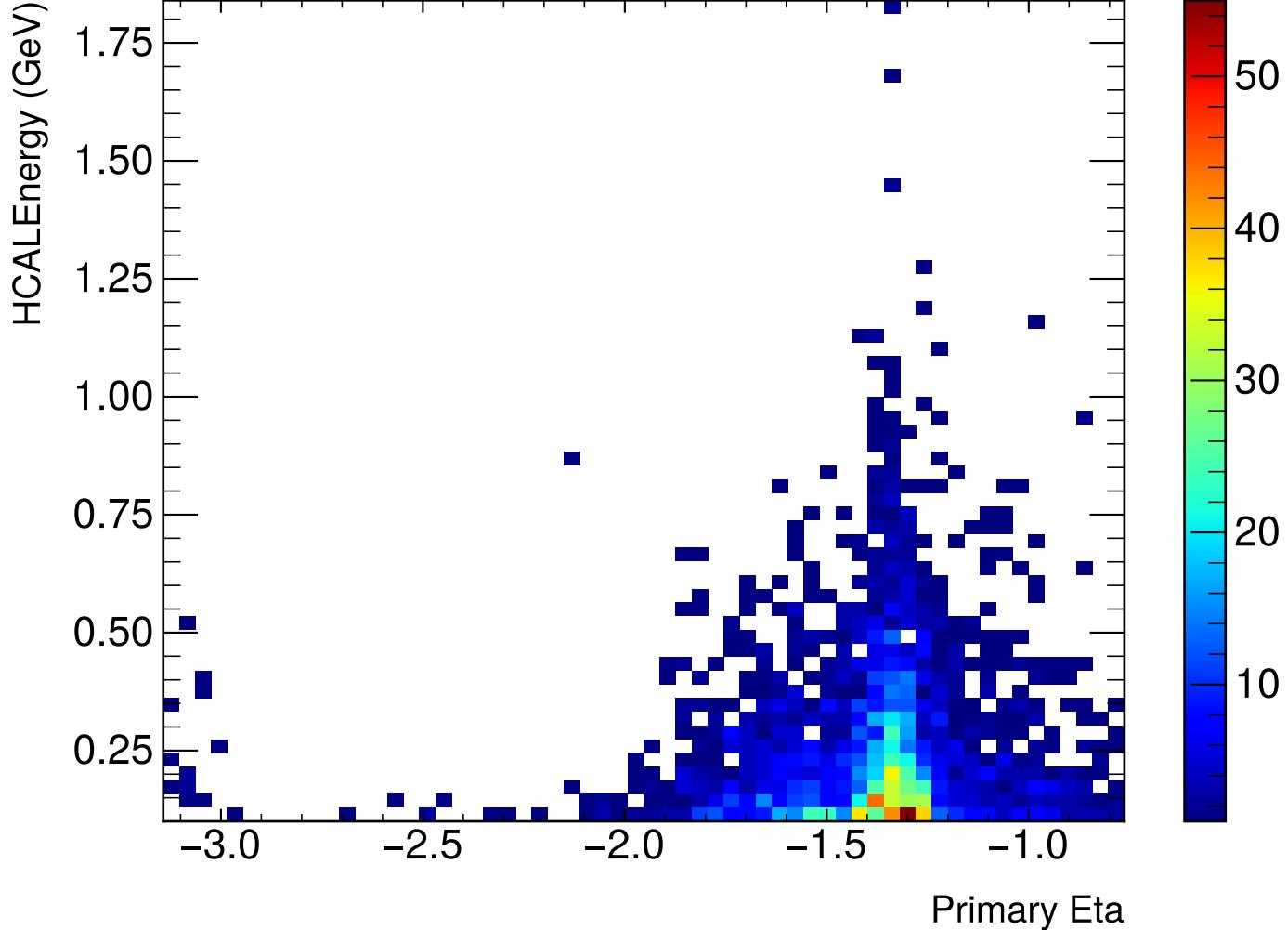
## Pythia8+Geant4



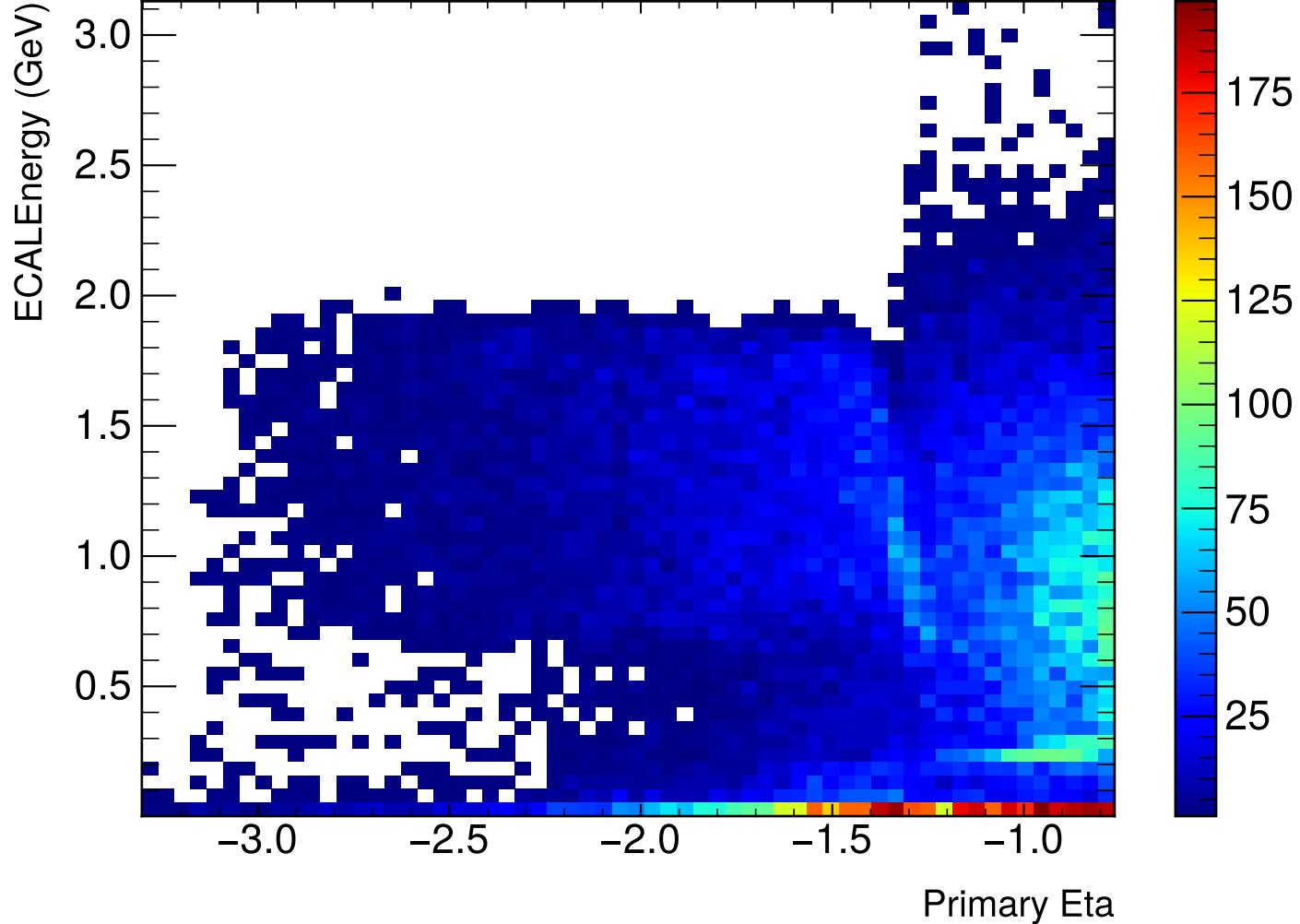
# ATHENA simulation [DD4hep] Pythia8+Geant4



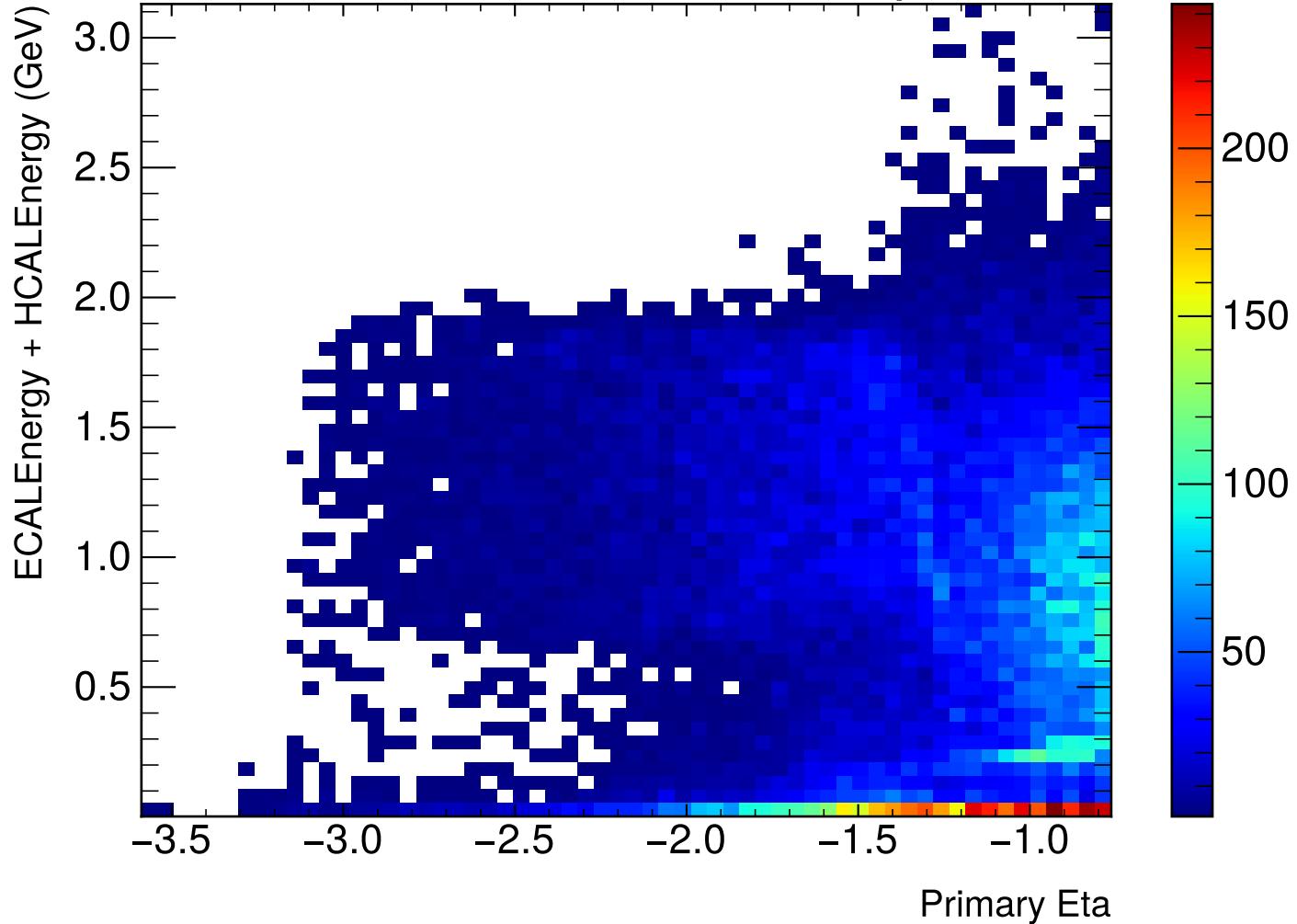
e-@2GeV spanning  $-3.64 < \eta < -0.76$



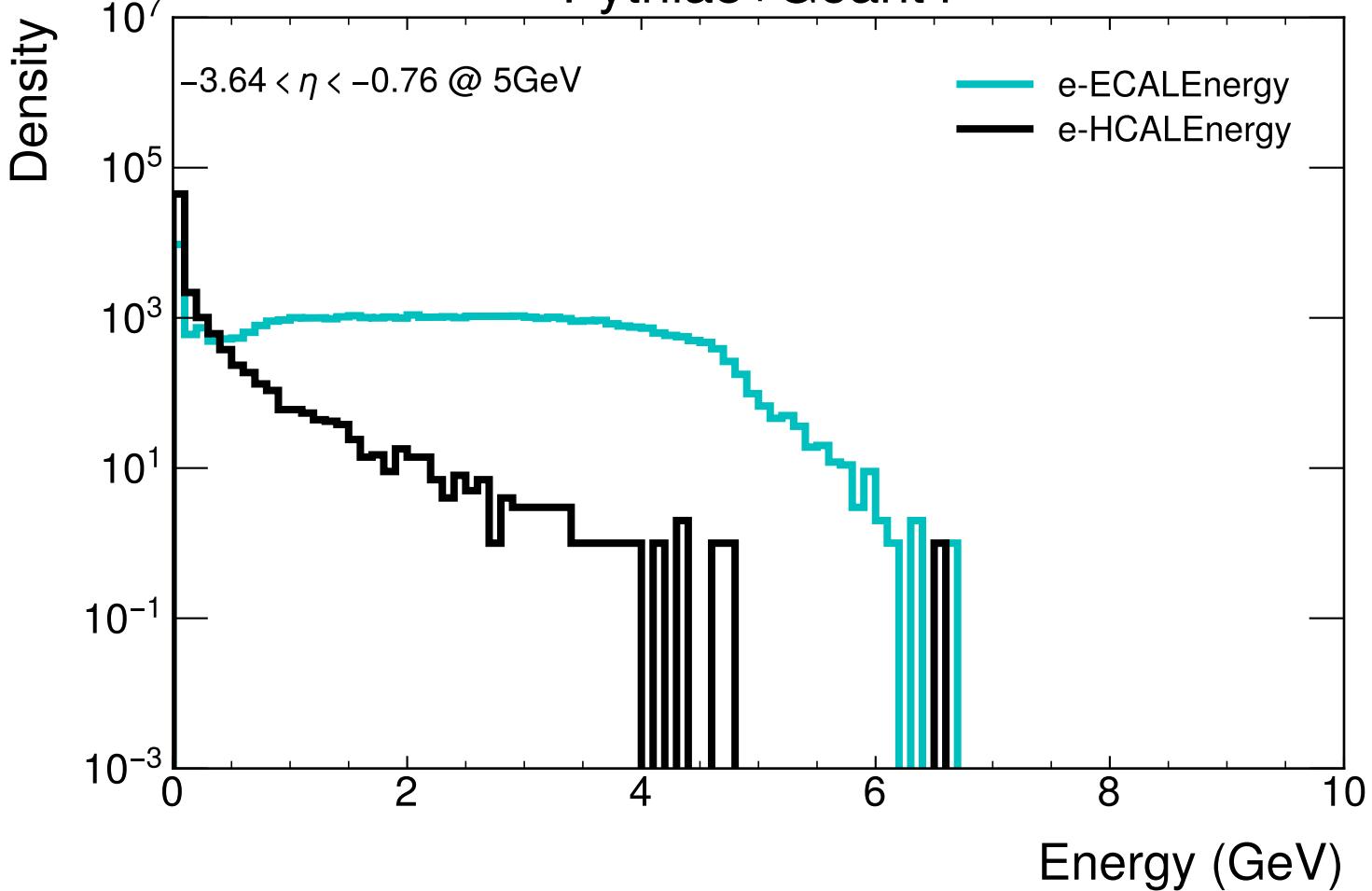
e-@2GeV spanning  $-3.64 < \eta < -0.76$



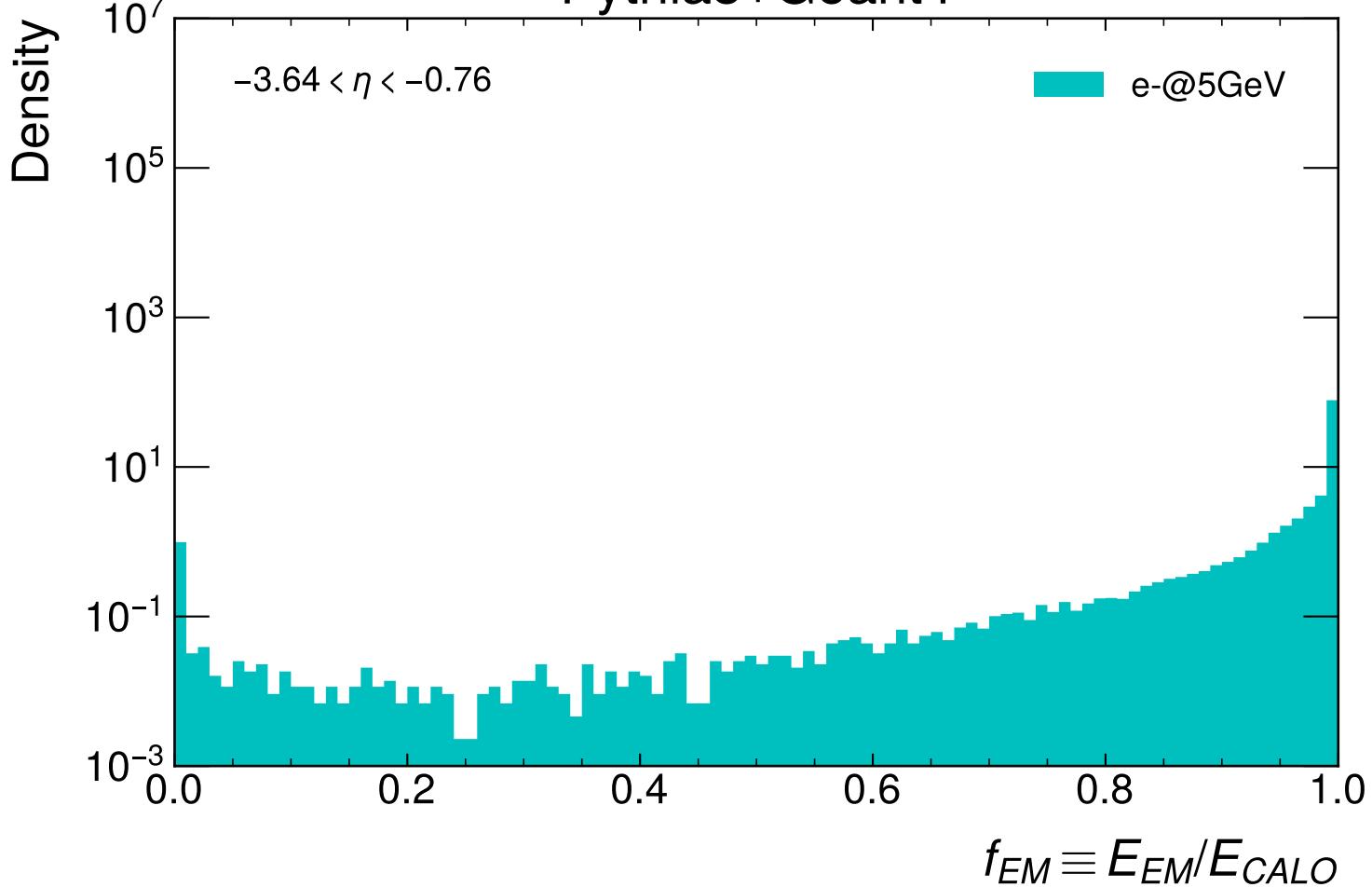
e-@2GeV spanning  $-3.64 < \eta < -0.76$



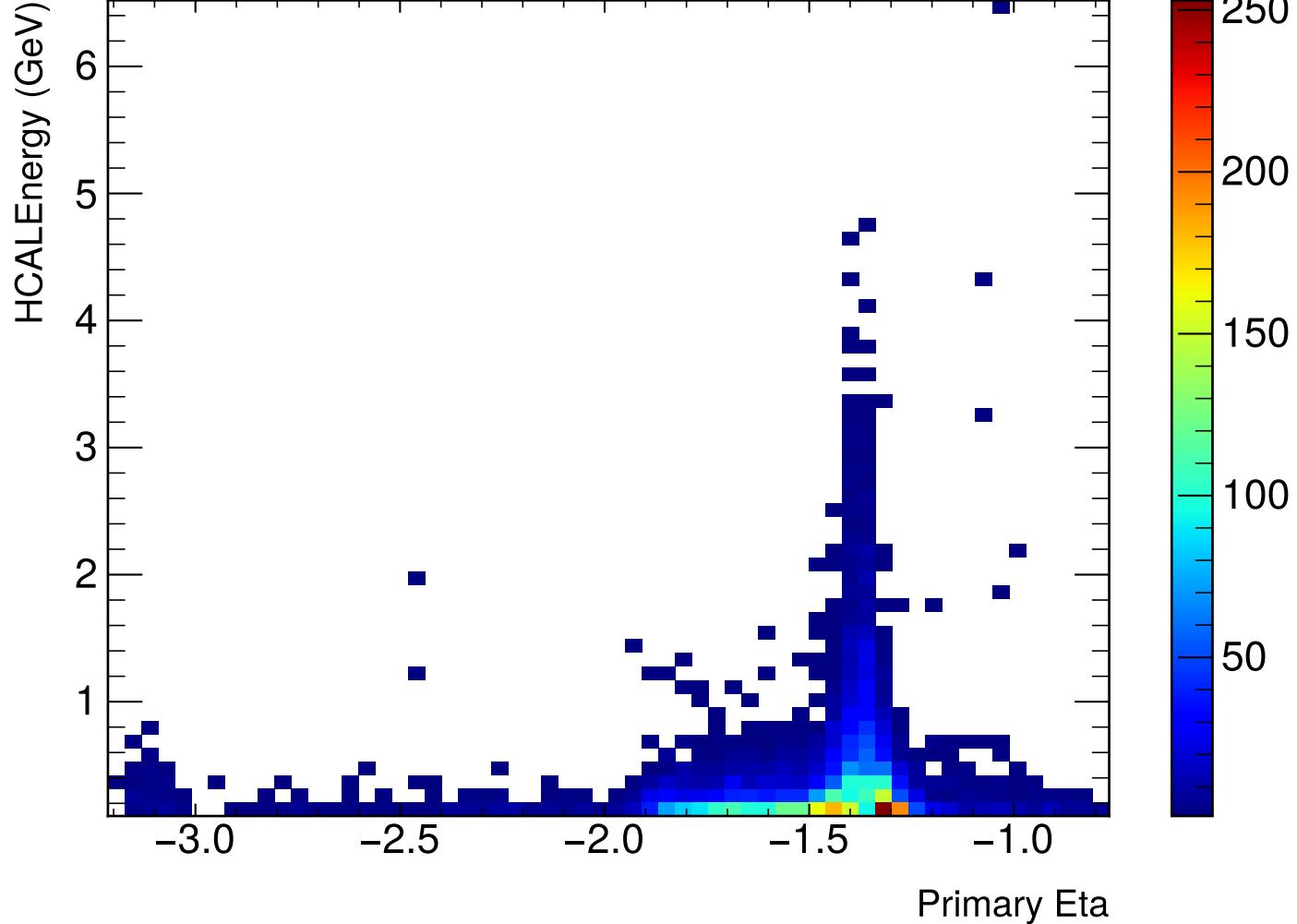
# ATHENA simulation [DD4hep] Pythia8+Geant4



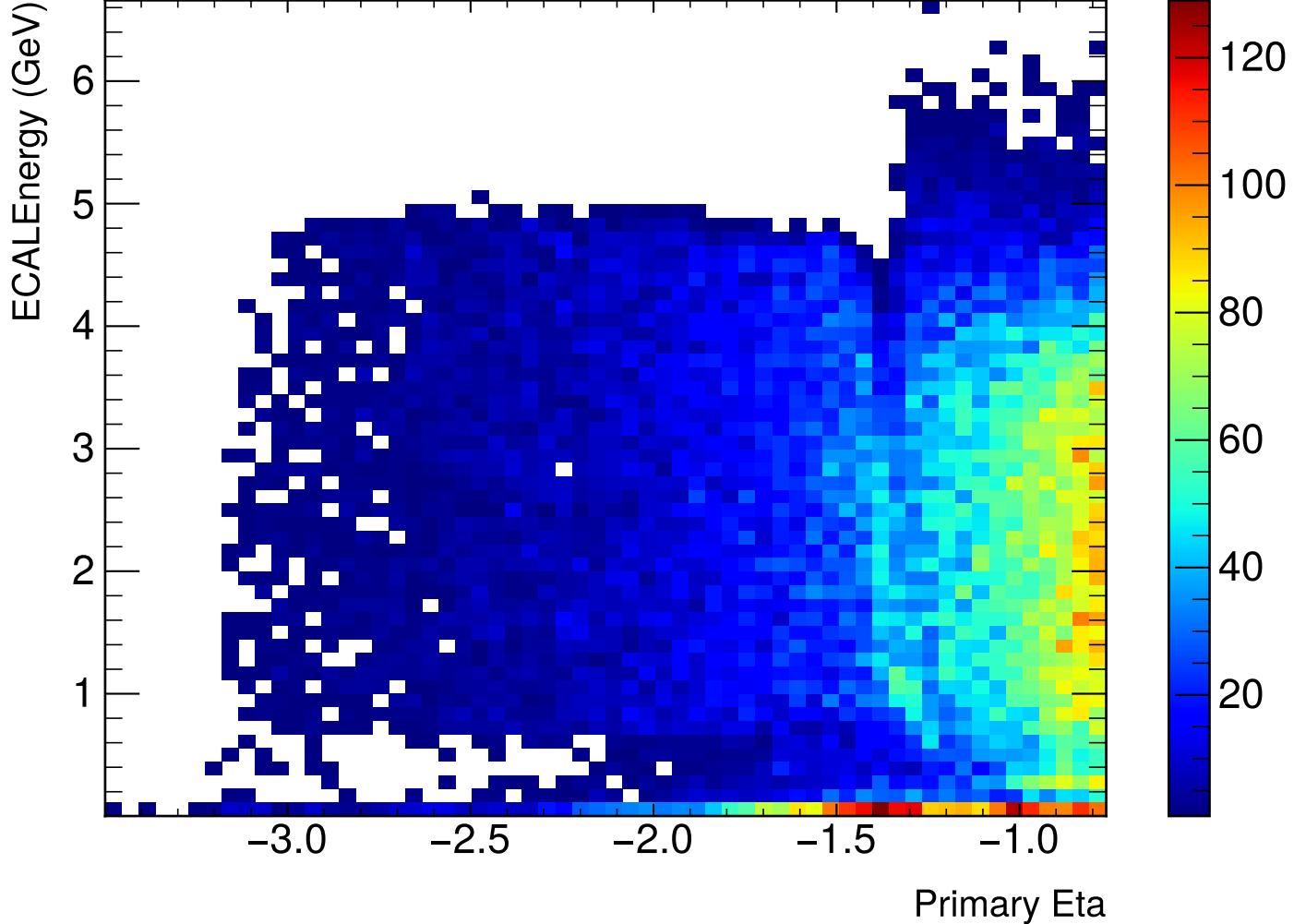
# ATHENA simulation [DD4hep] Pythia8+Geant4



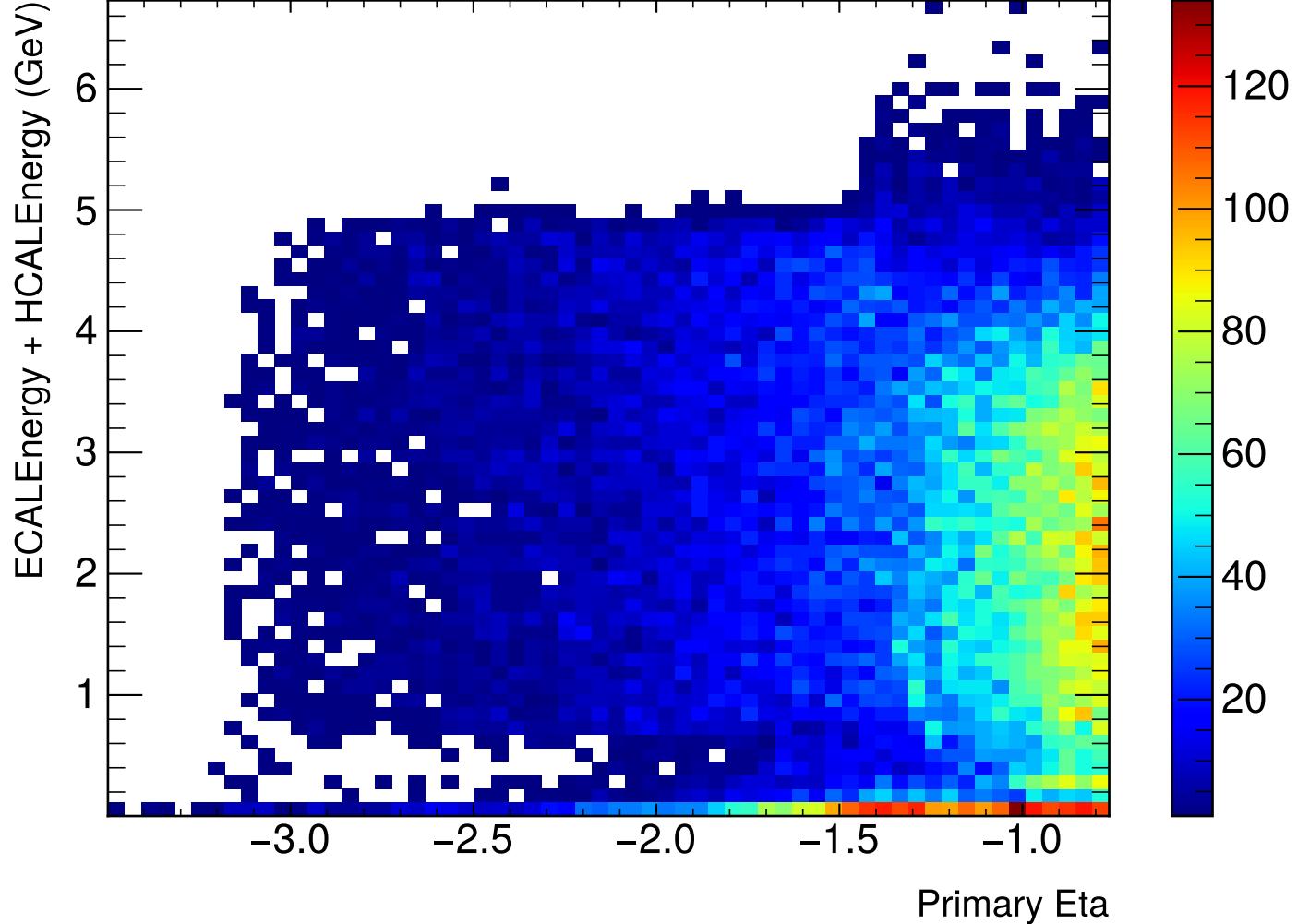
e-@5GeV spanning  $-3.64 < \eta < -0.76$



e-@5GeV spanning  $-3.64 < \eta < -0.76$

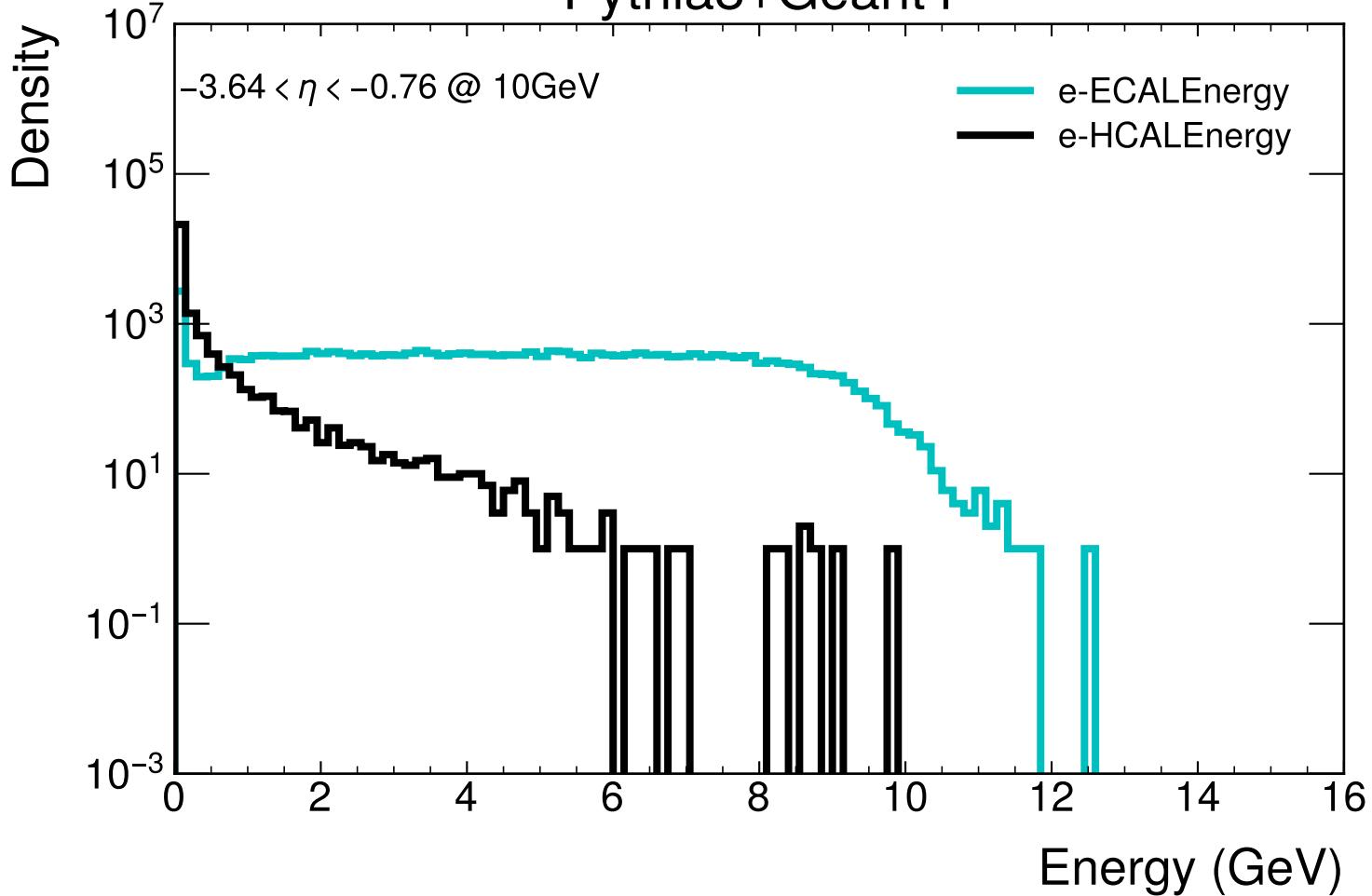


e-@5GeV spanning  $-3.64 < \eta < -0.76$

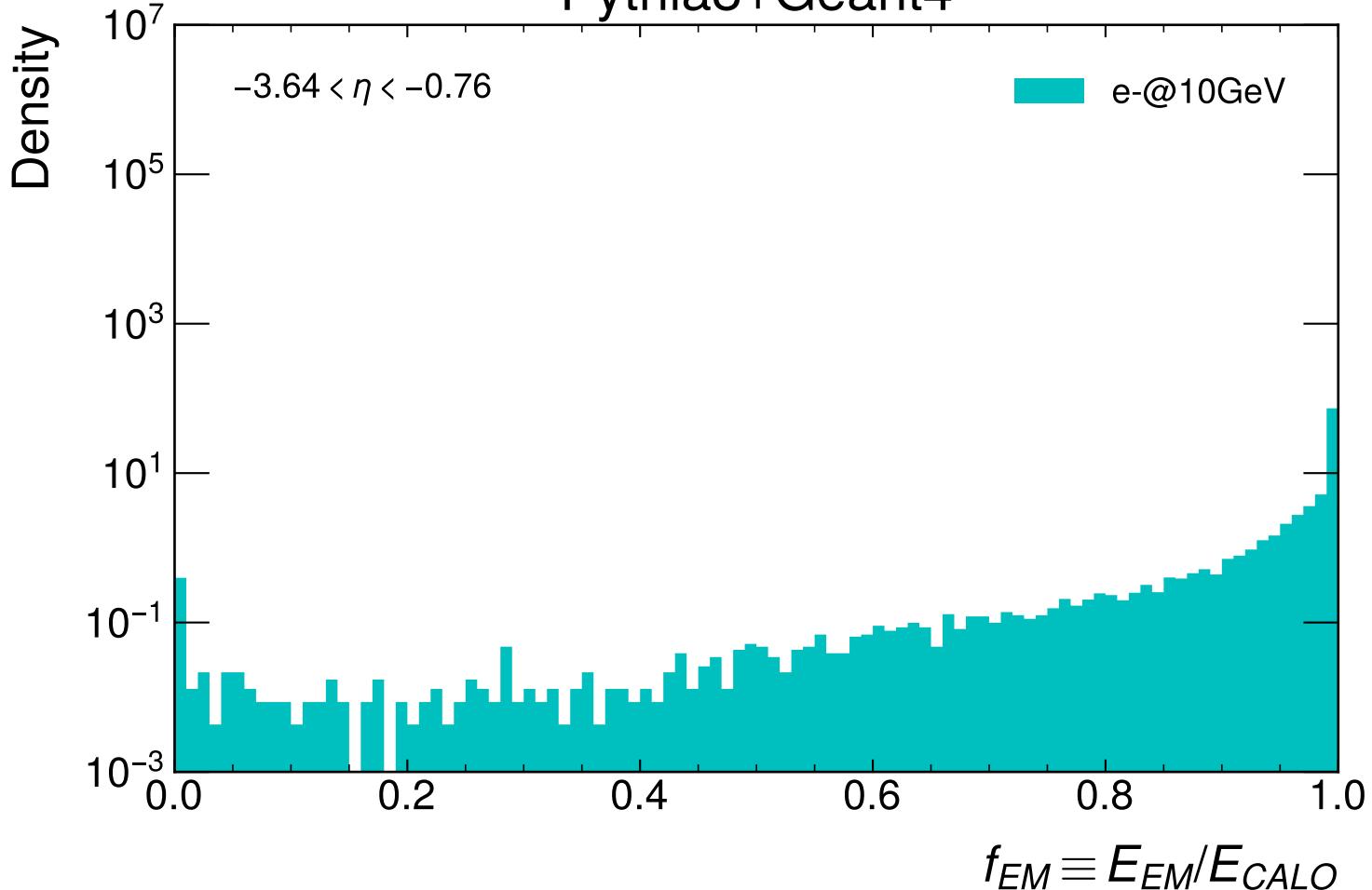


# ATHENA simulation [DD4hep]

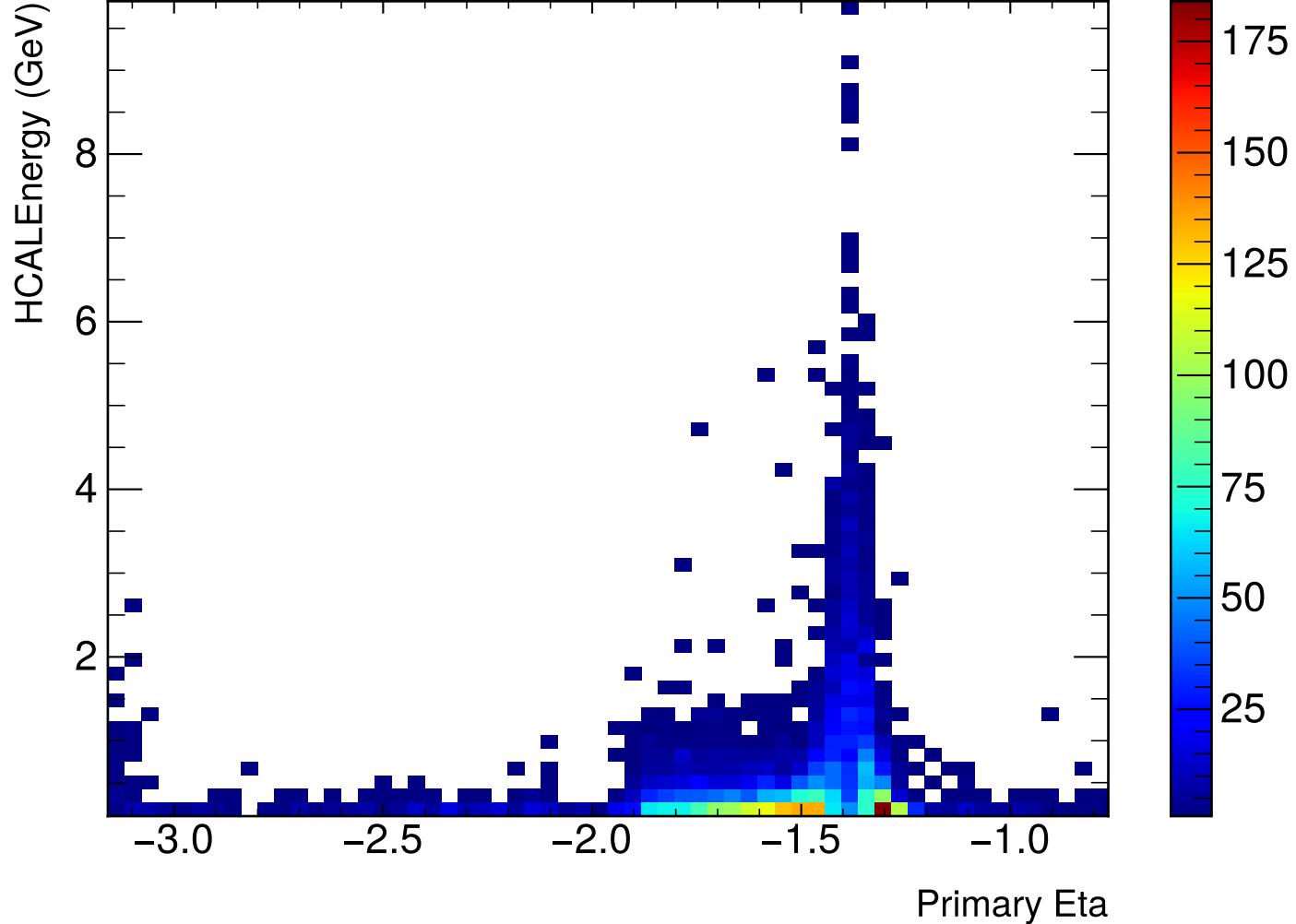
## Pythia8+Geant4



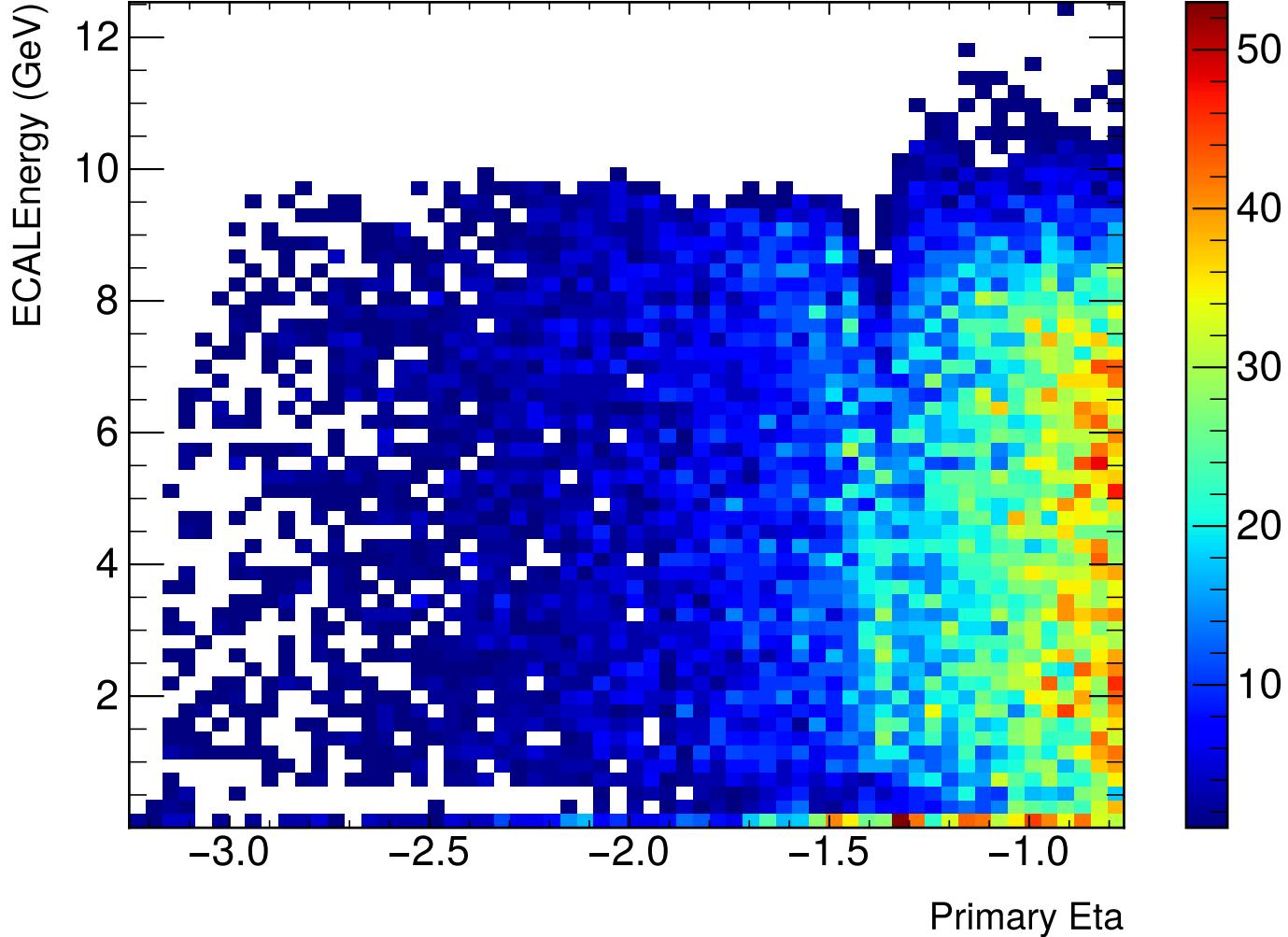
# ATHENA simulation [DD4hep] Pythia8+Geant4



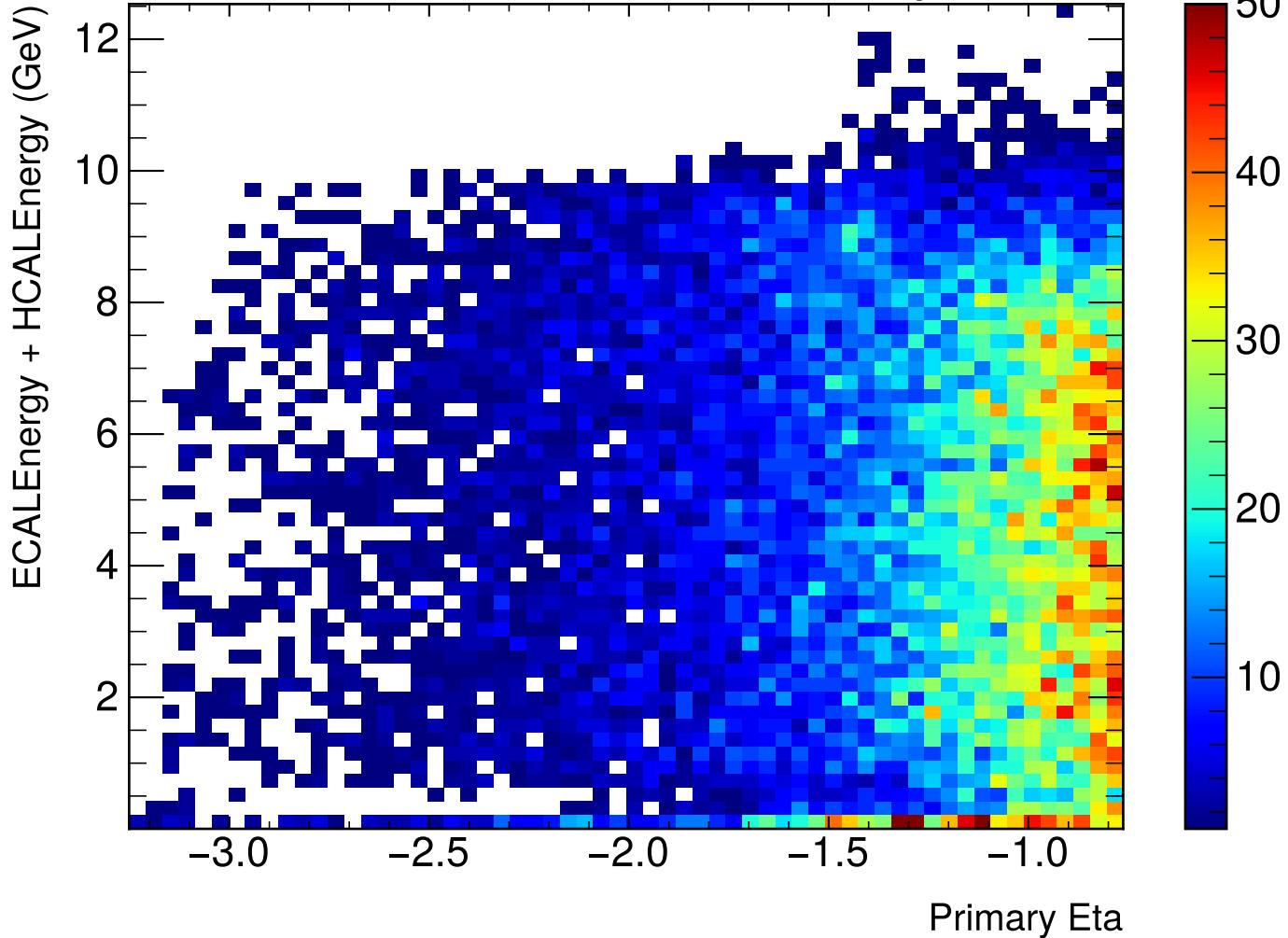
e-@10GeV spanning  $-3.64 < \eta < -0.76$



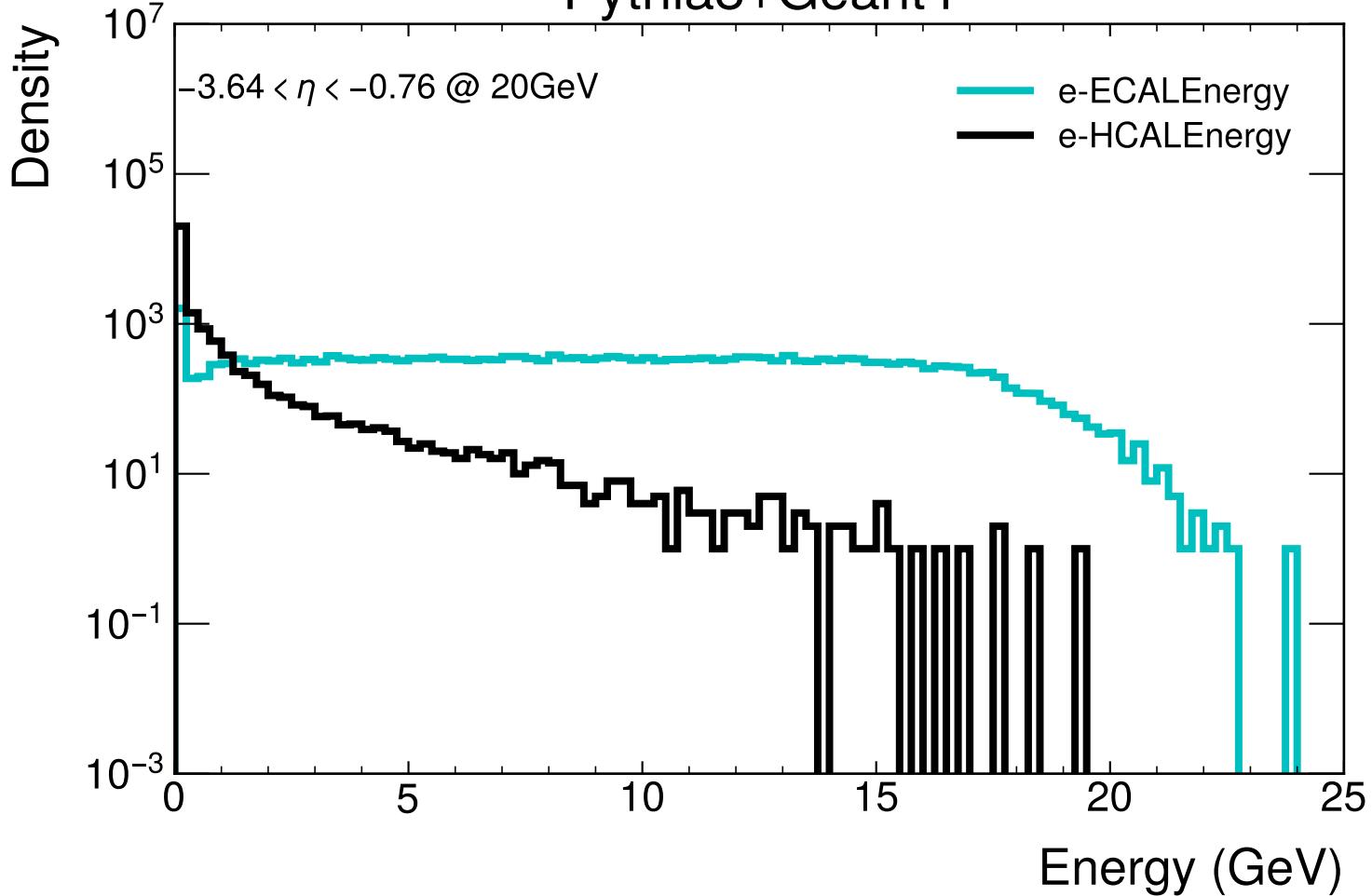
e-@10GeV spanning  $-3.64 < \eta < -0.76$



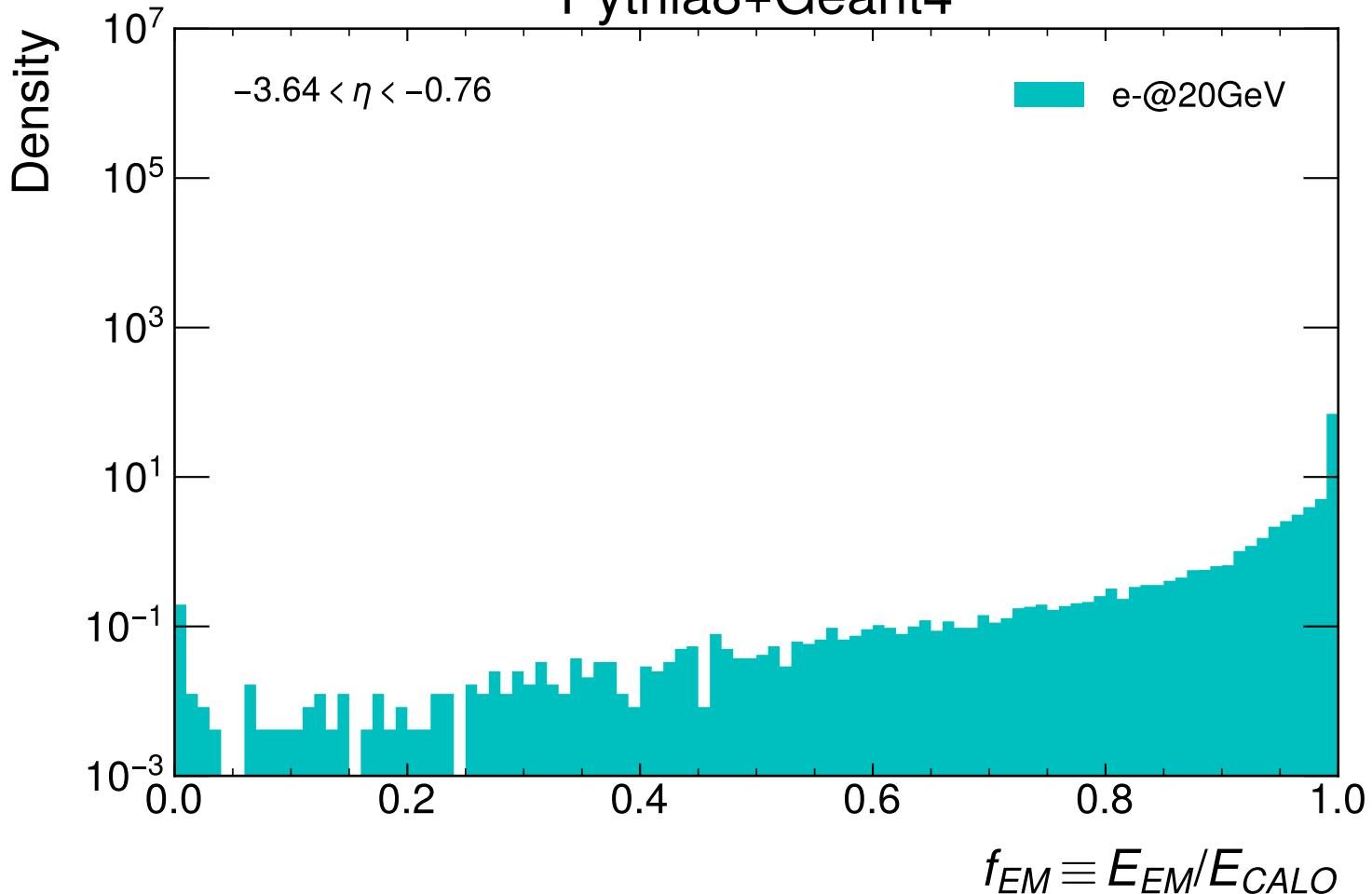
e-@10GeV spanning  $-3.64 < \eta < -0.76$



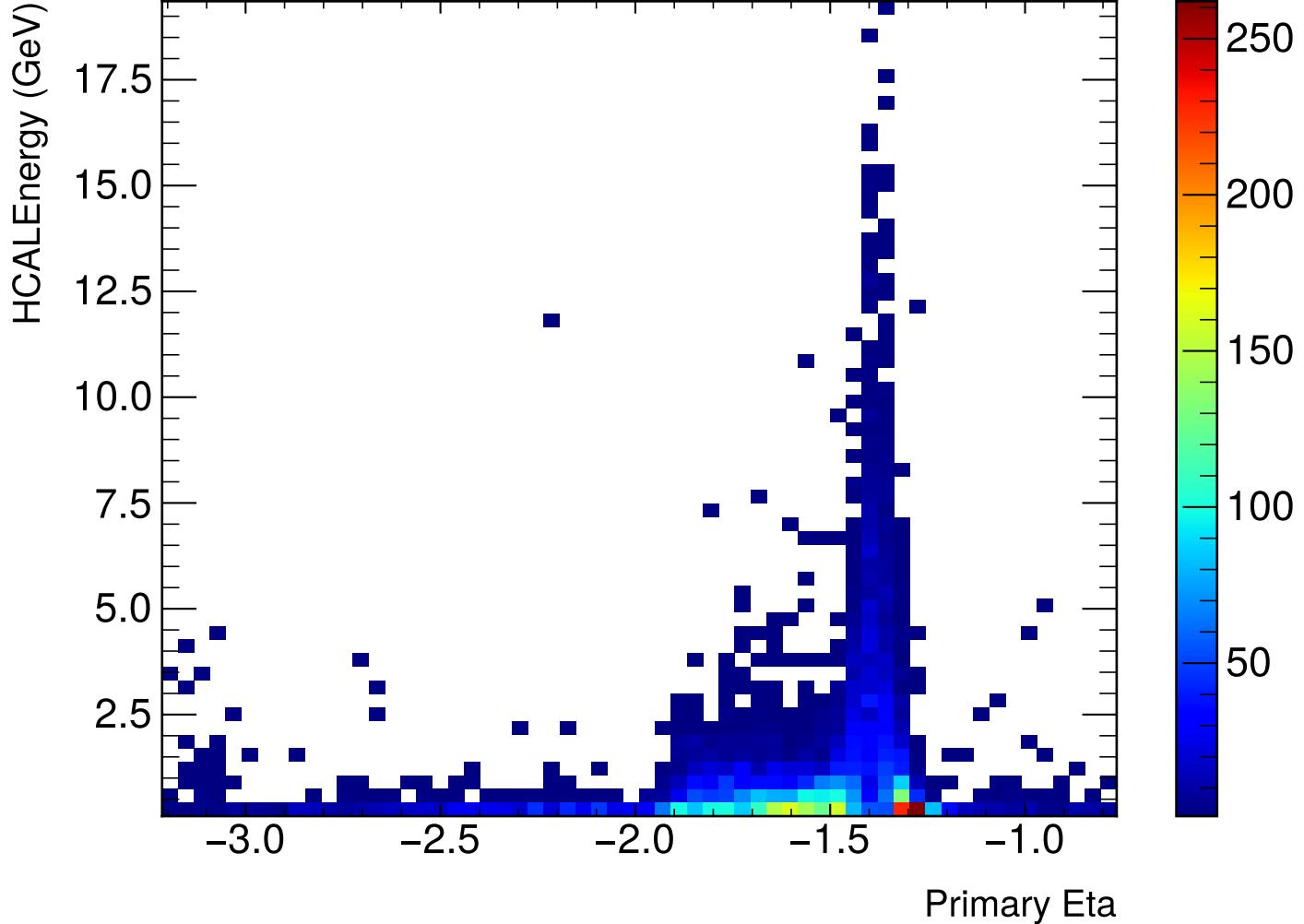
# ATHENA simulation [DD4hep] Pythia8+Geant4



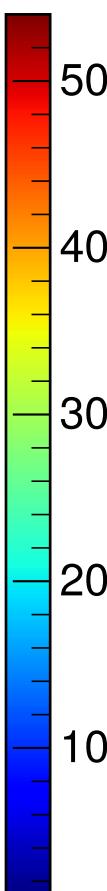
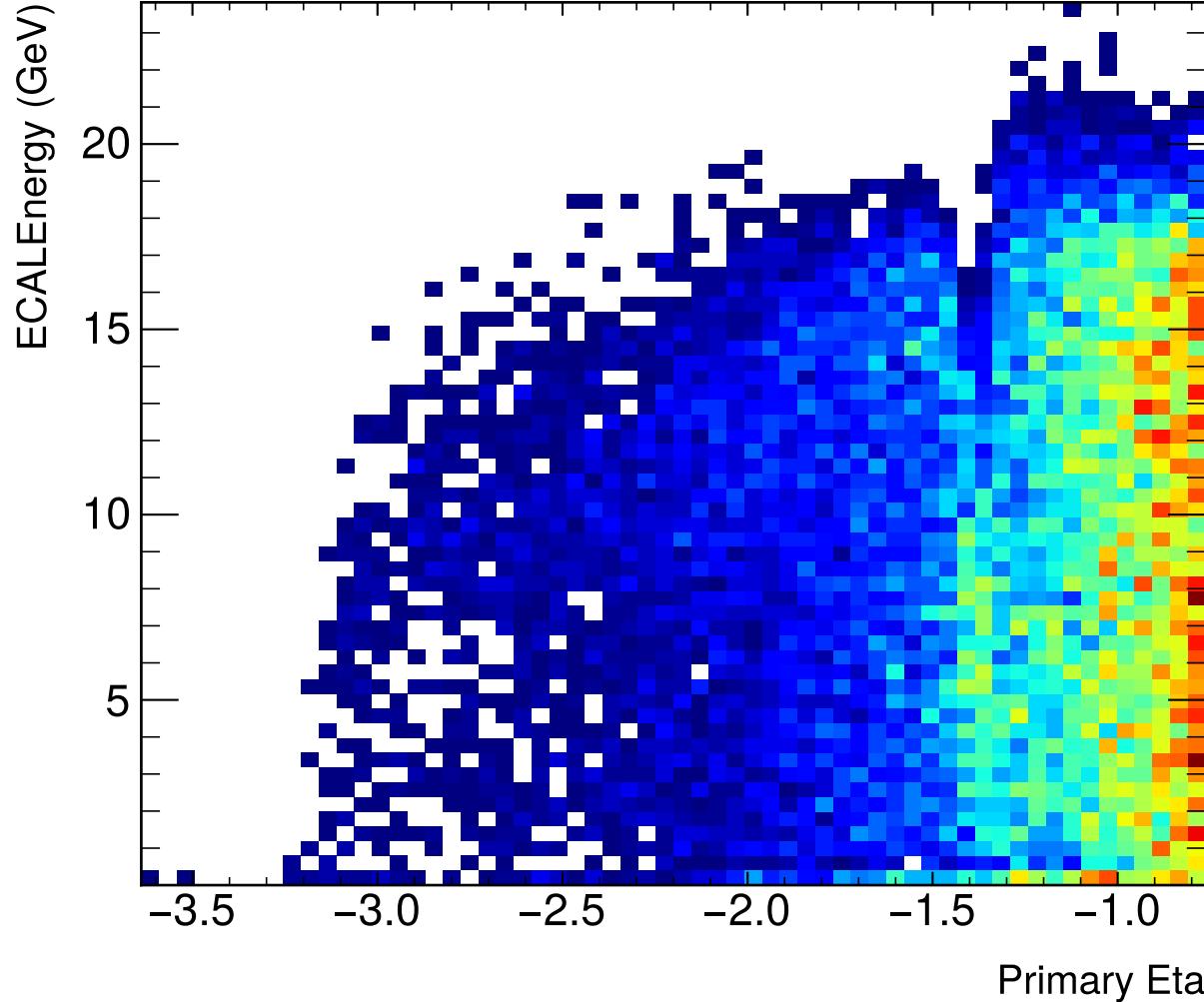
# ATHENA simulation [DD4hep] Pythia8+Geant4



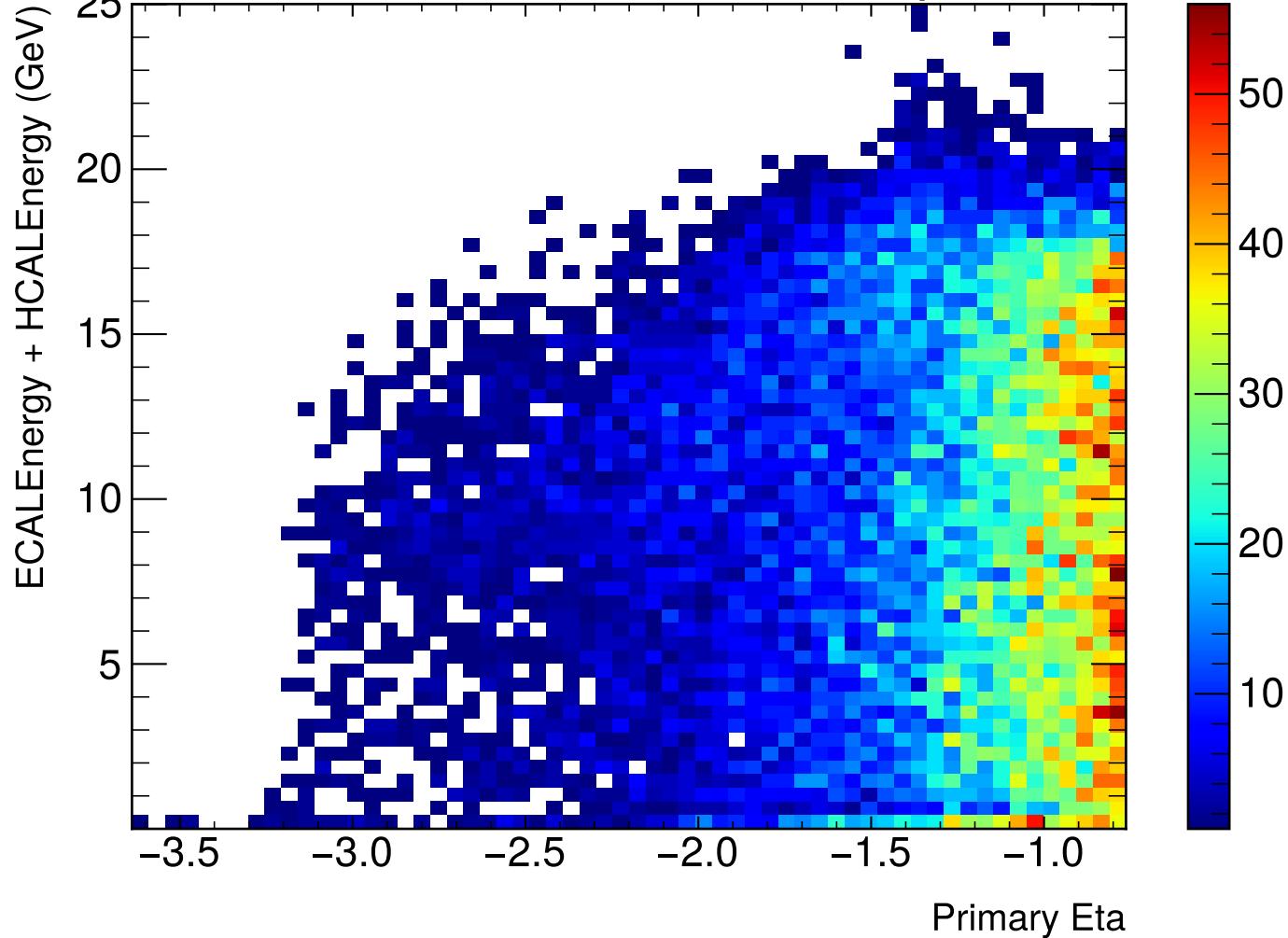
e-@20GeV spanning  $-3.64 < \eta < -0.76$



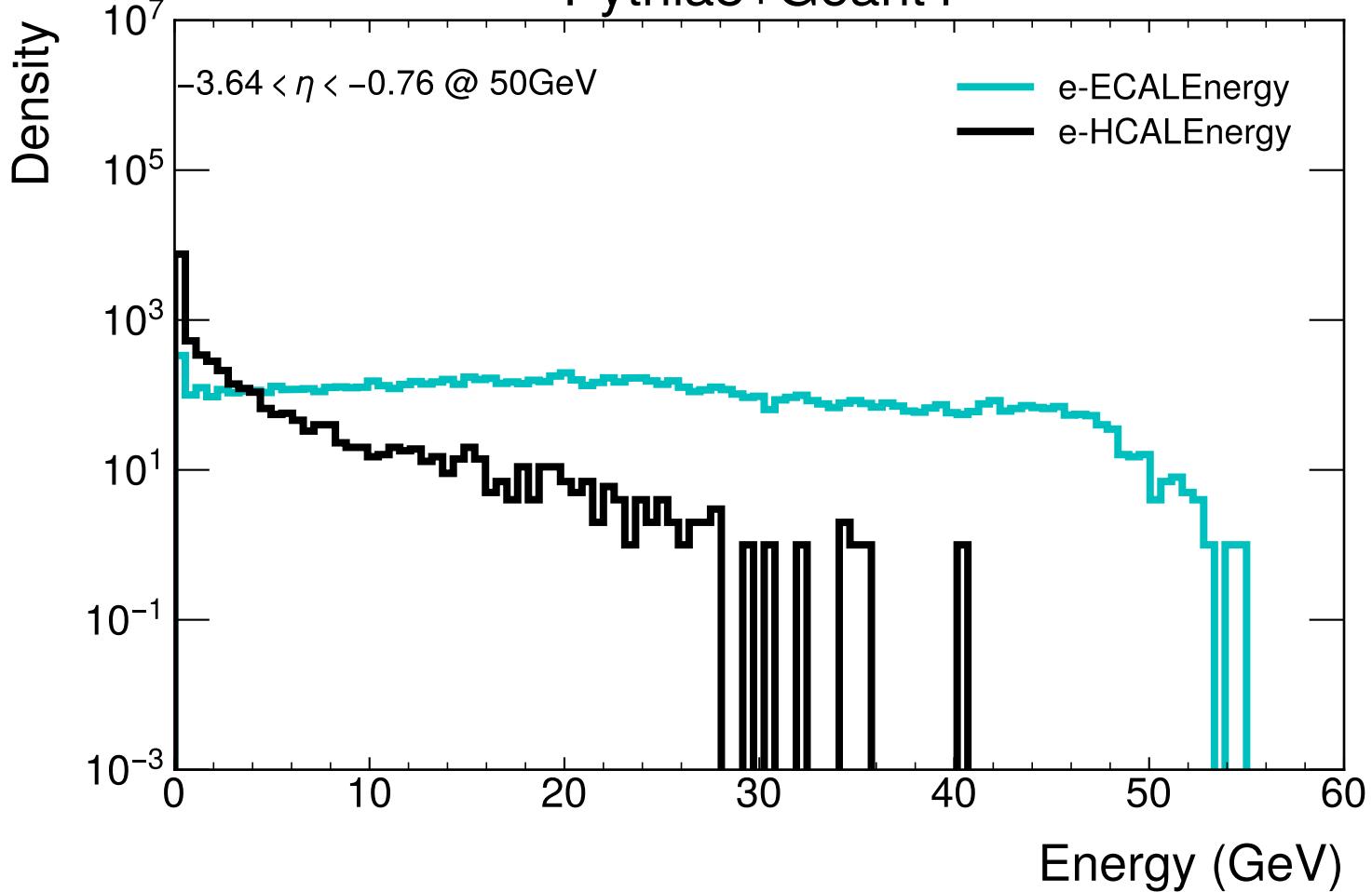
e-@20GeV spanning  $-3.64 < \eta < -0.76$



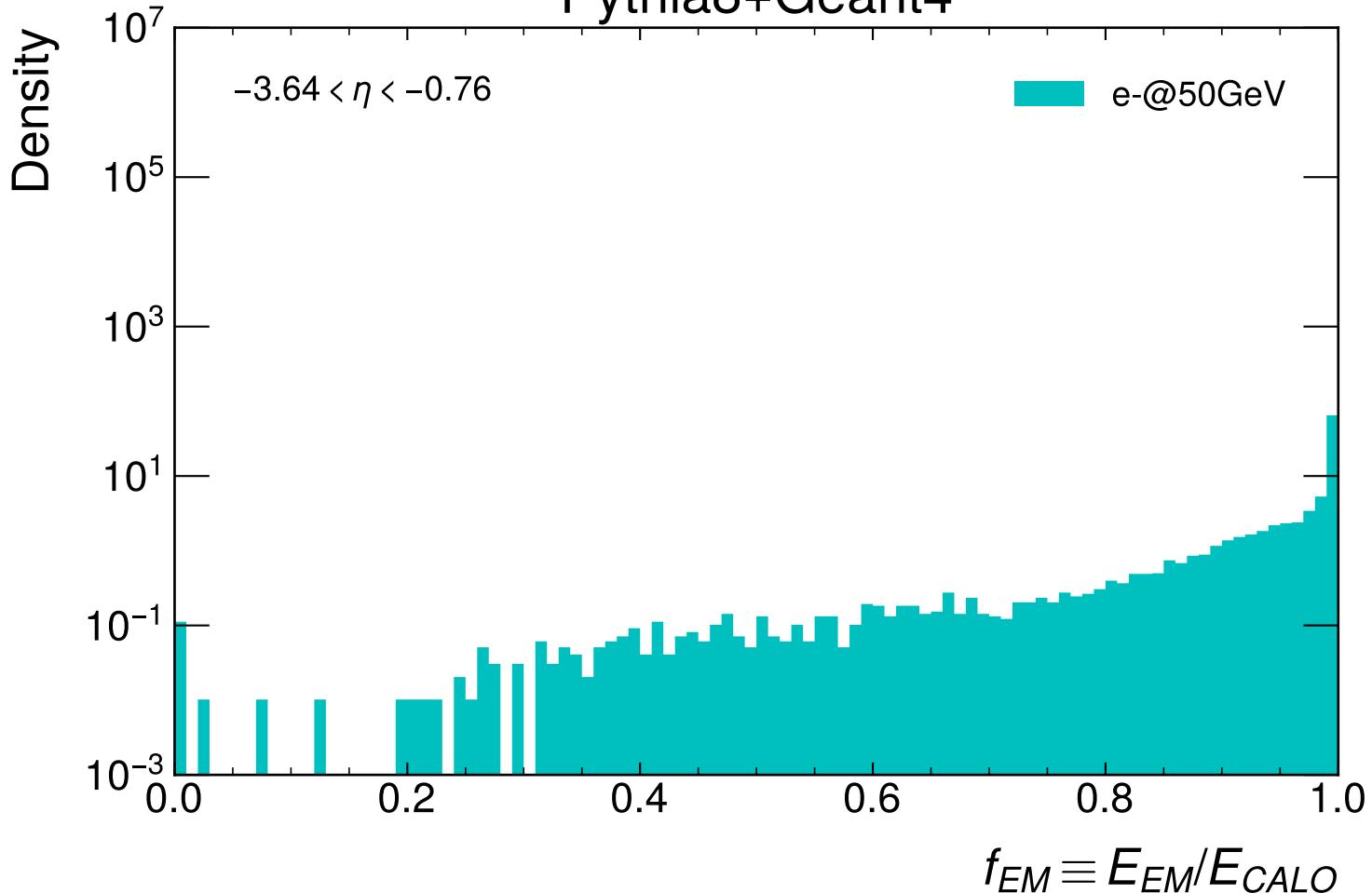
e-@20GeV spanning  $-3.64 < \eta < -0.76$



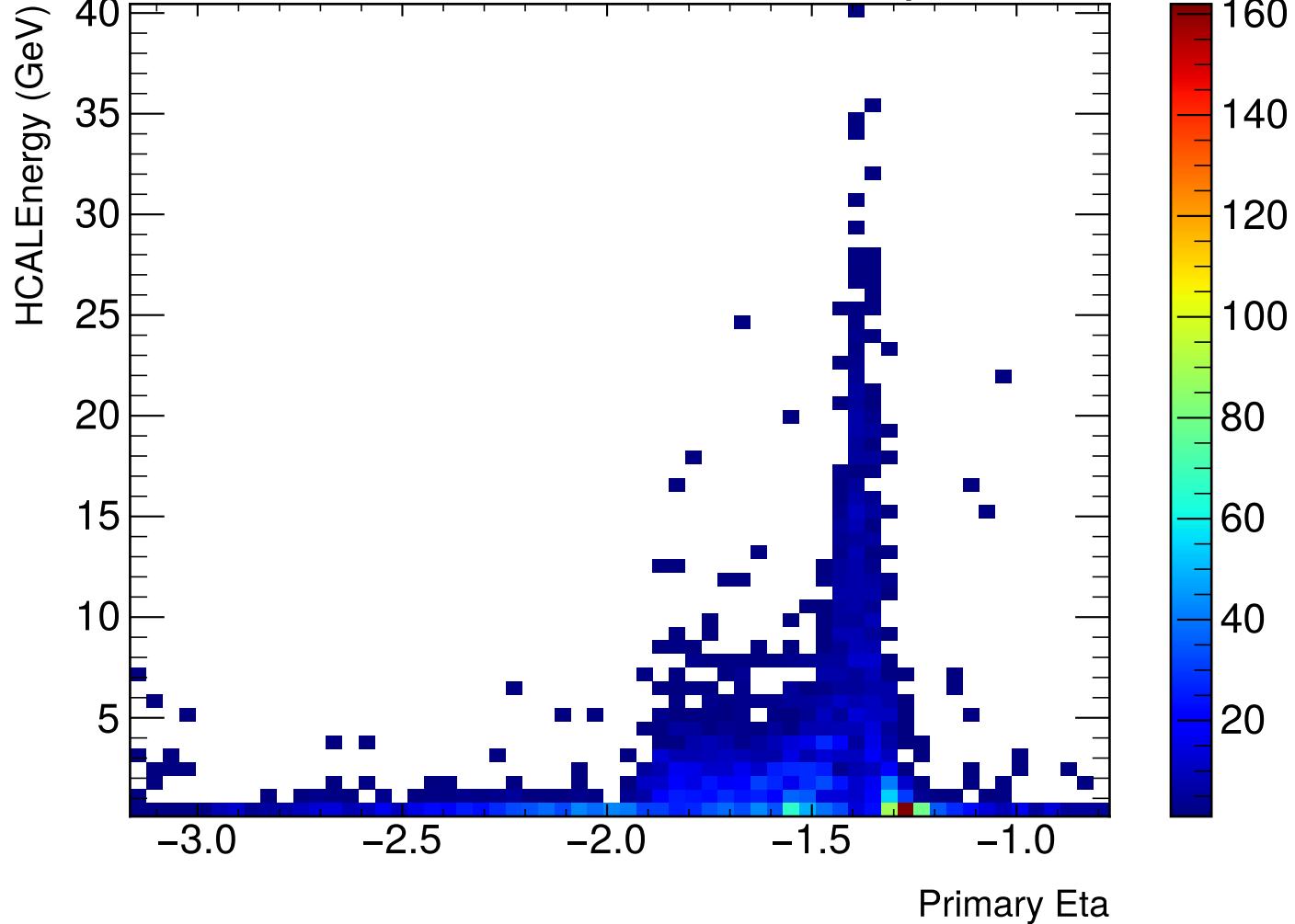
# ATHENA simulation [DD4hep] Pythia8+Geant4



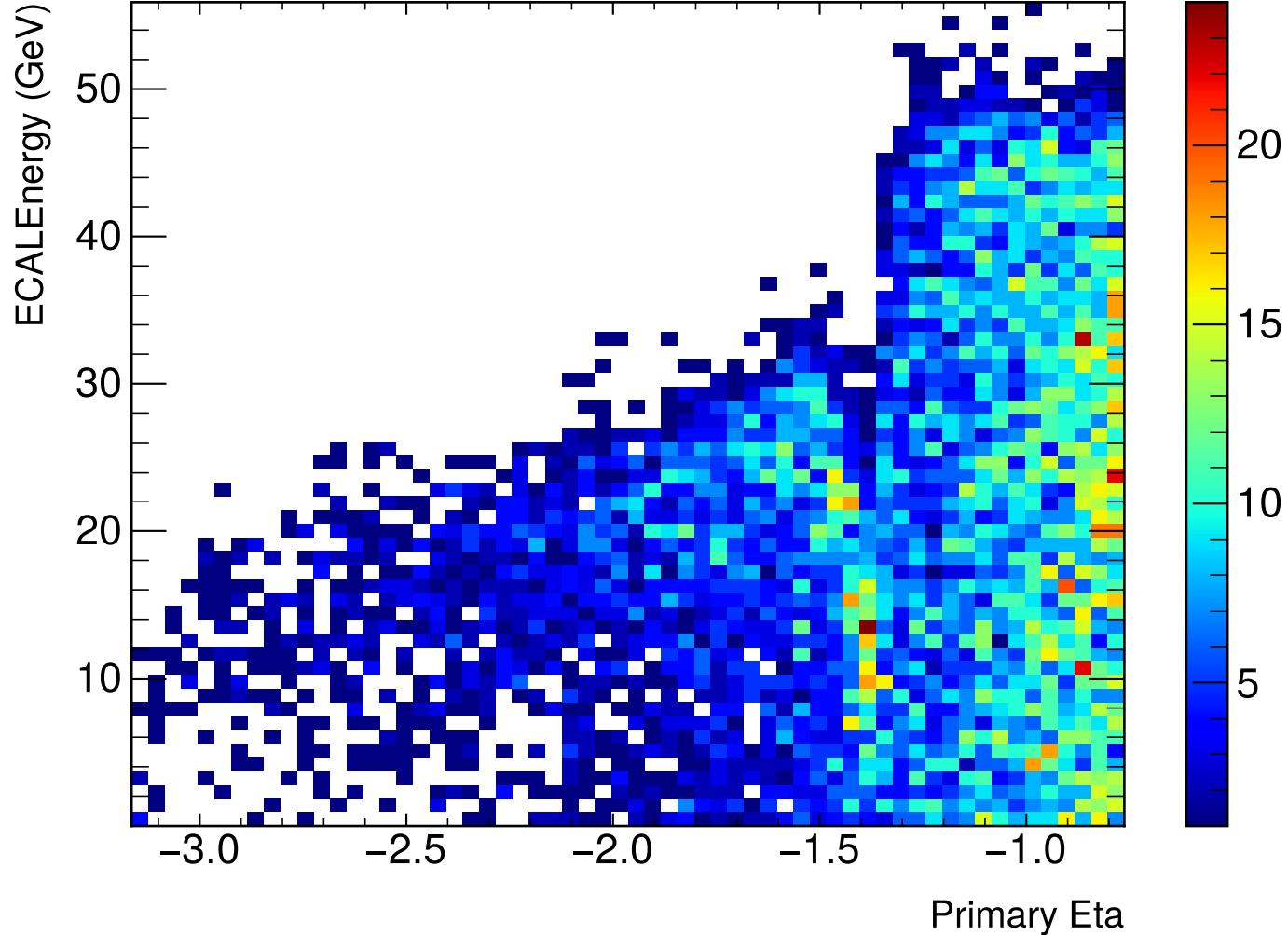
# ATHENA simulation [DD4hep] Pythia8+Geant4



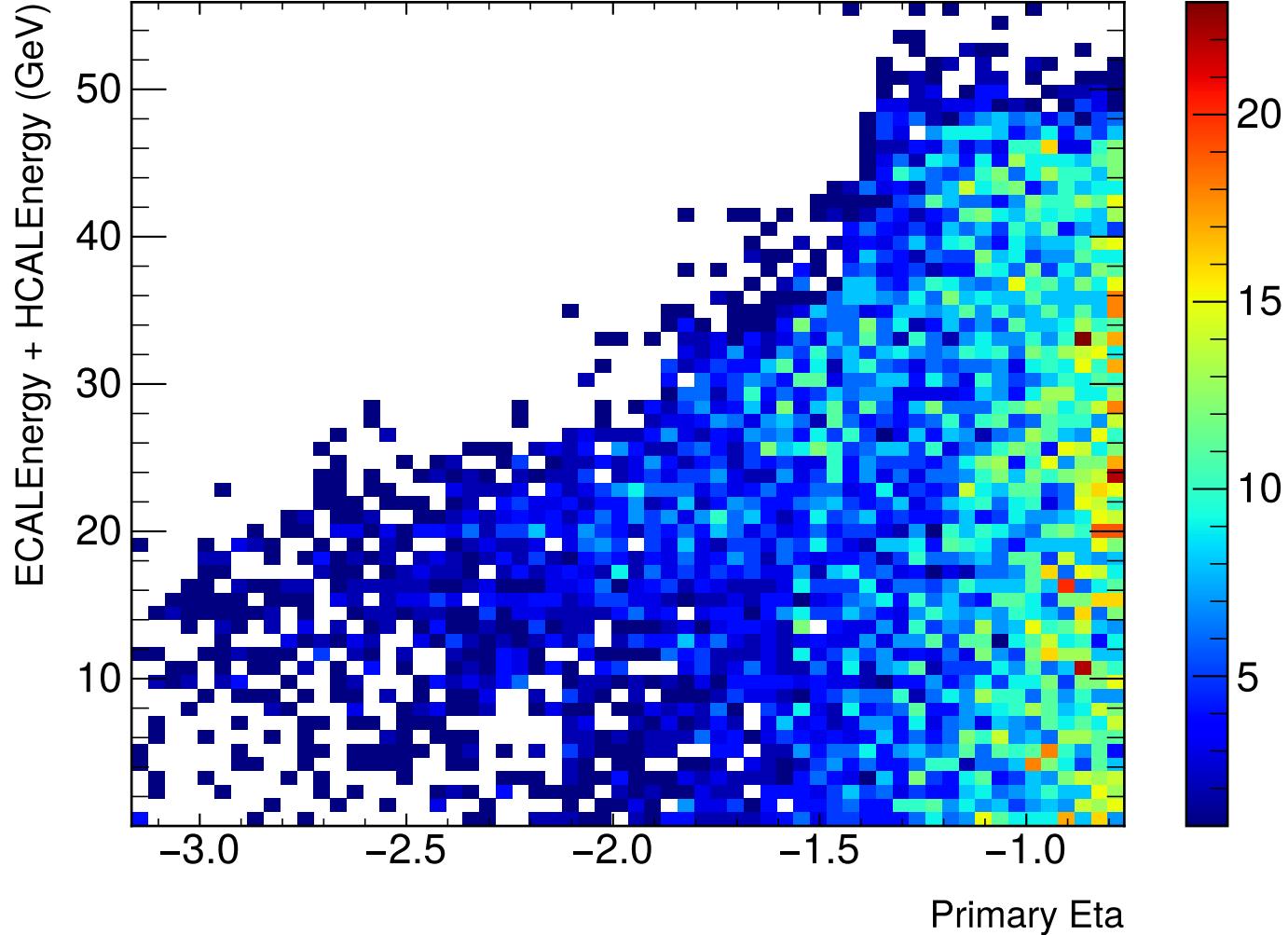
e-@50GeV spanning  $-3.64 < \eta < -0.76$



e-@50GeV spanning  $-3.64 < \eta < -0.76$

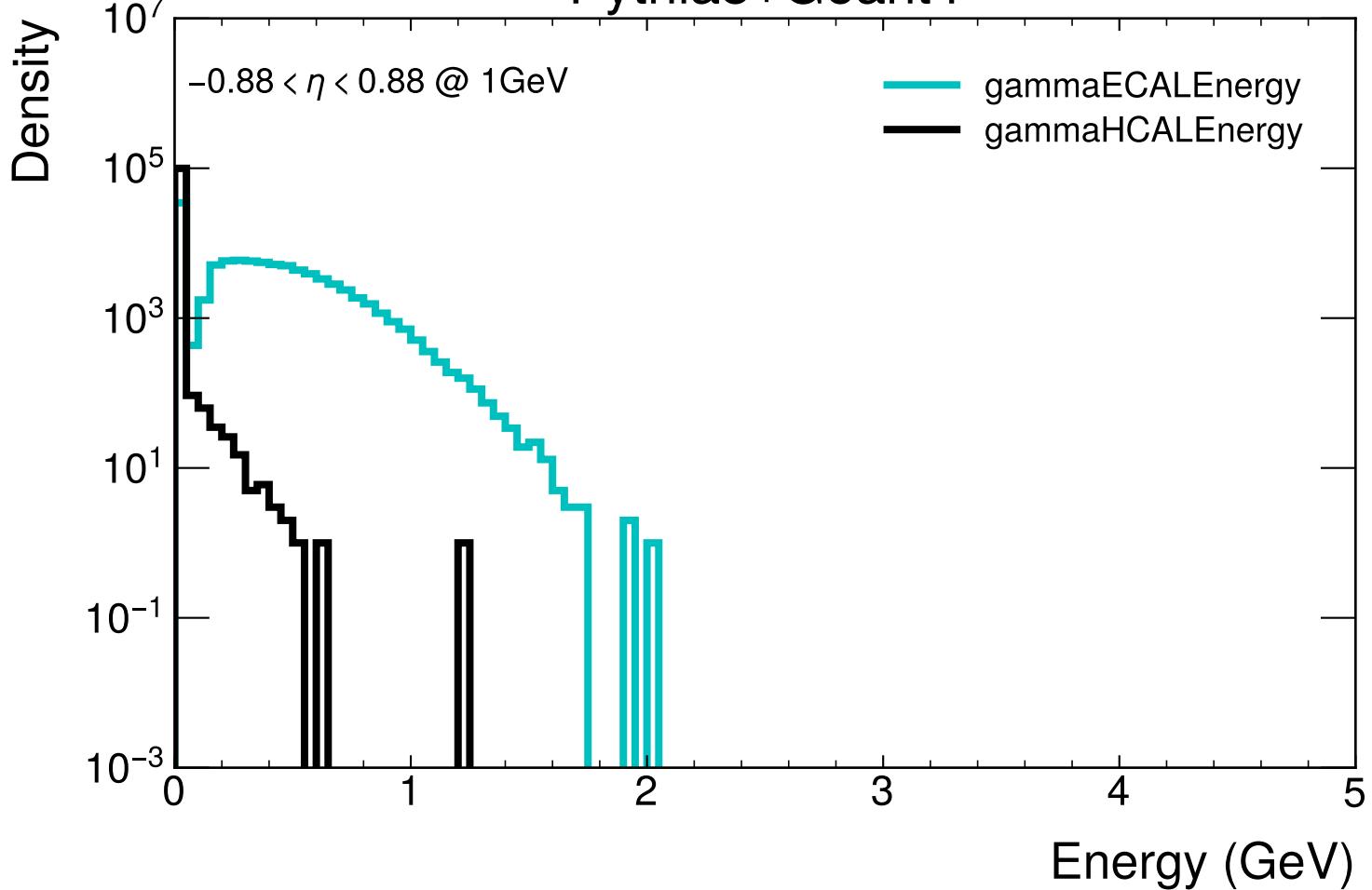


e-@50GeV spanning  $-3.64 < \eta < -0.76$

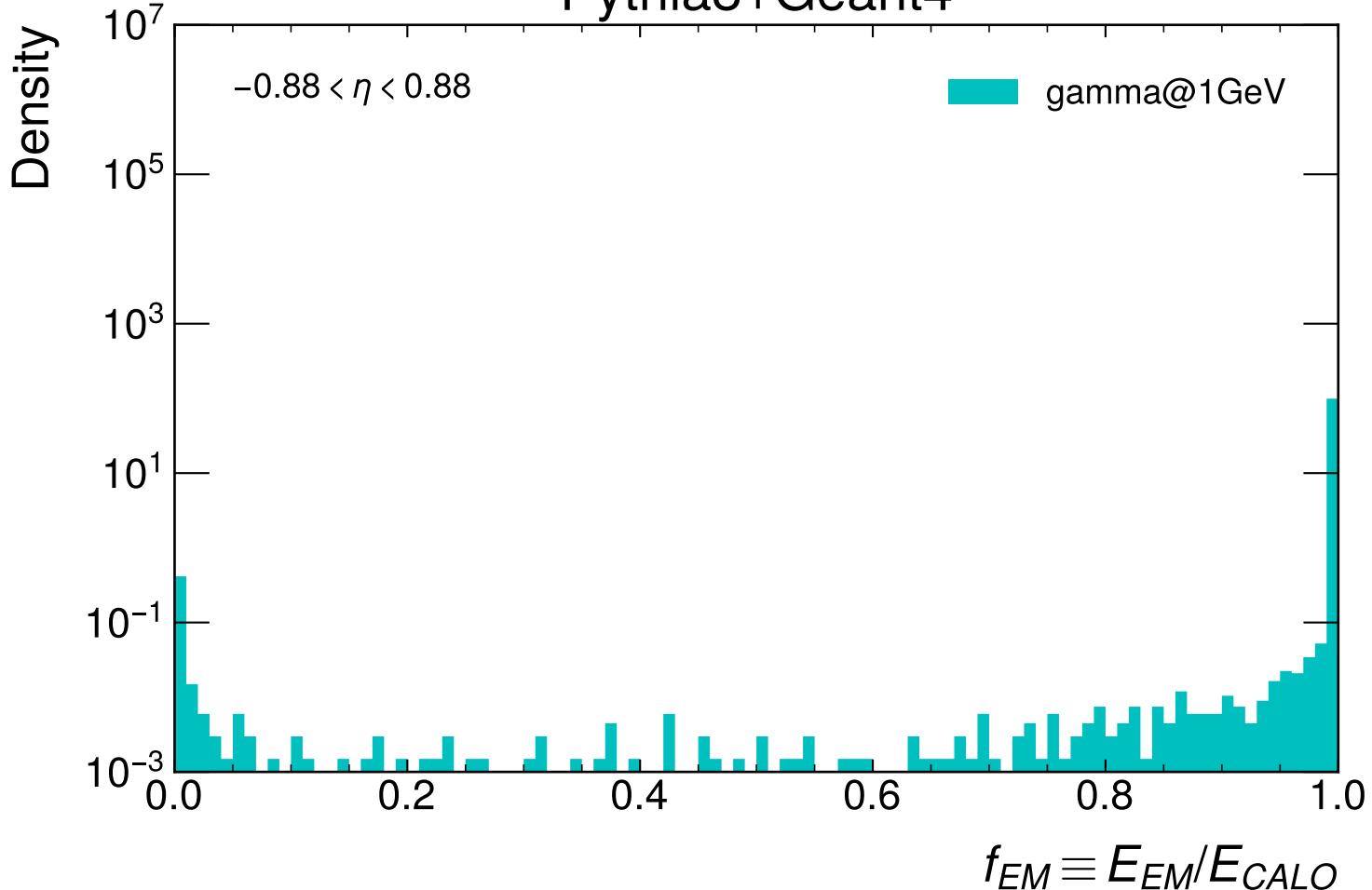


# ATHENA simulation [DD4hep]

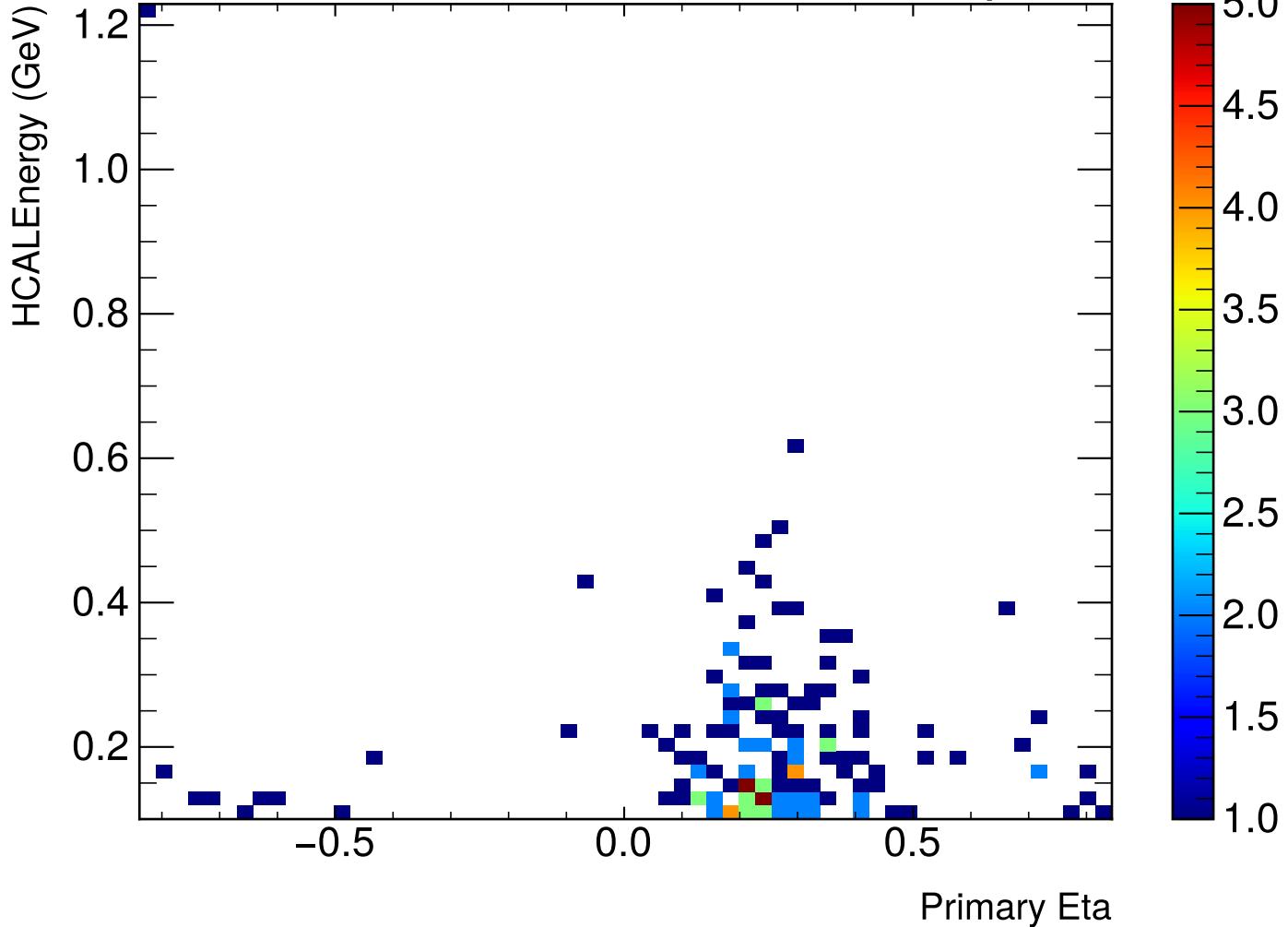
## Pythia8+Geant4



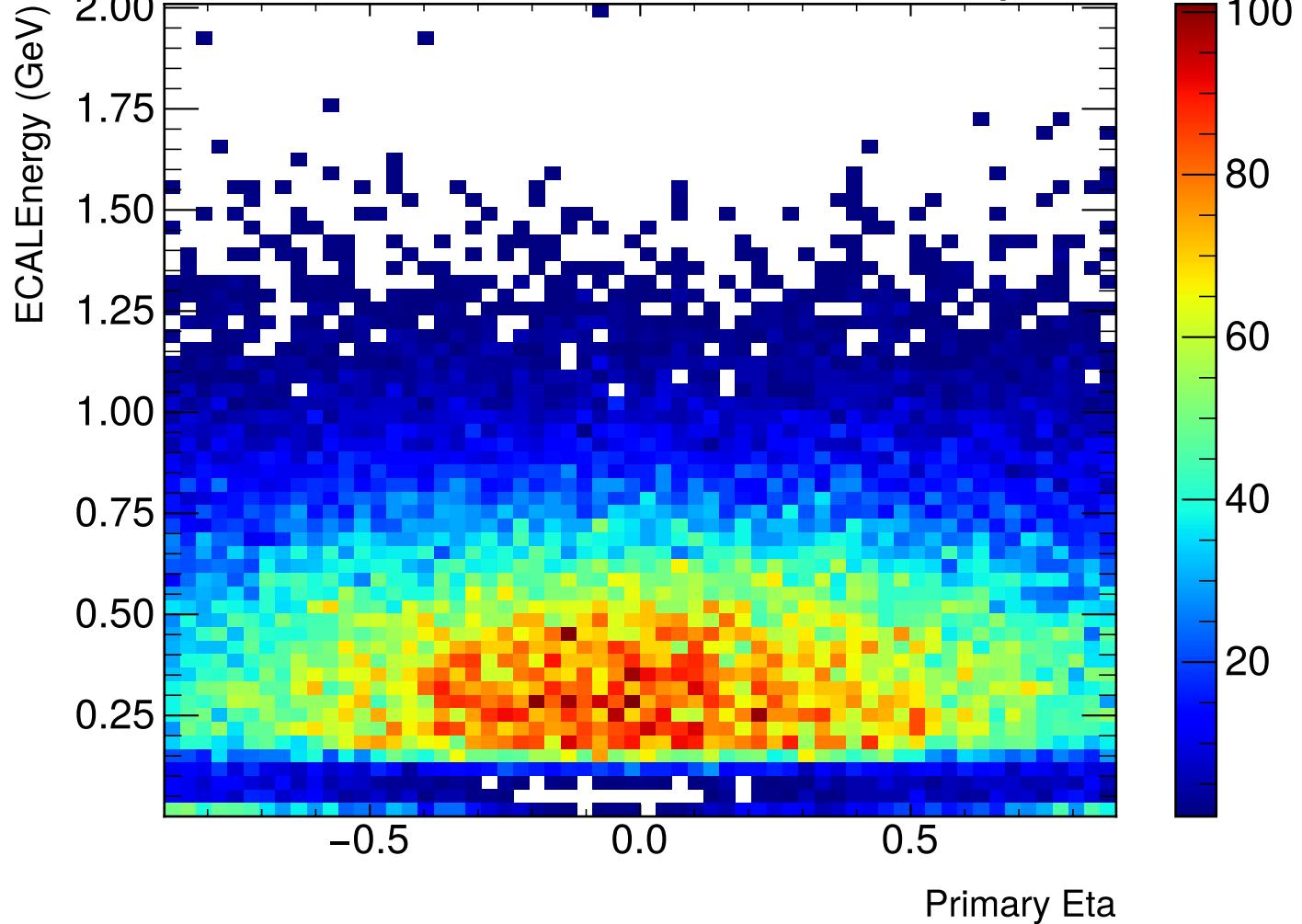
# ATHENA simulation [DD4hep] Pythia8+Geant4



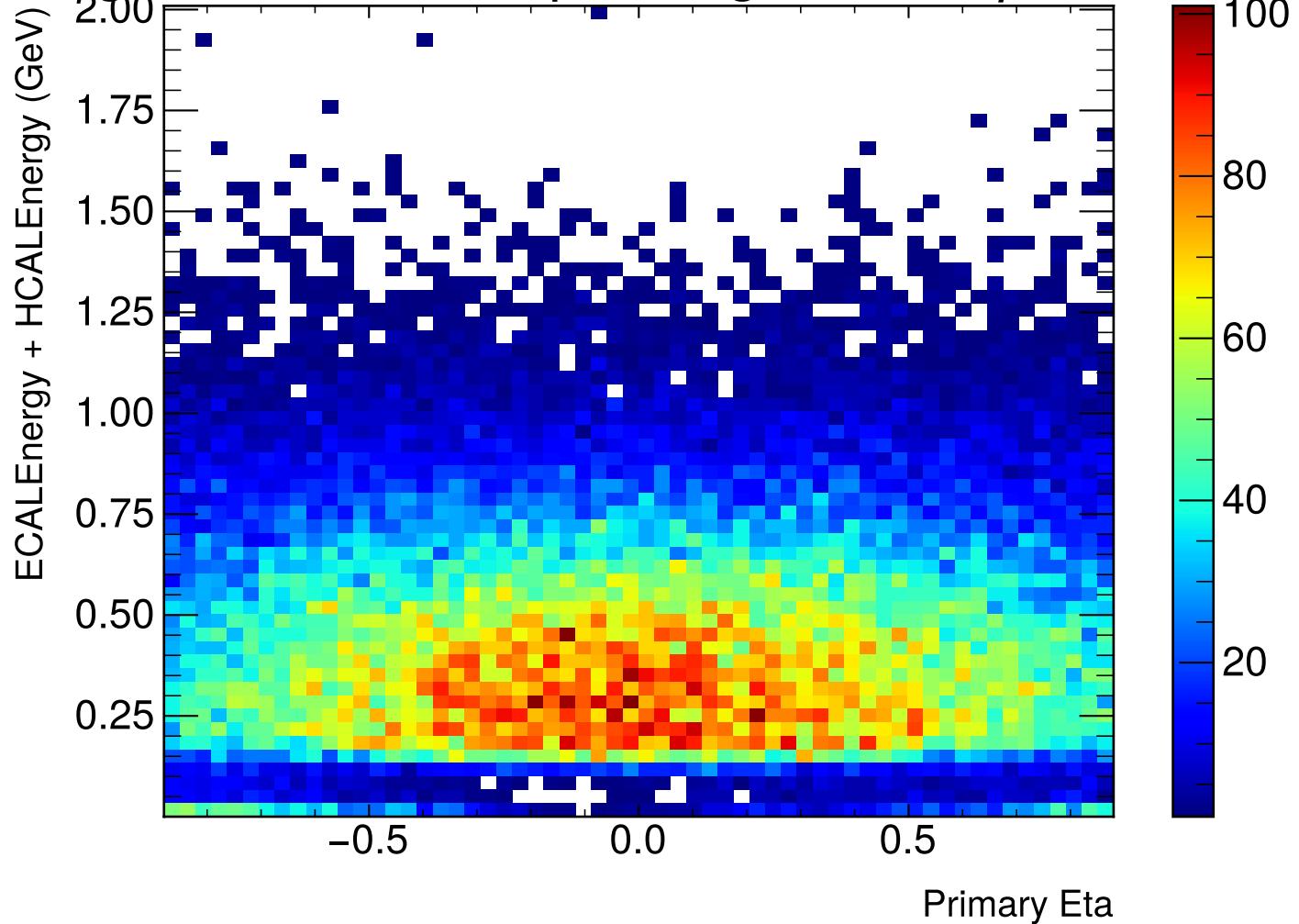
gamma@1GeV spanning  $-0.88 < \eta < 0.88$



gamma@1GeV spanning  $-0.88 < \eta < 0.88$

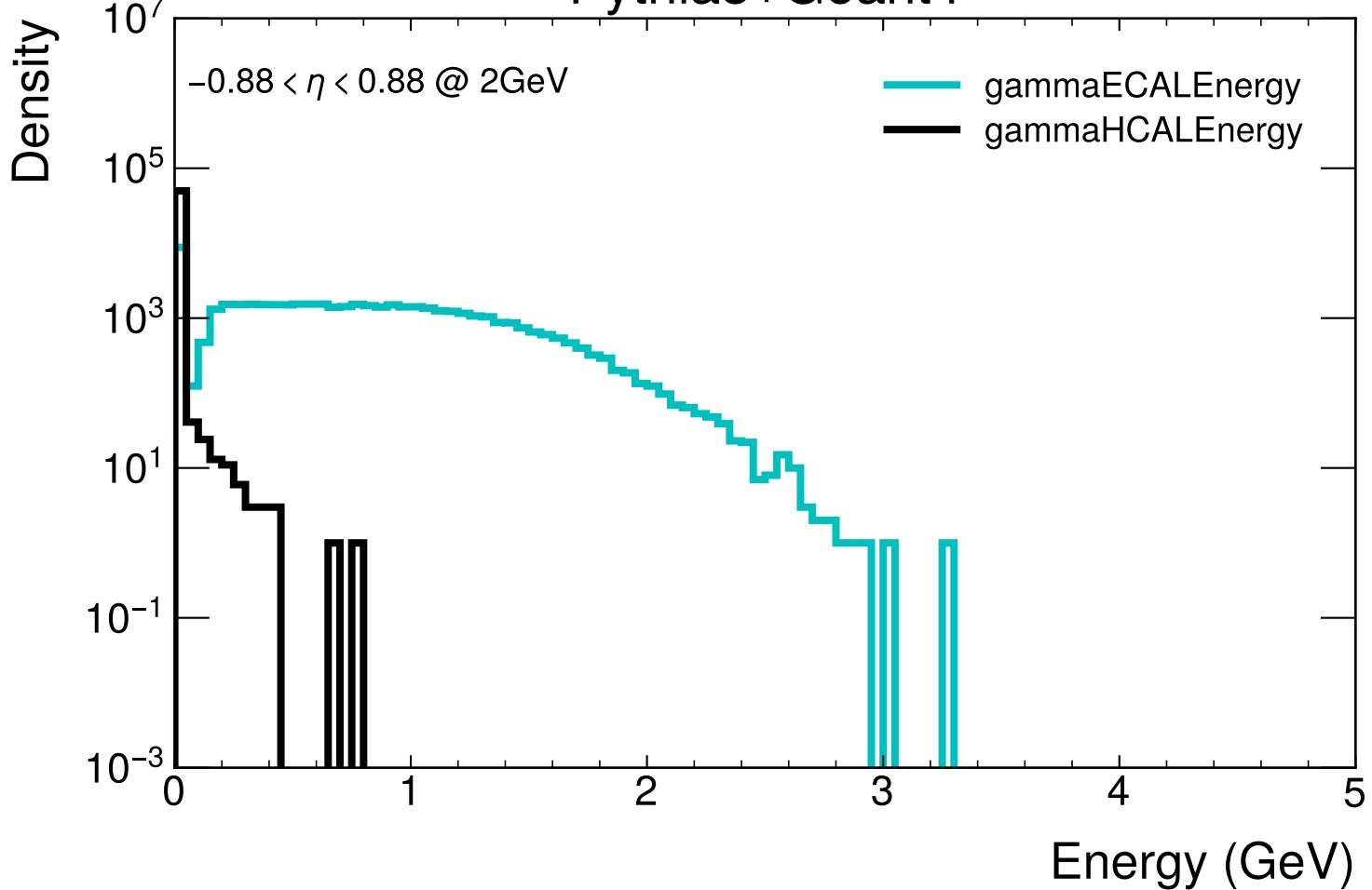


gamma@1GeV spanning  $-0.88 < \eta < 0.88$

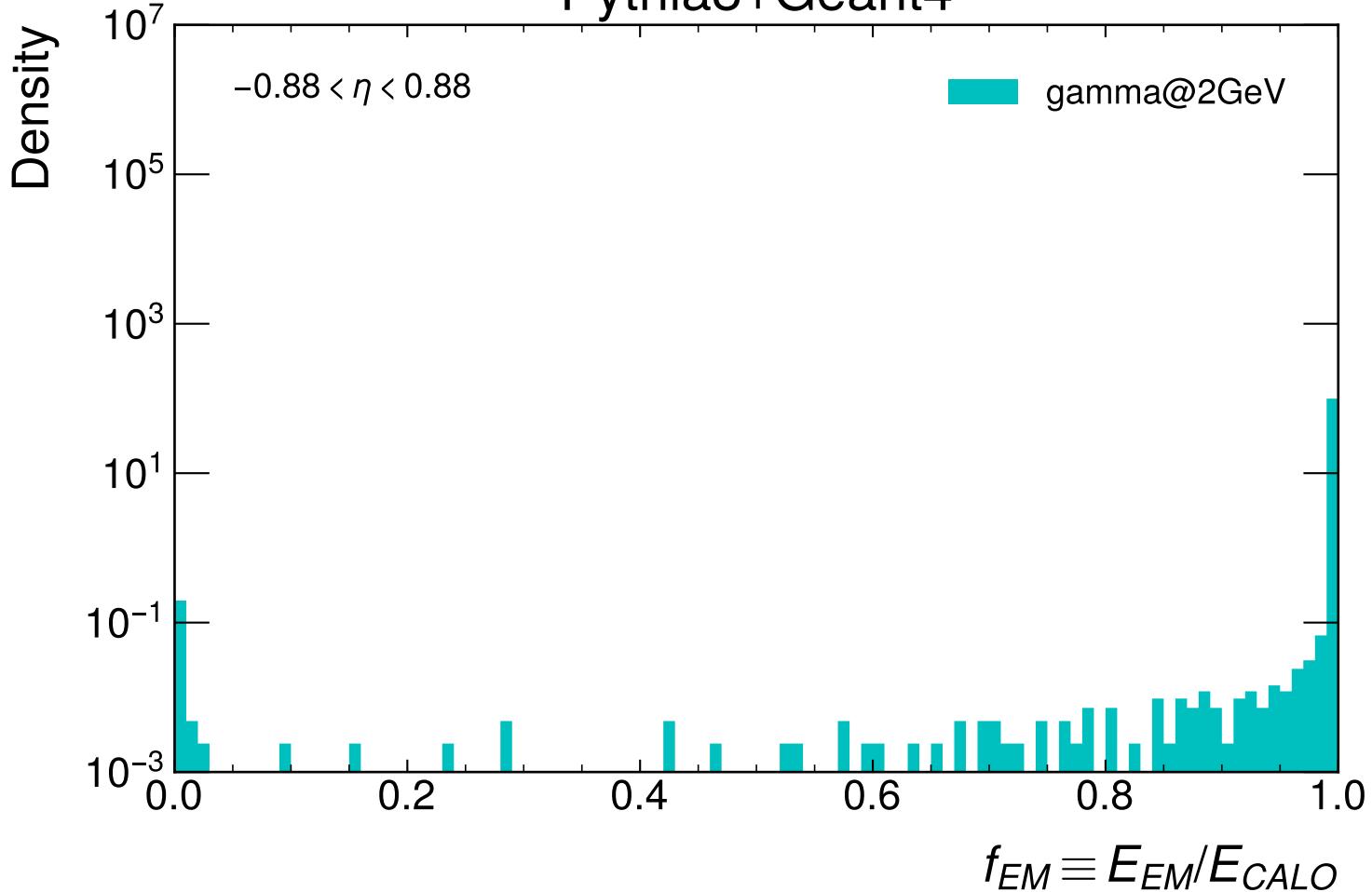


# ATHENA simulation [DD4hep]

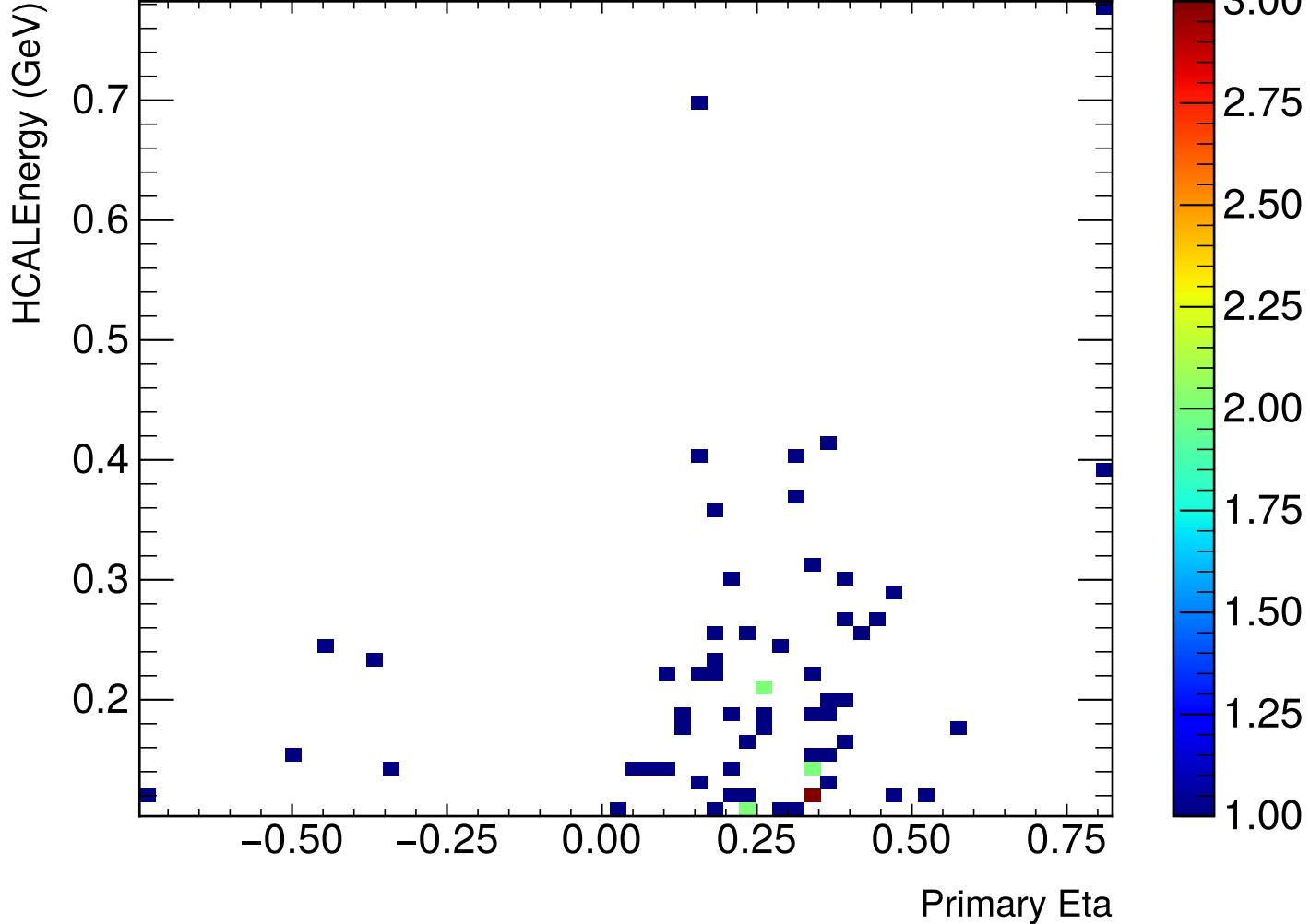
## Pythia8+Geant4



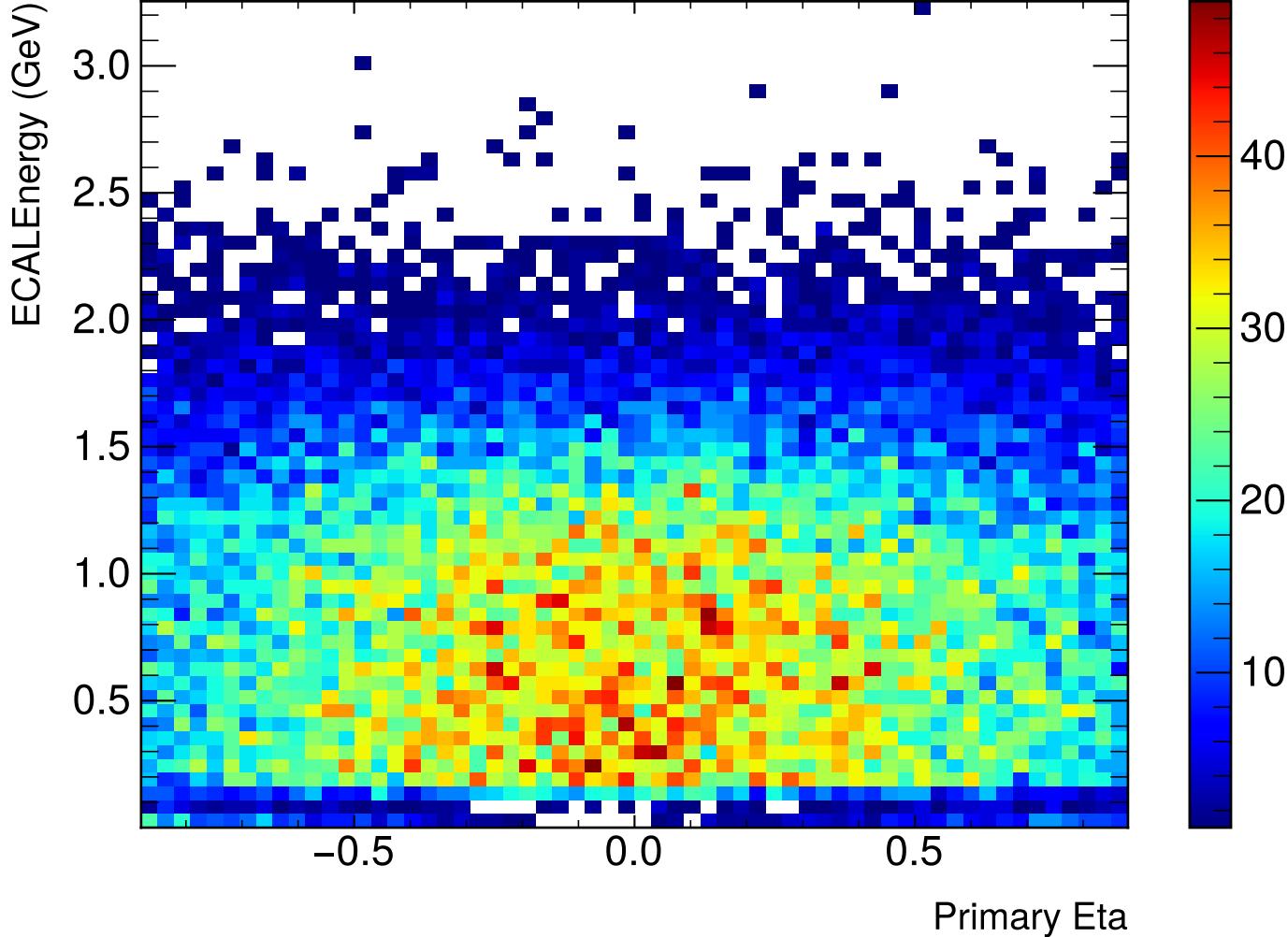
# ATHENA simulation [DD4hep] Pythia8+Geant4



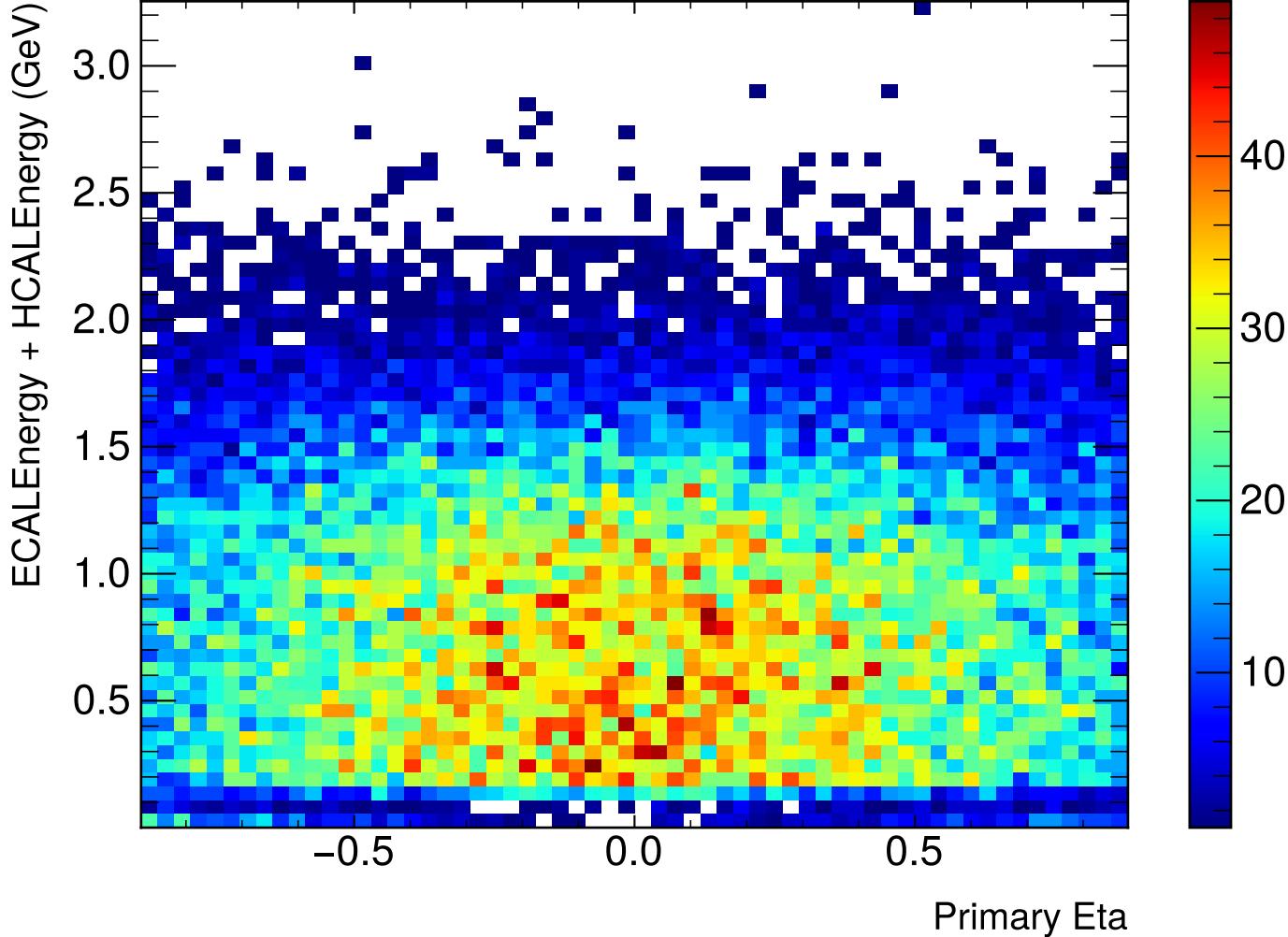
gamma@2GeV spanning  $-0.88 < \eta < 0.88$



gamma@2GeV spanning  $-0.88 < \eta < 0.88$

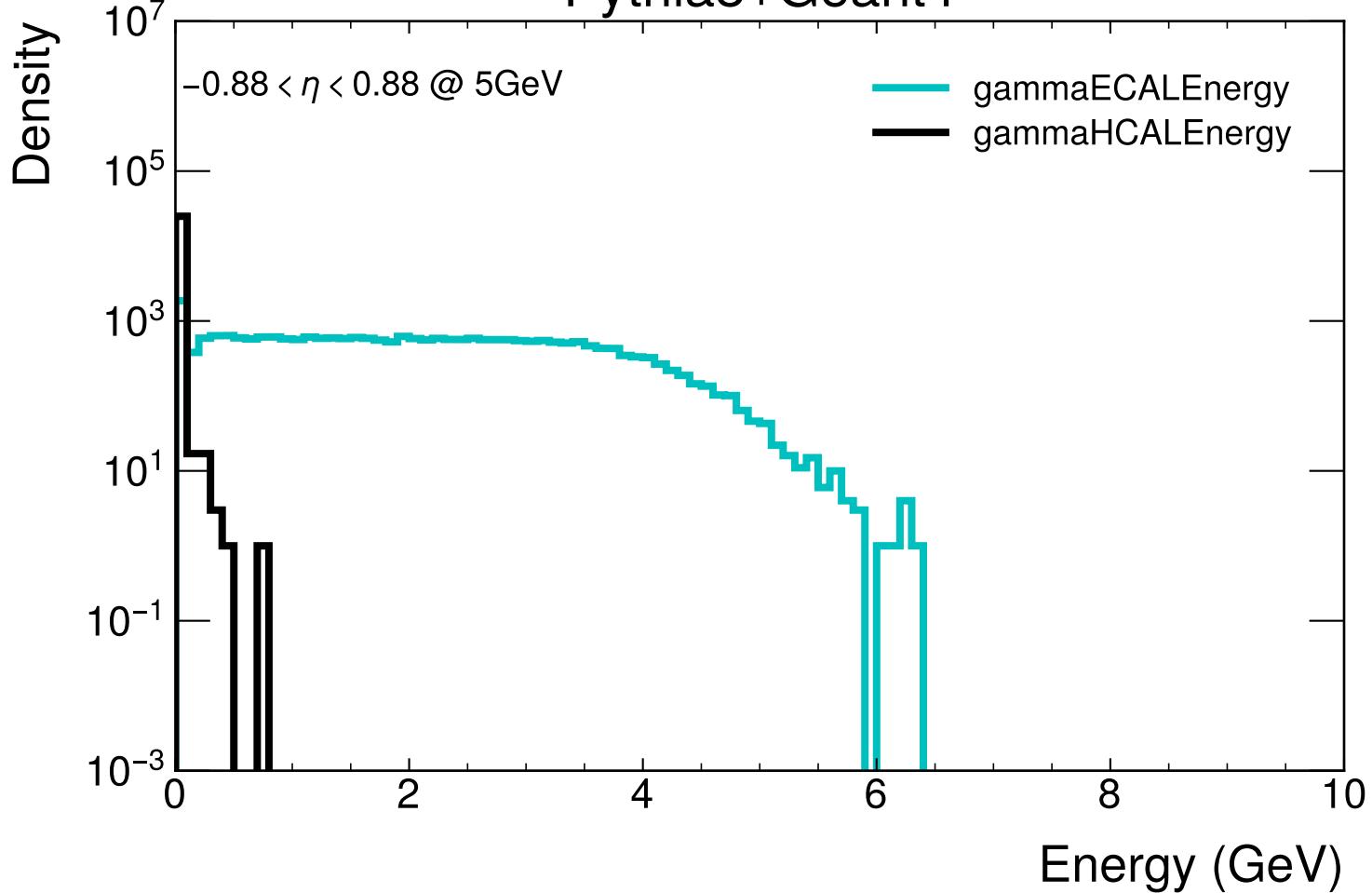


gamma@2GeV spanning  $-0.88 < \eta < 0.88$

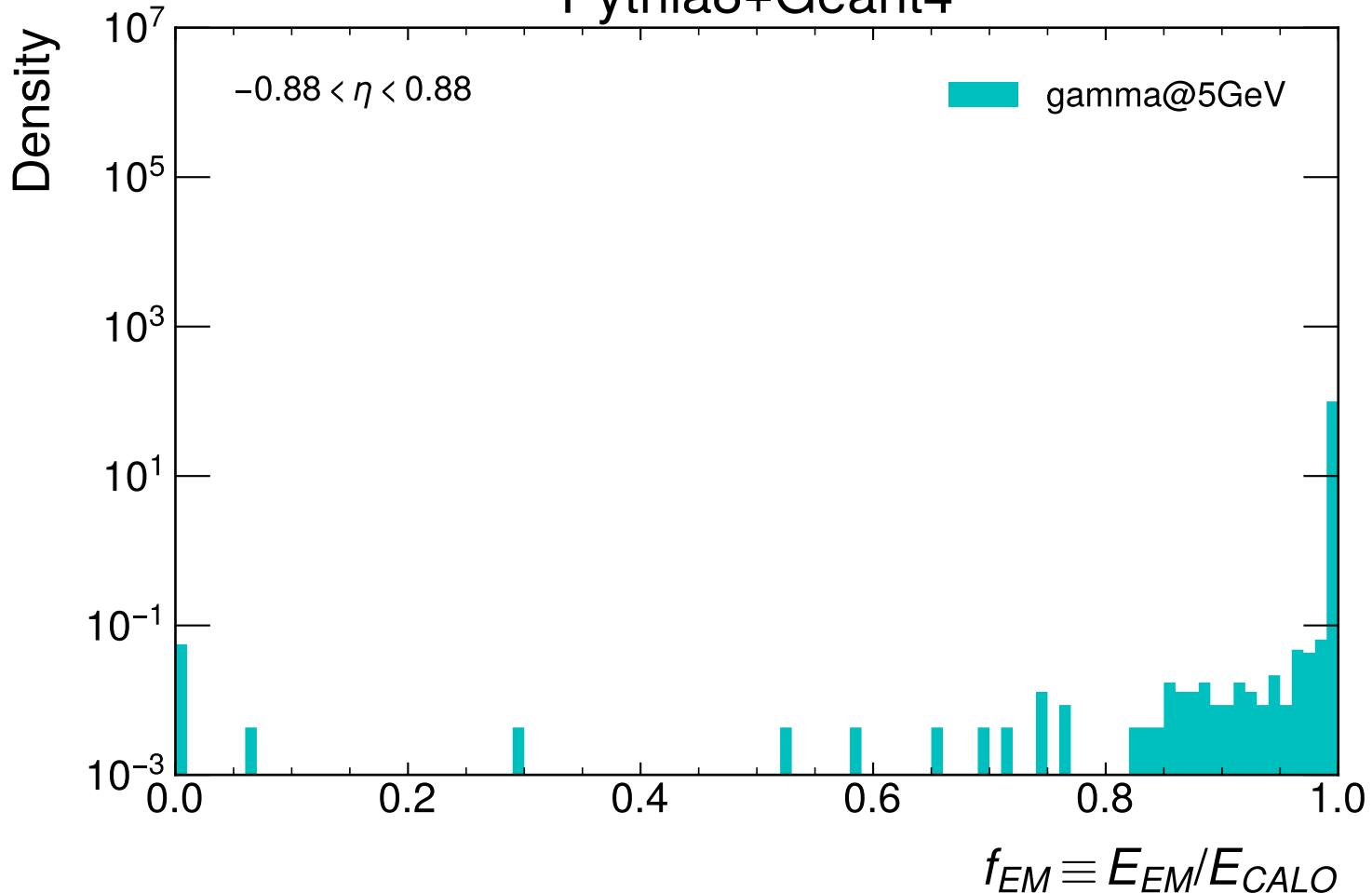


# ATHENA simulation [DD4hep]

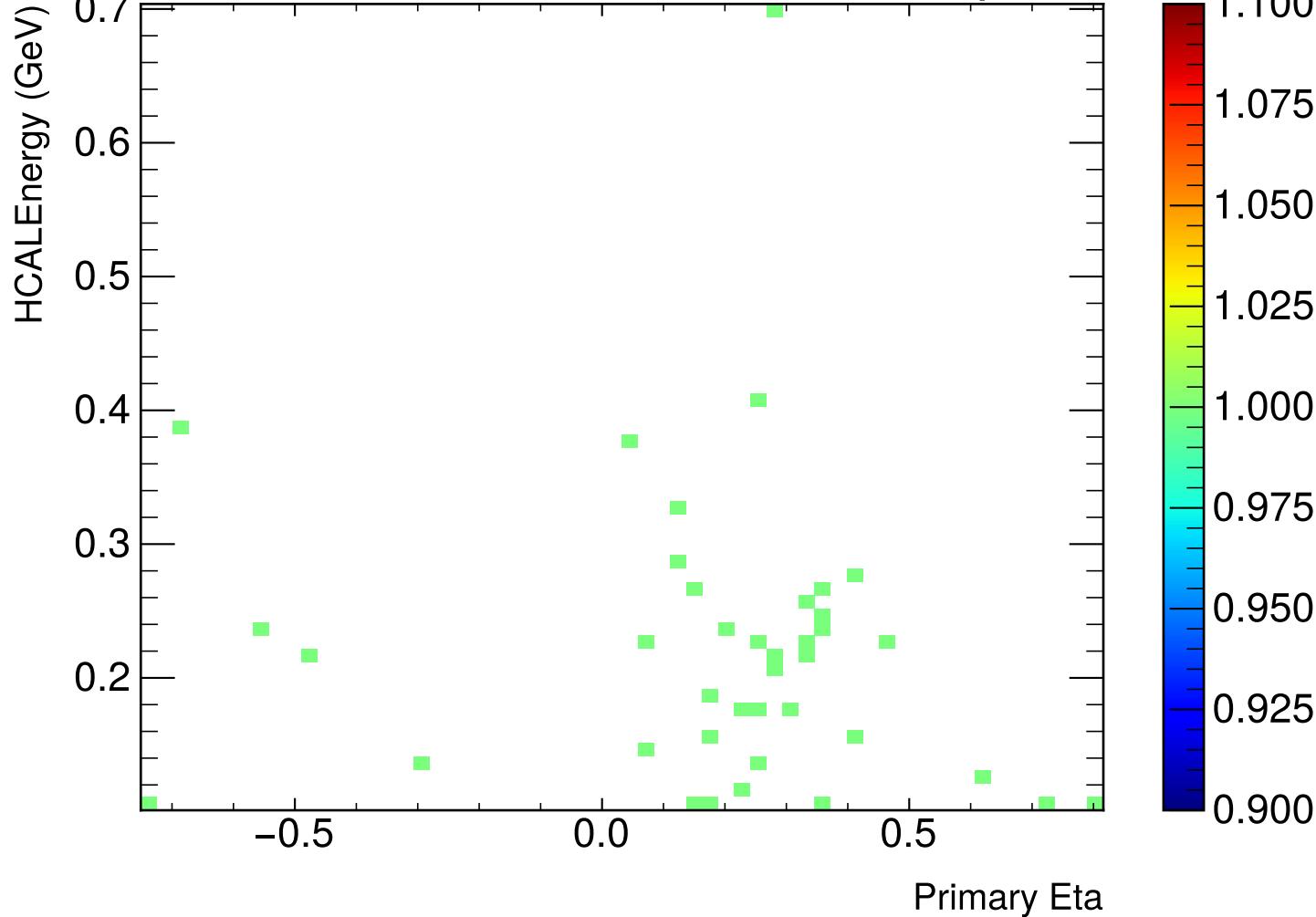
## Pythia8+Geant4



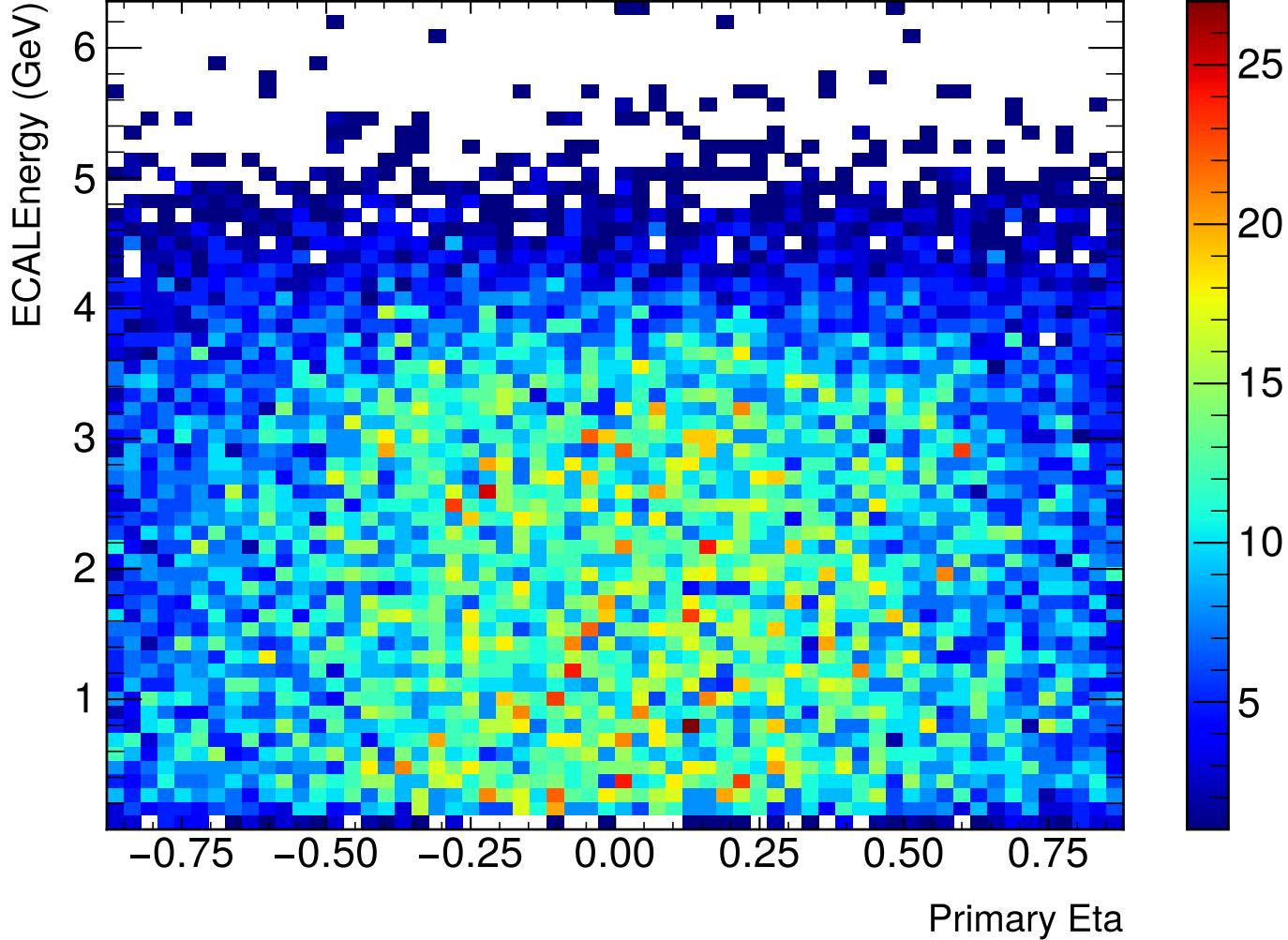
# ATHENA simulation [DD4hep] Pythia8+Geant4



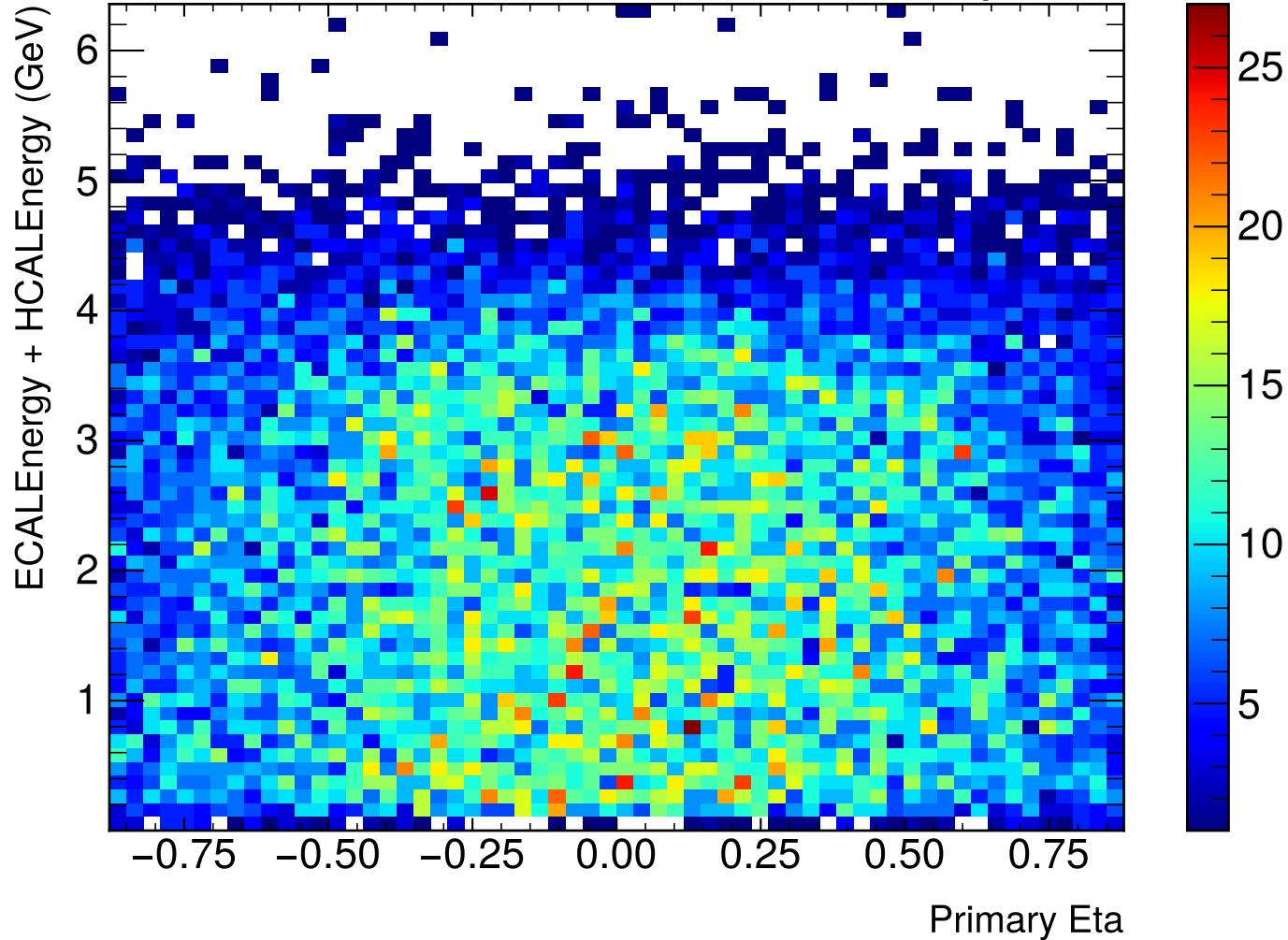
gamma@5GeV spanning  $-0.88 < \eta < 0.88$



gamma@5GeV spanning  $-0.88 < \eta < 0.88$

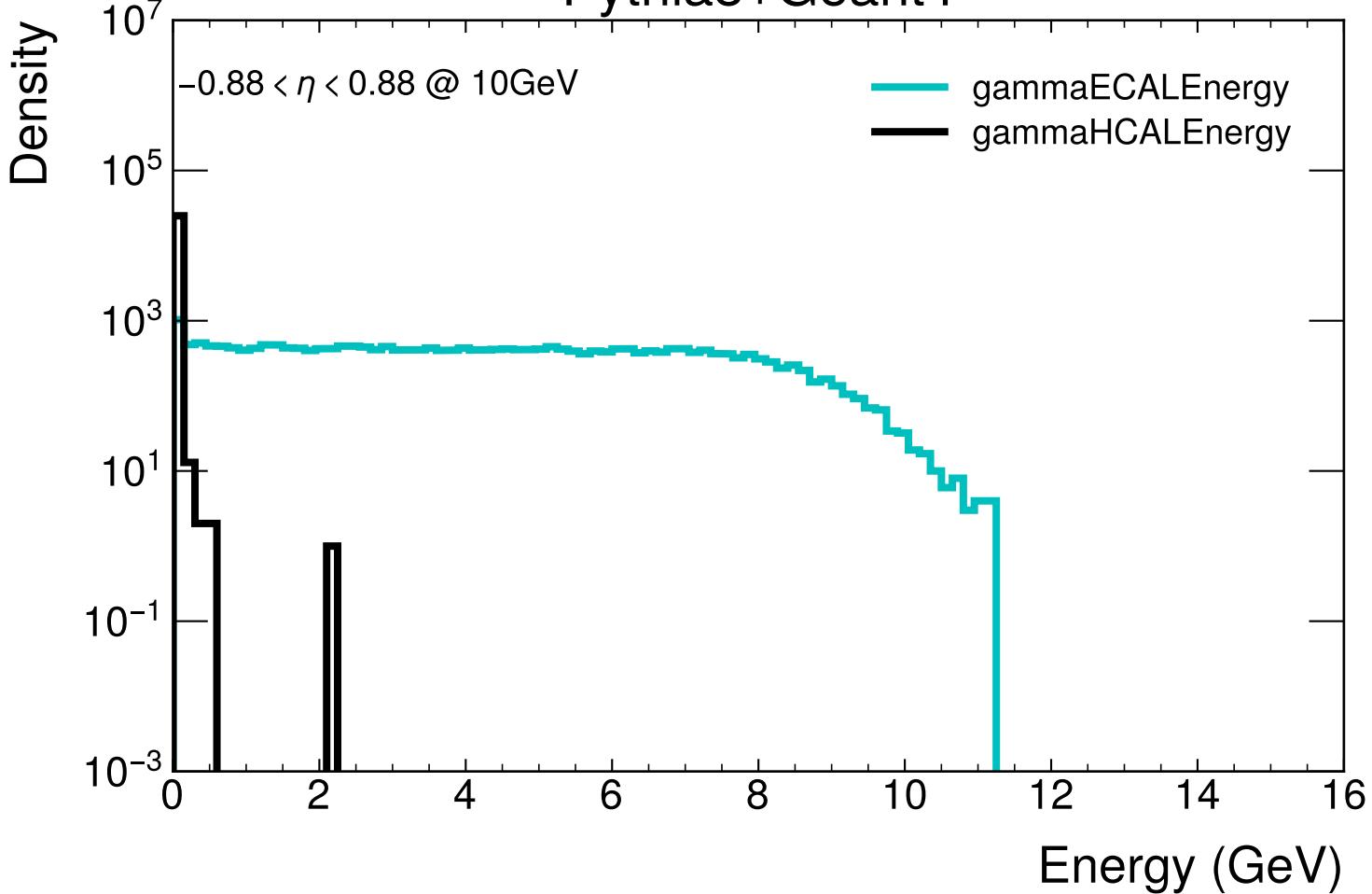


gamma@5GeV spanning  $-0.88 < \eta < 0.88$

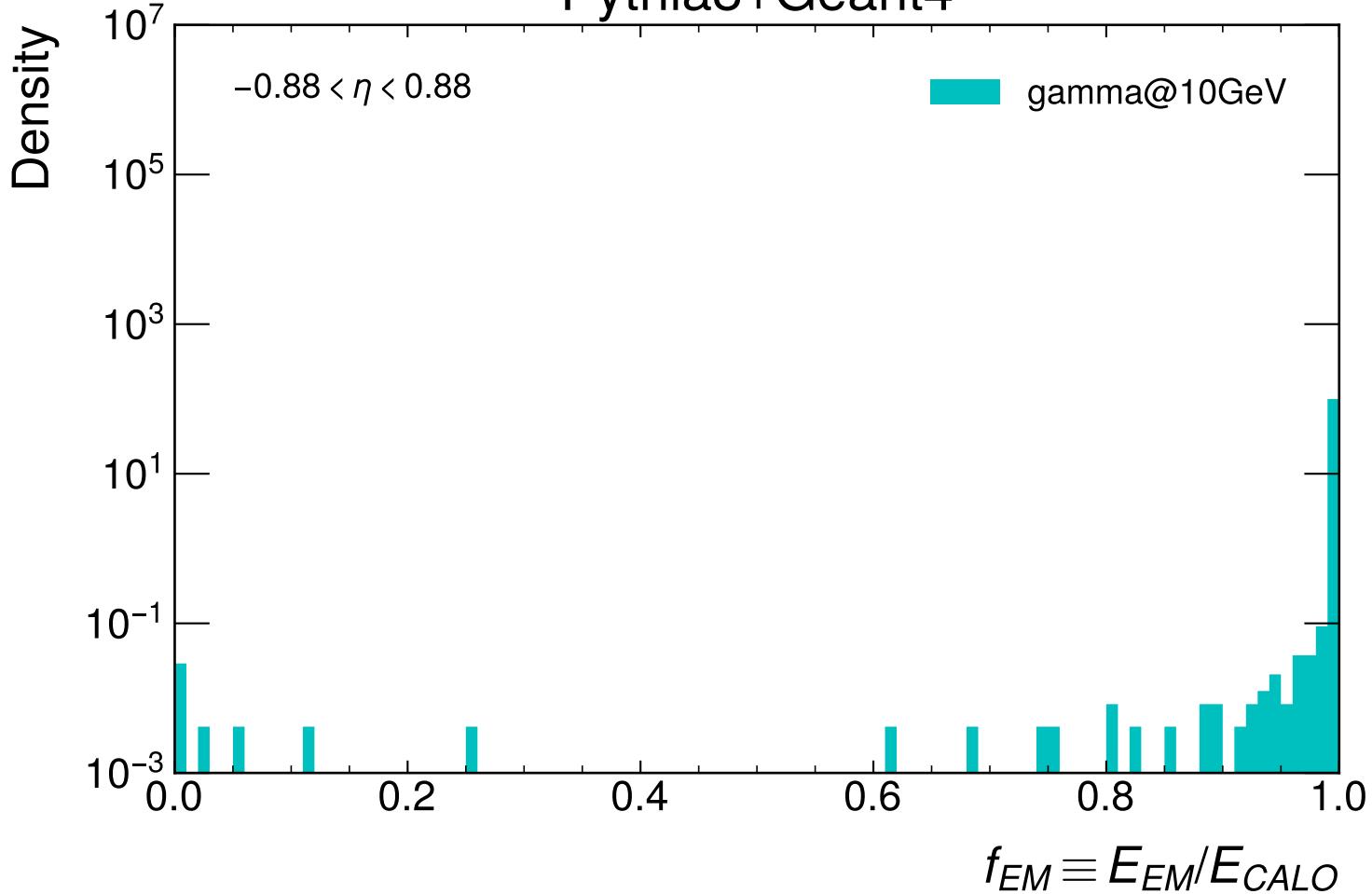


# ATHENA simulation [DD4hep]

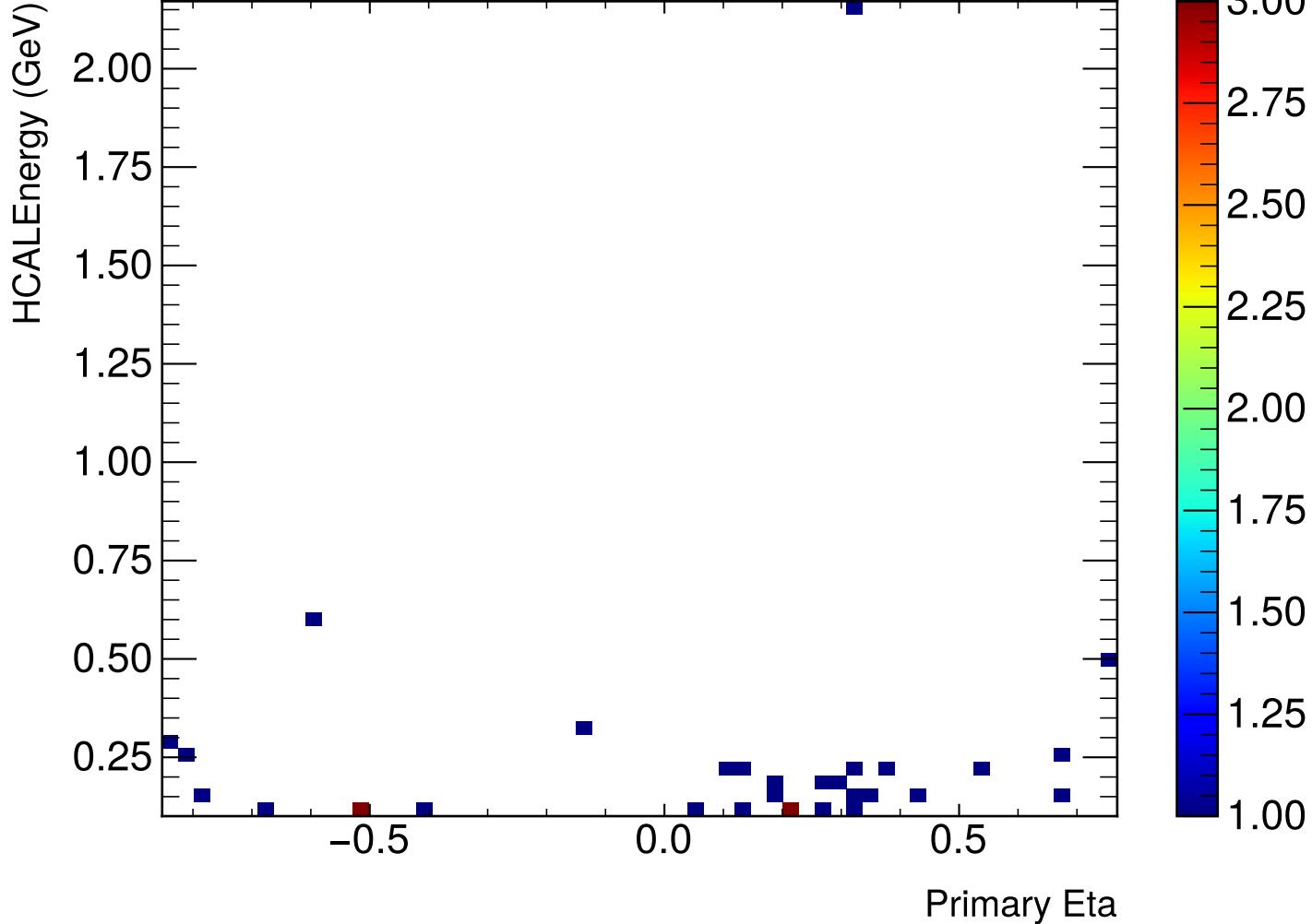
## Pythia8+Geant4



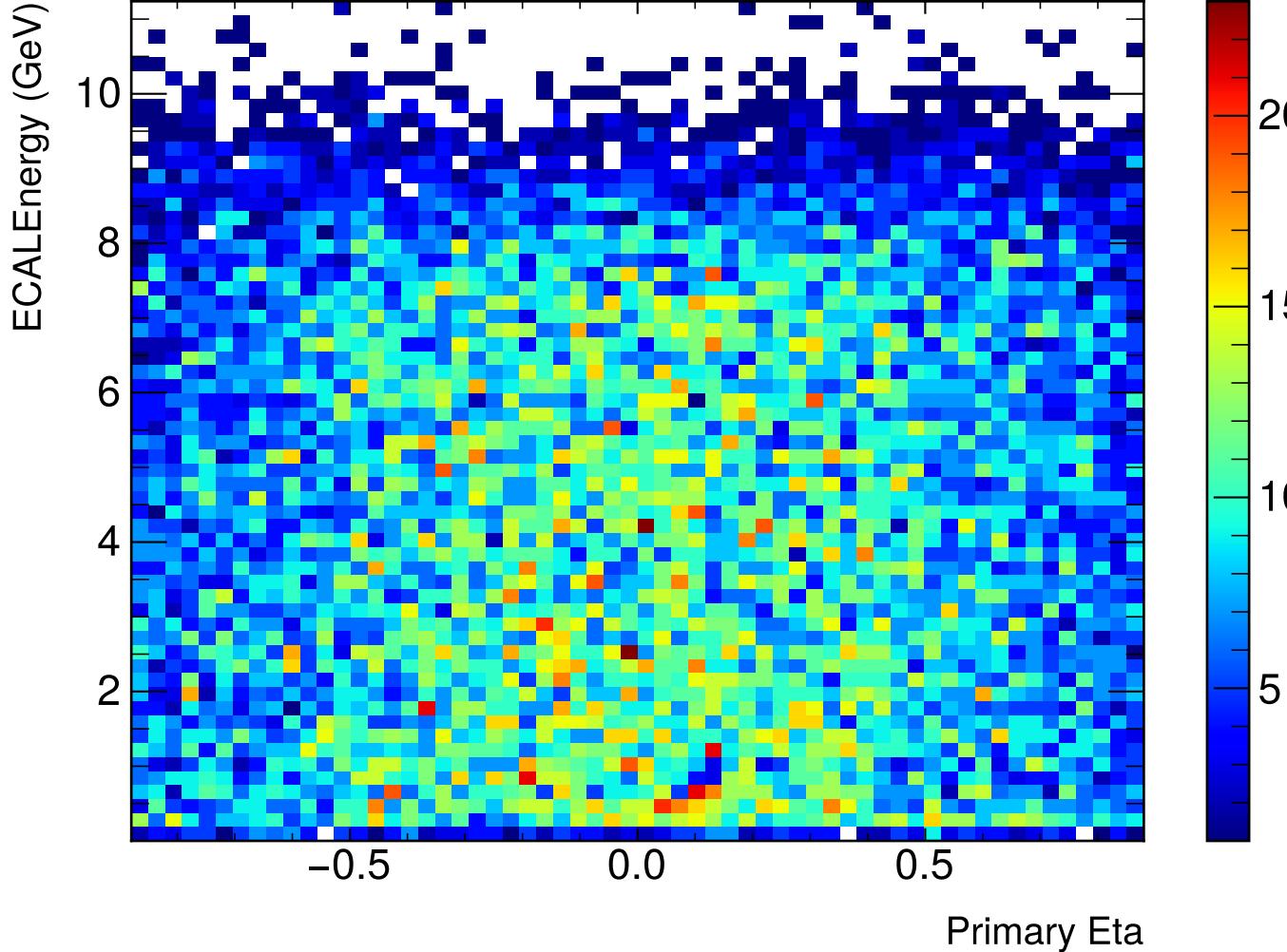
# ATHENA simulation [DD4hep] Pythia8+Geant4



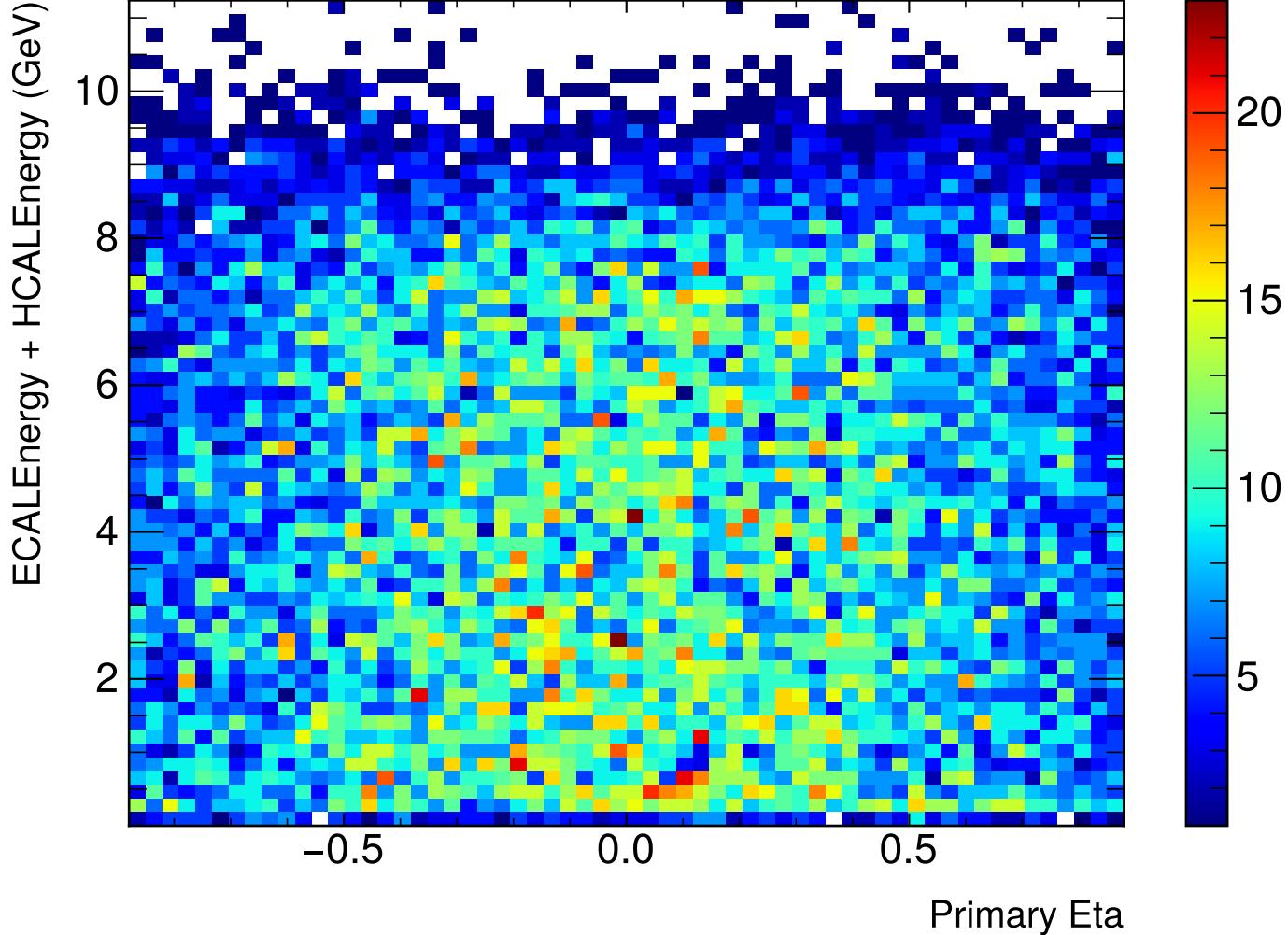
gamma@10GeV spanning  $-0.88 < \eta < 0.88$



gamma@10GeV spanning  $-0.88 < \eta < 0.88$

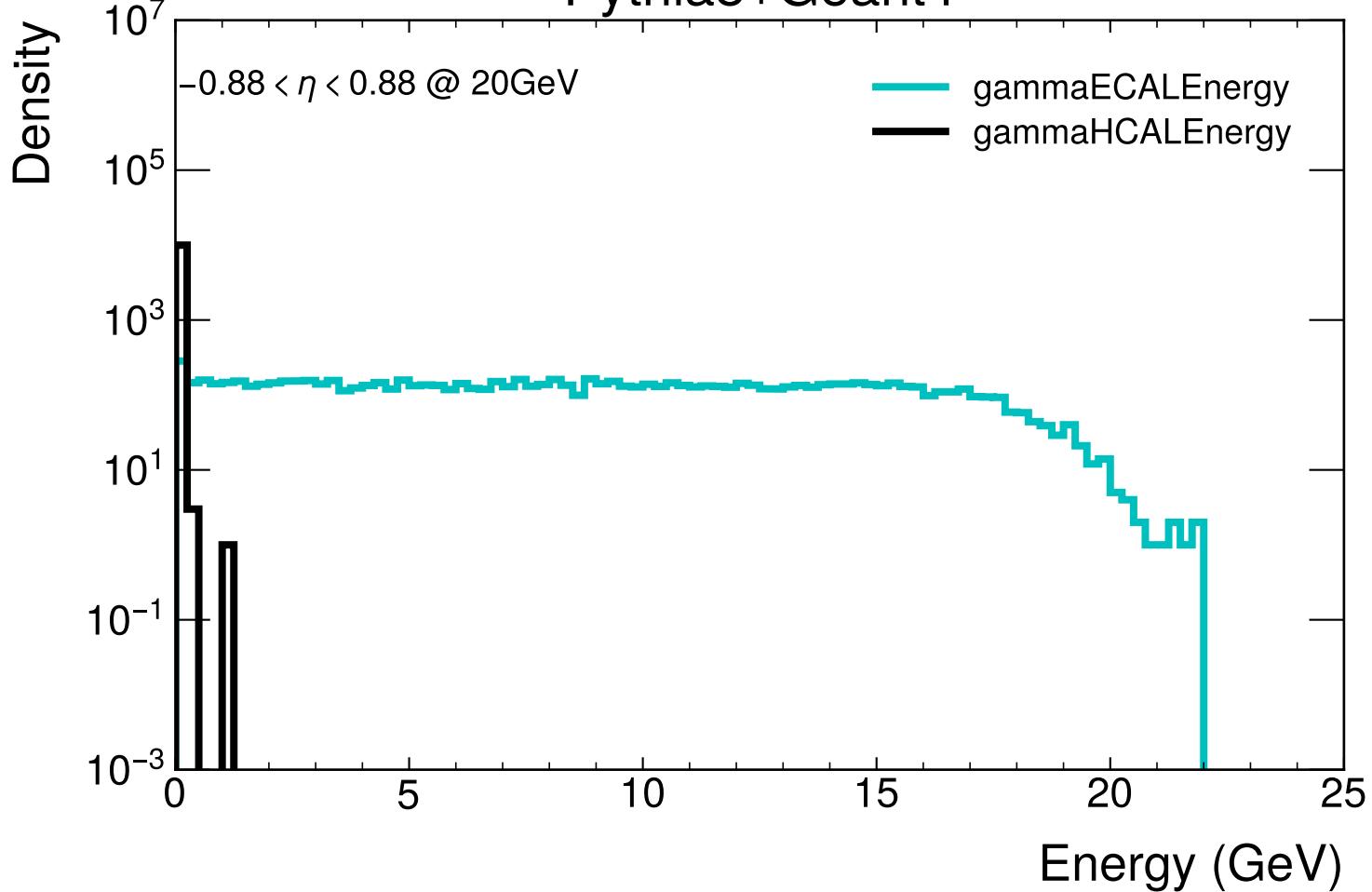


gamma@10GeV spanning  $-0.88 < \eta < 0.88$



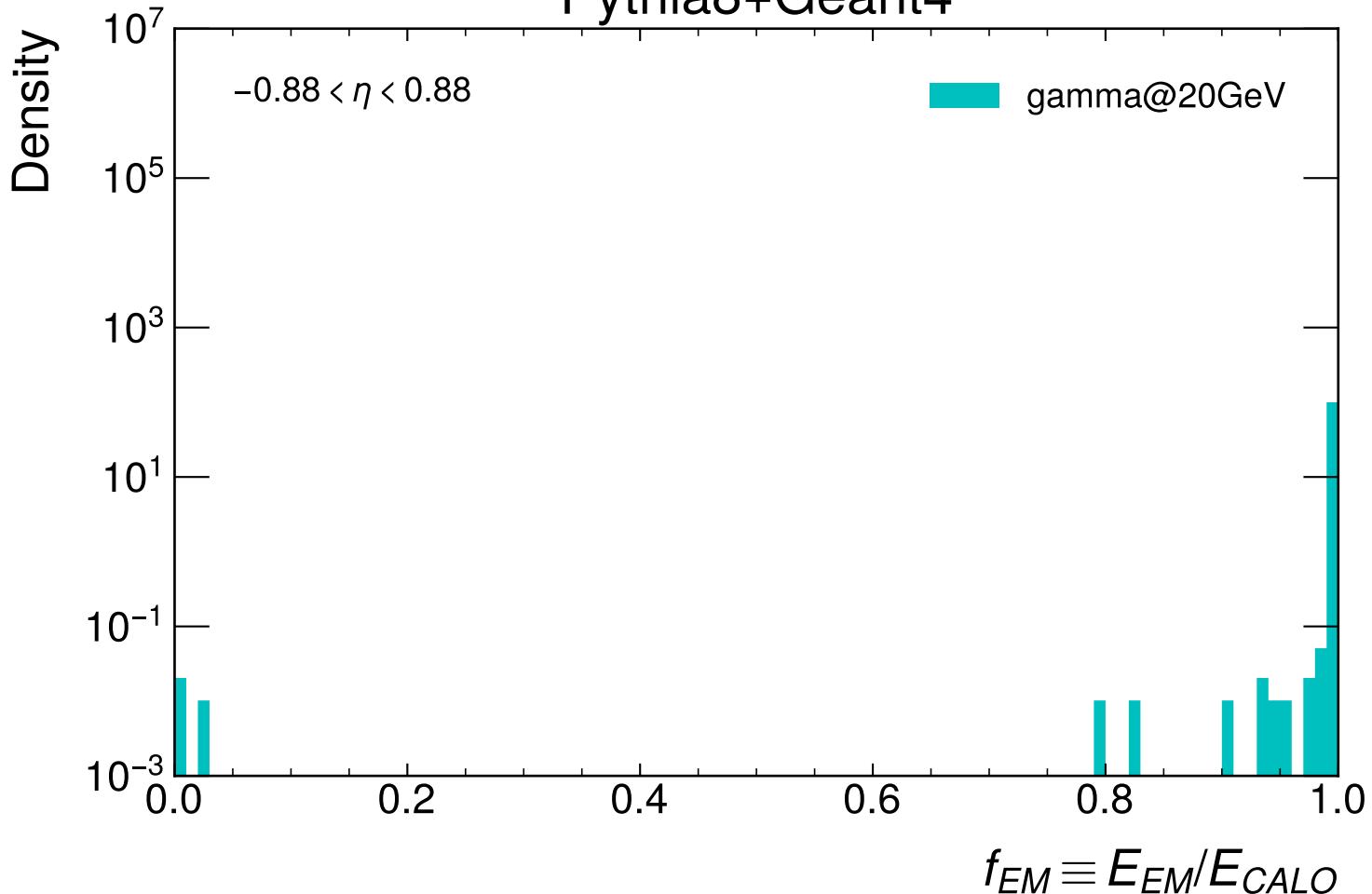
# ATHENA simulation [DD4hep]

## Pythia8+Geant4

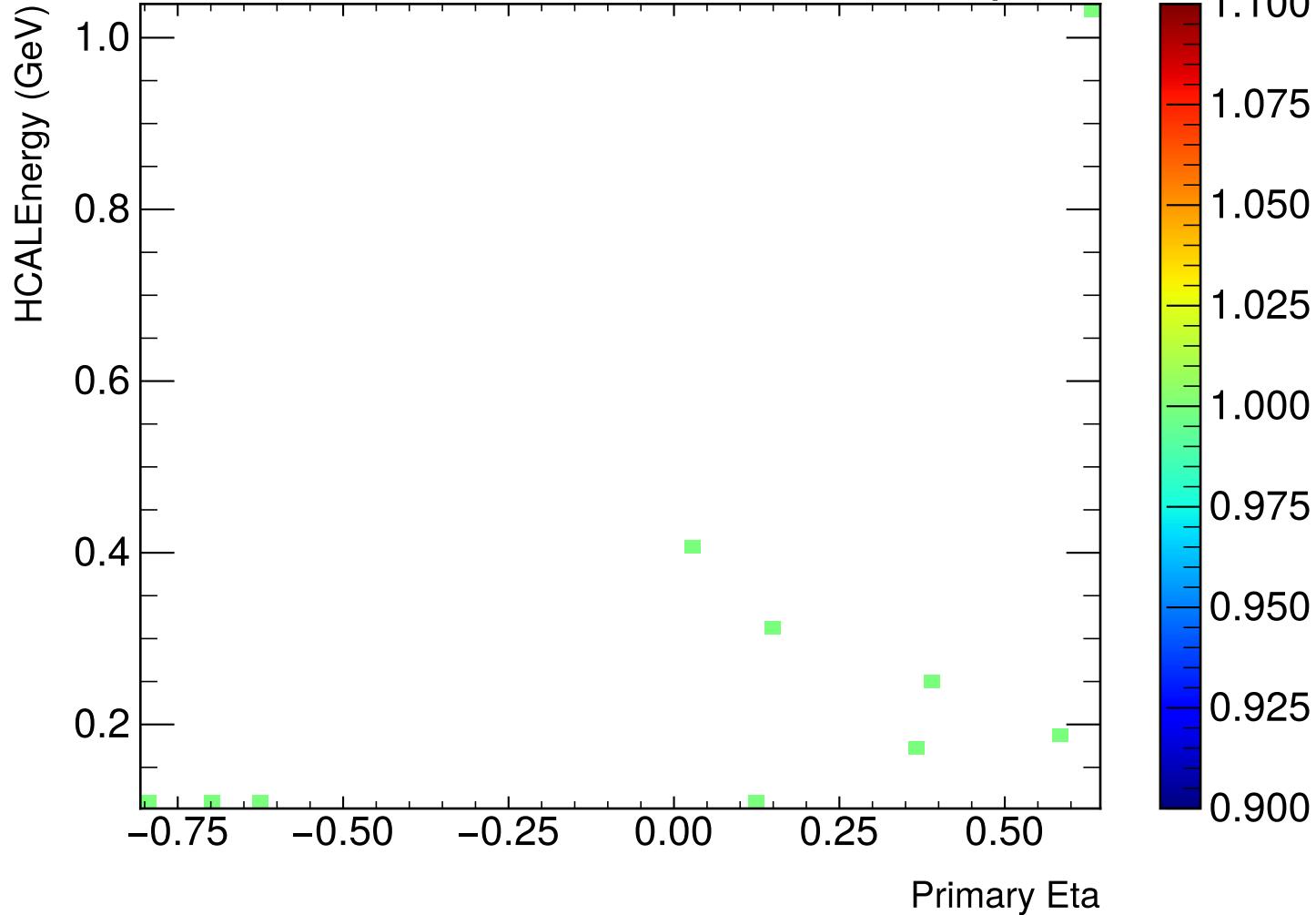


# ATHENA simulation [DD4hep]

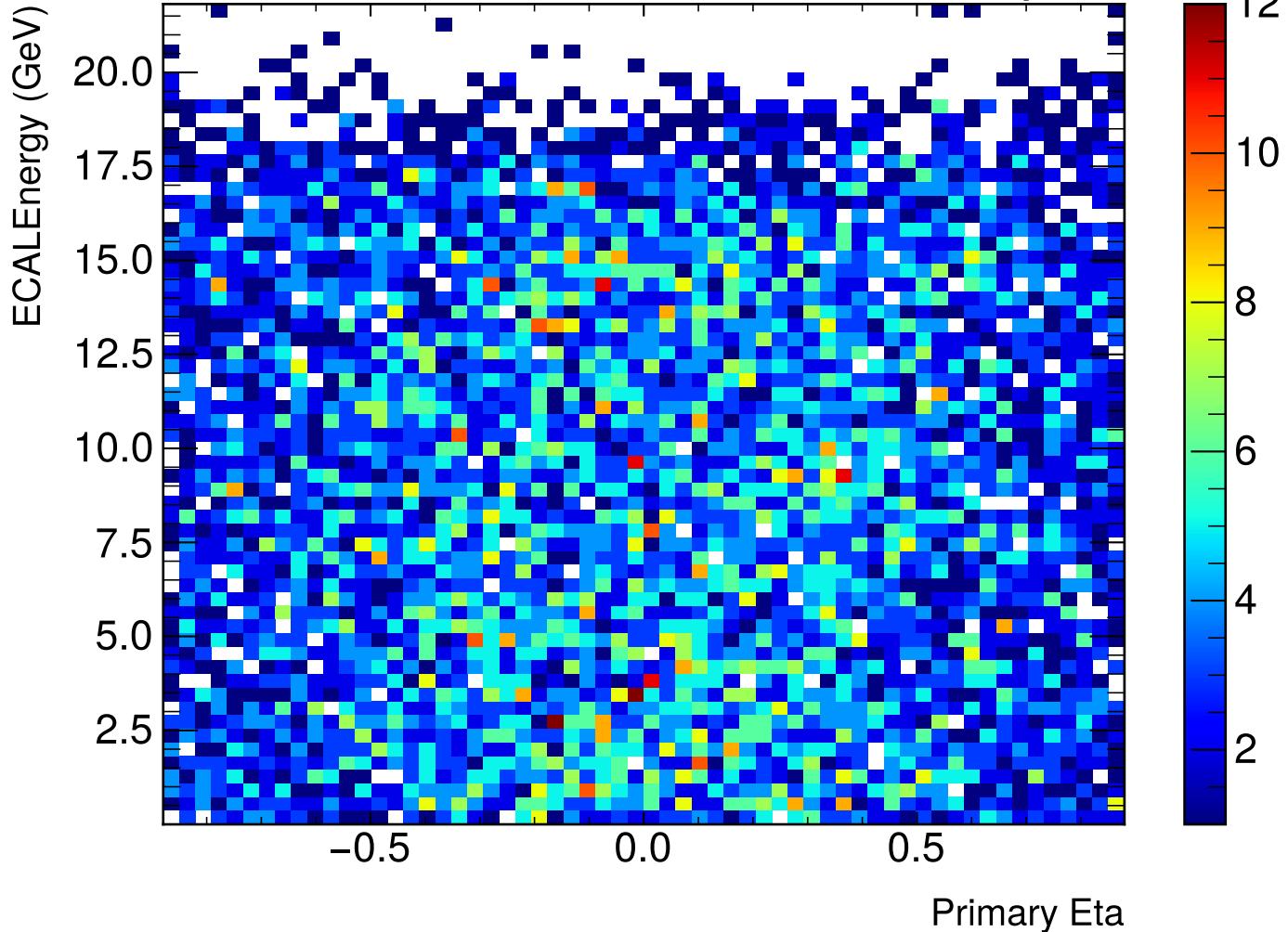
## Pythia8+Geant4



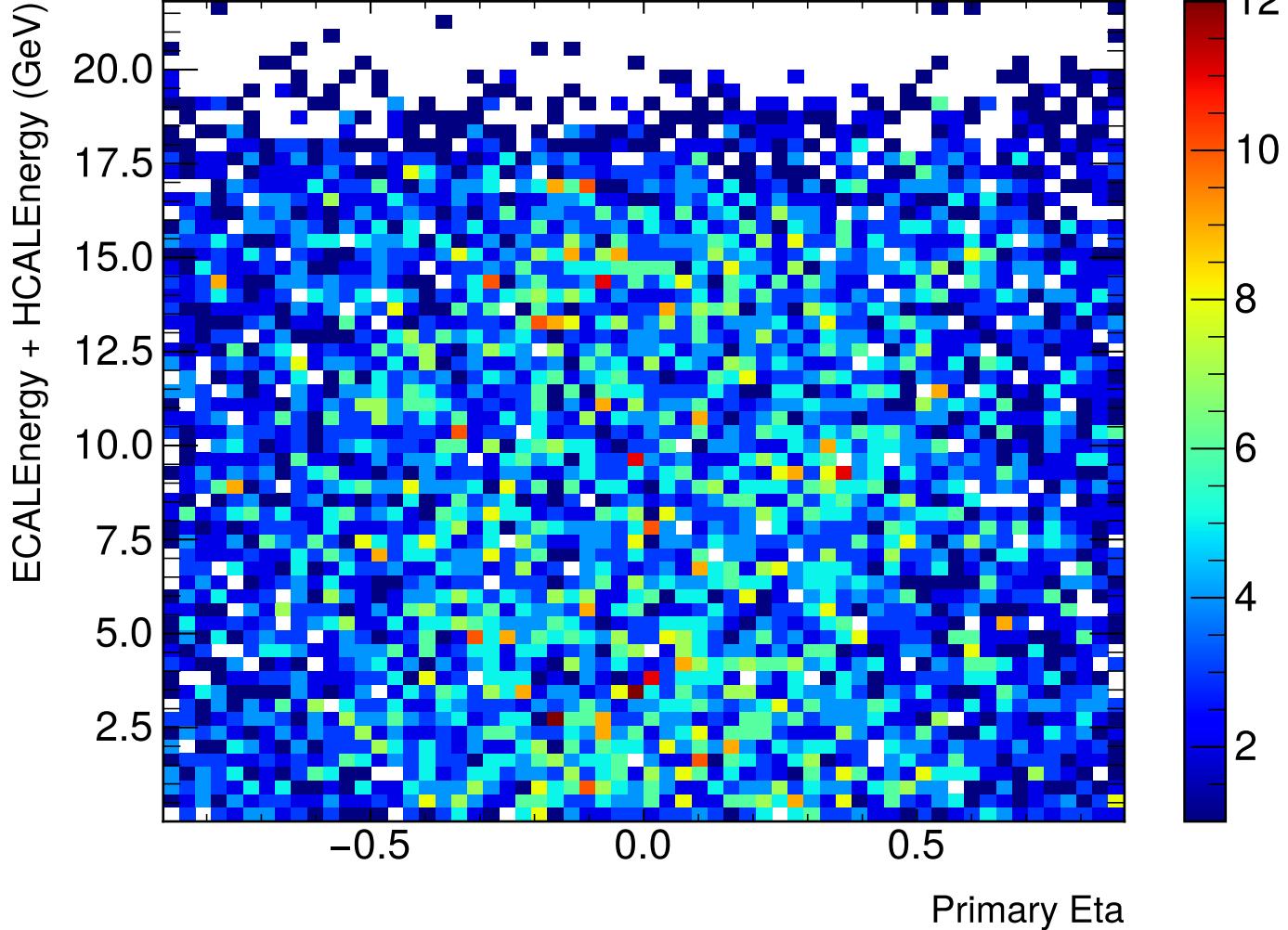
gamma@20GeV spanning  $-0.88 < \eta < 0.88$



gamma@20GeV spanning  $-0.88 < \eta < 0.88$

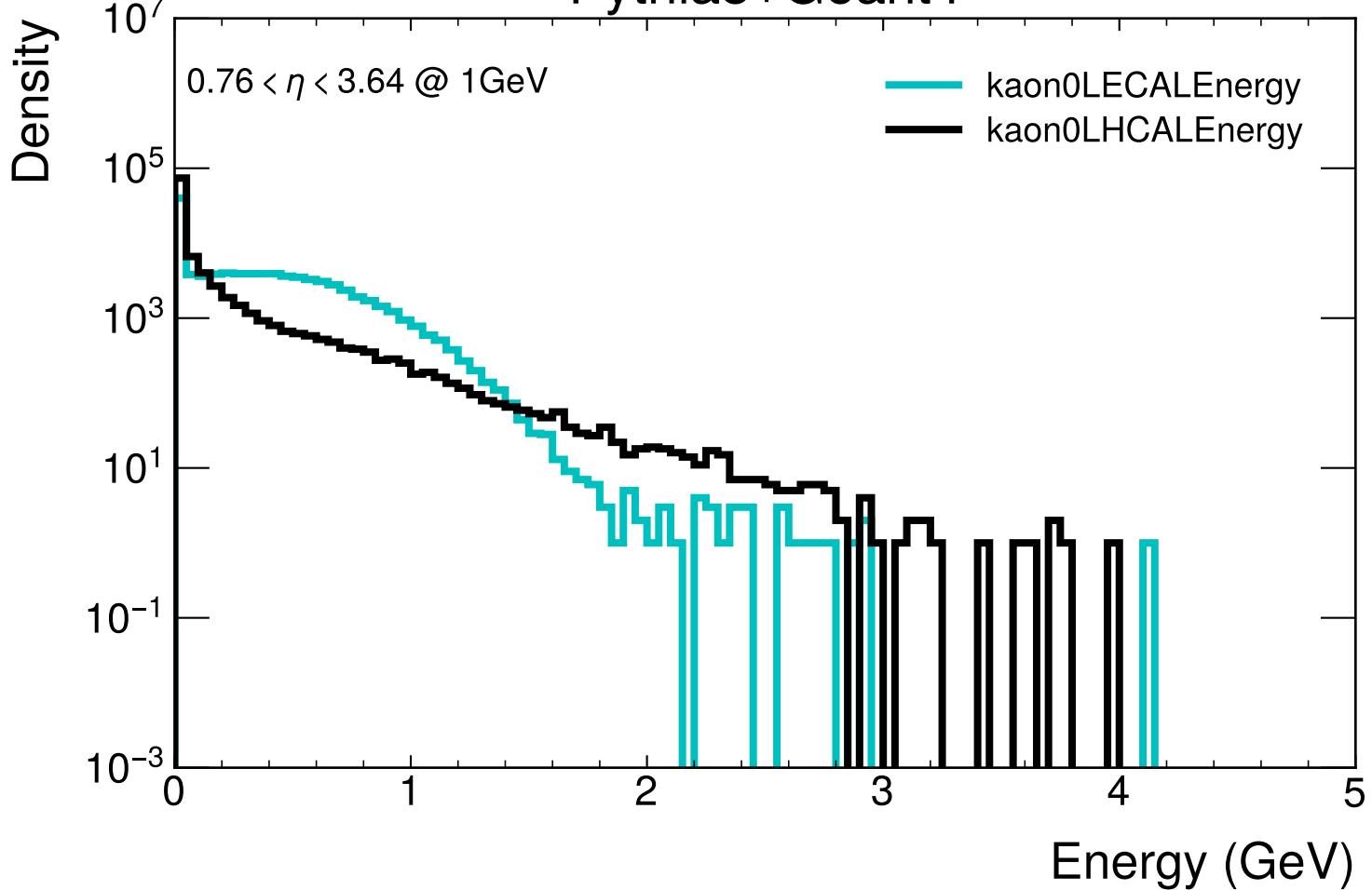


gamma@20GeV spanning  $-0.88 < \eta < 0.88$

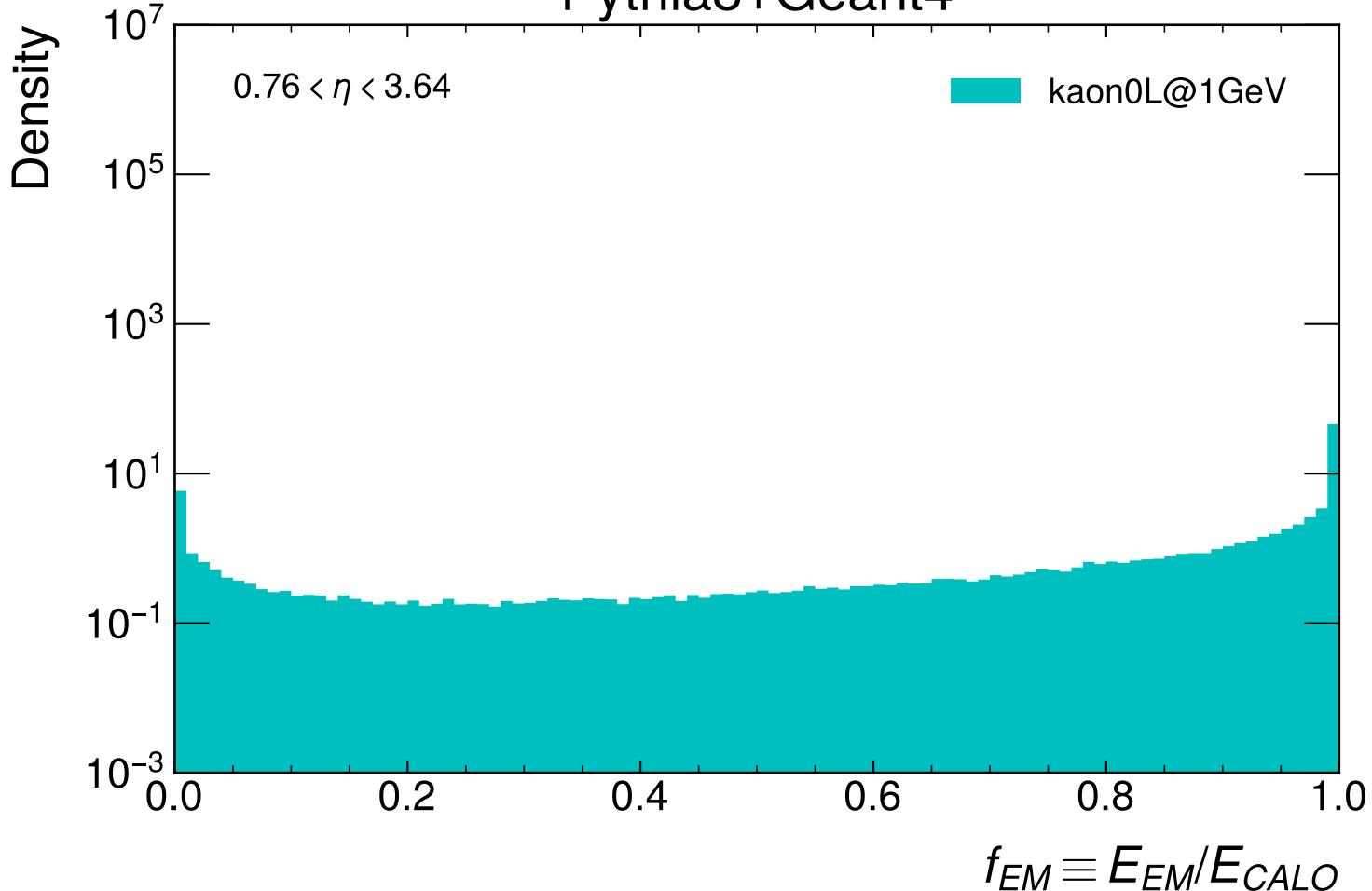


# ATHENA simulation [DD4hep]

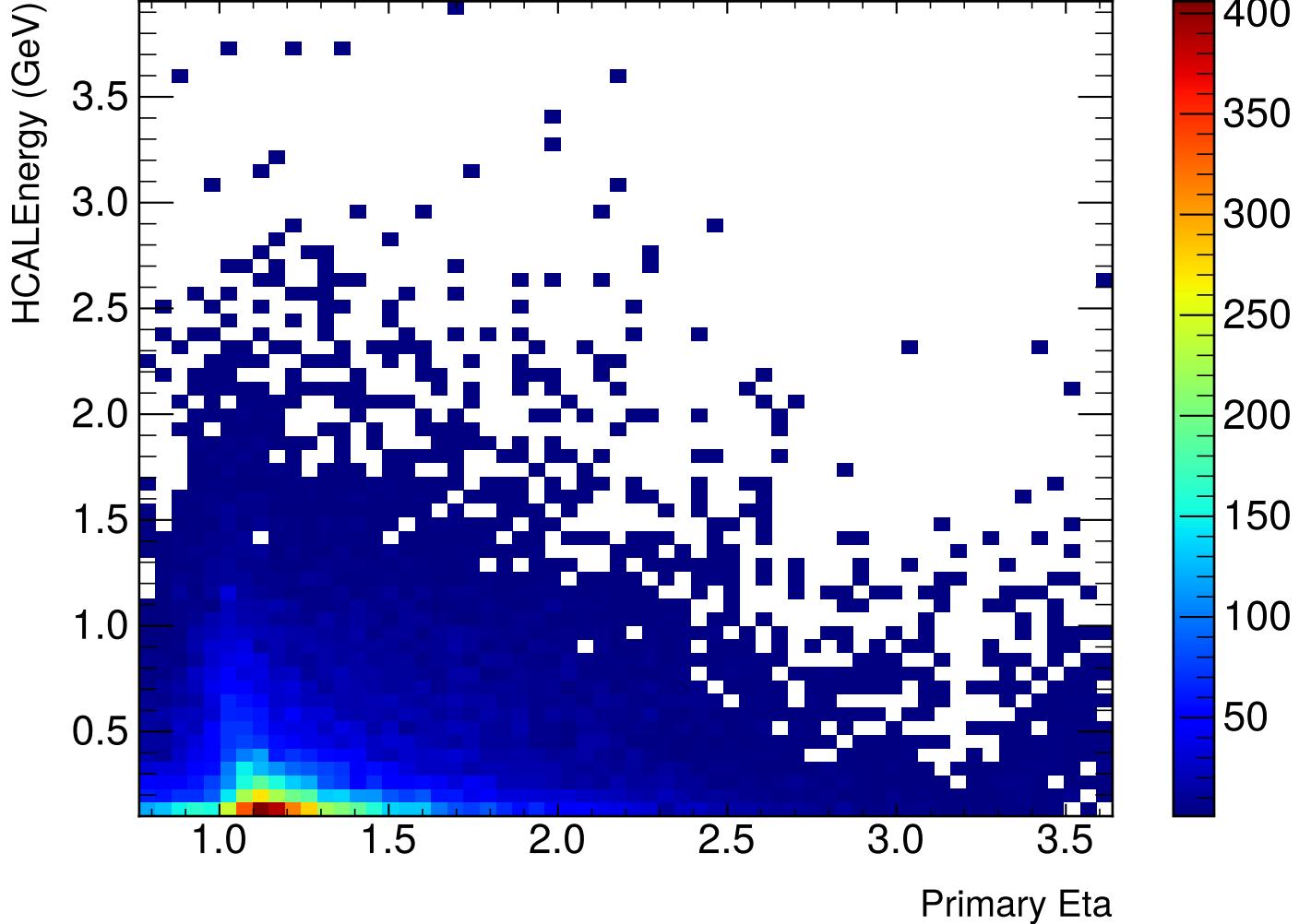
## Pythia8+Geant4



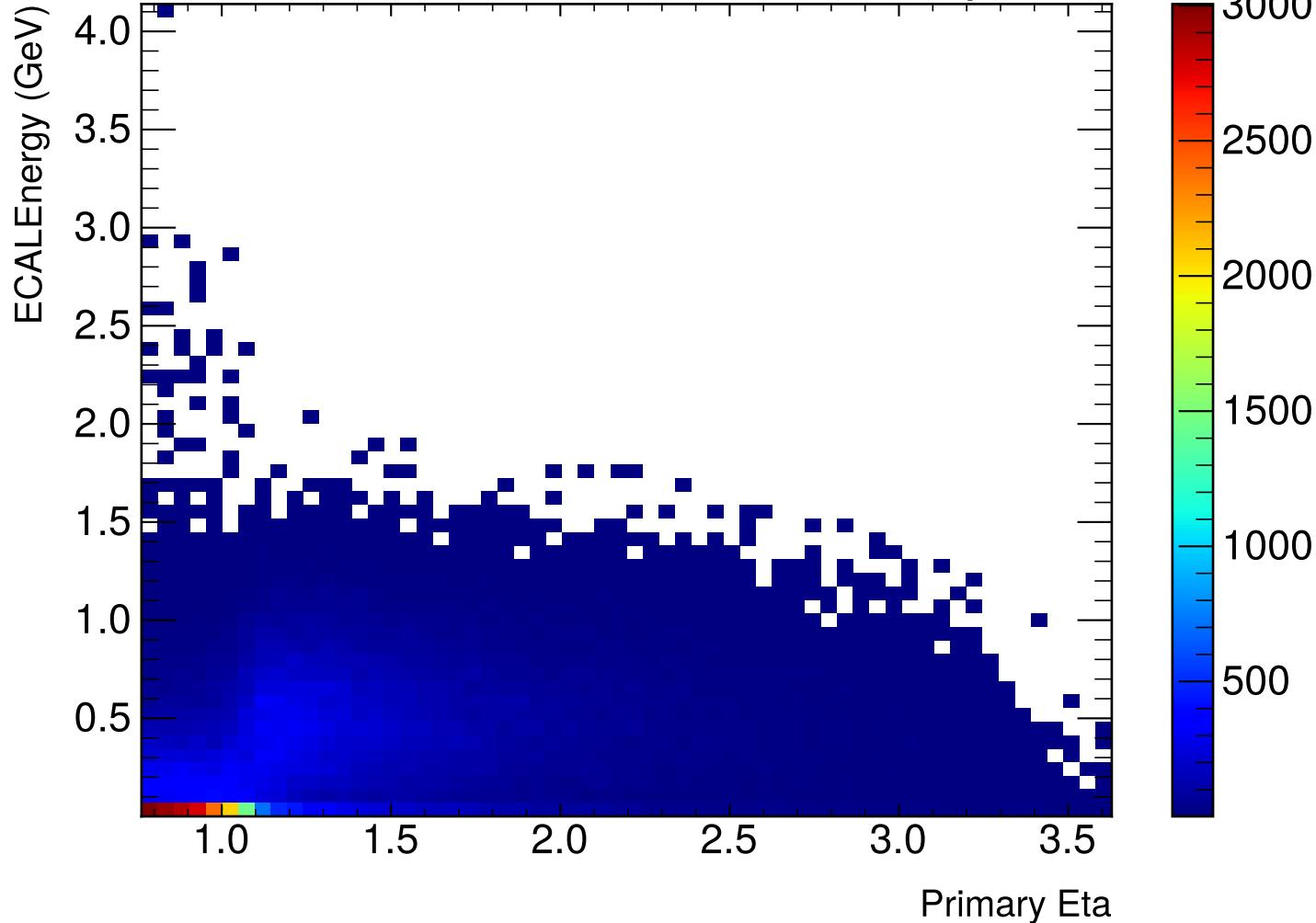
# ATHENA simulation [DD4hep] Pythia8+Geant4



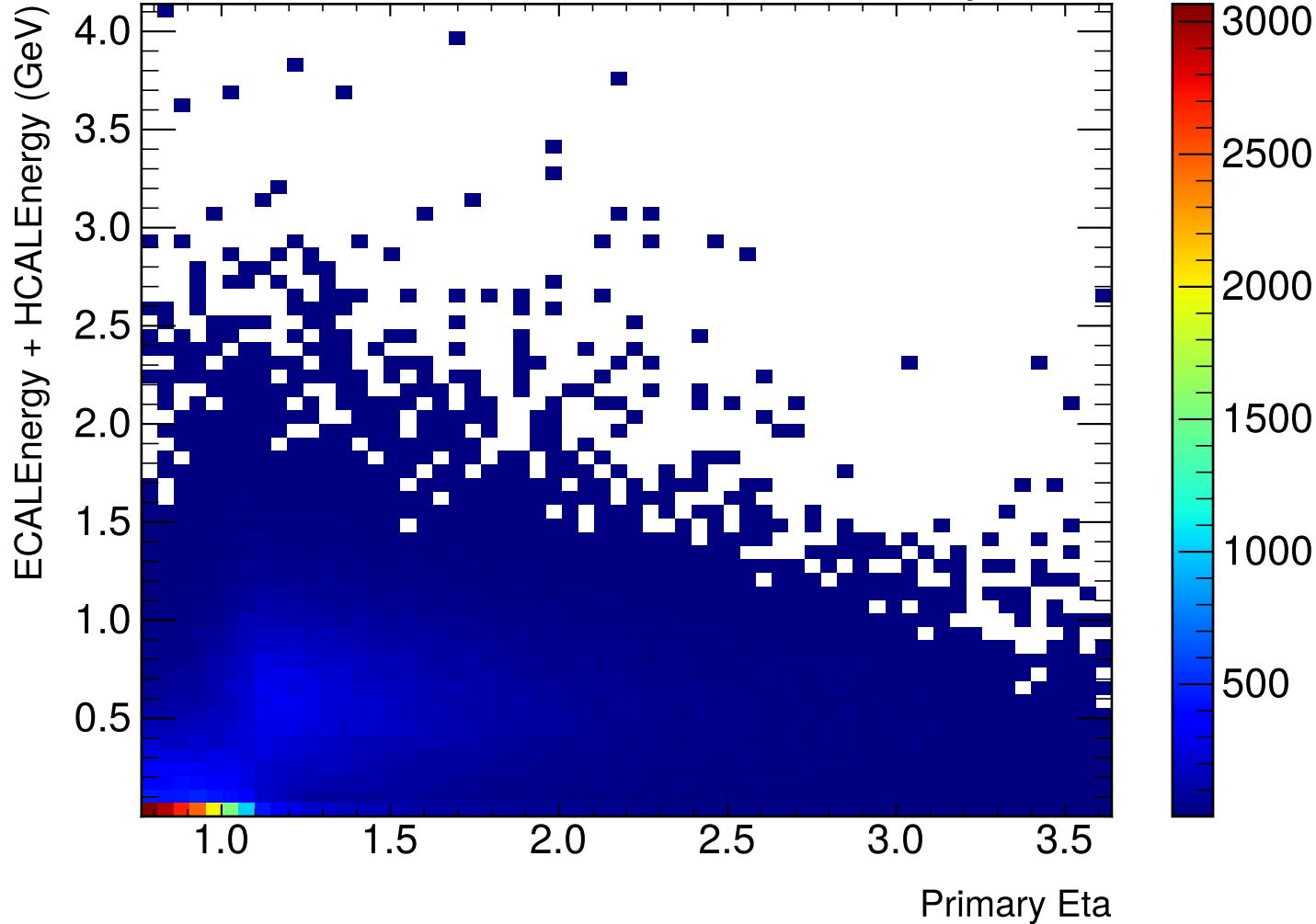
kaon0L@1GeV spanning  $0.76 < \eta < 3.64$



kaon0L@1GeV spanning  $0.76 < \eta < 3.64$

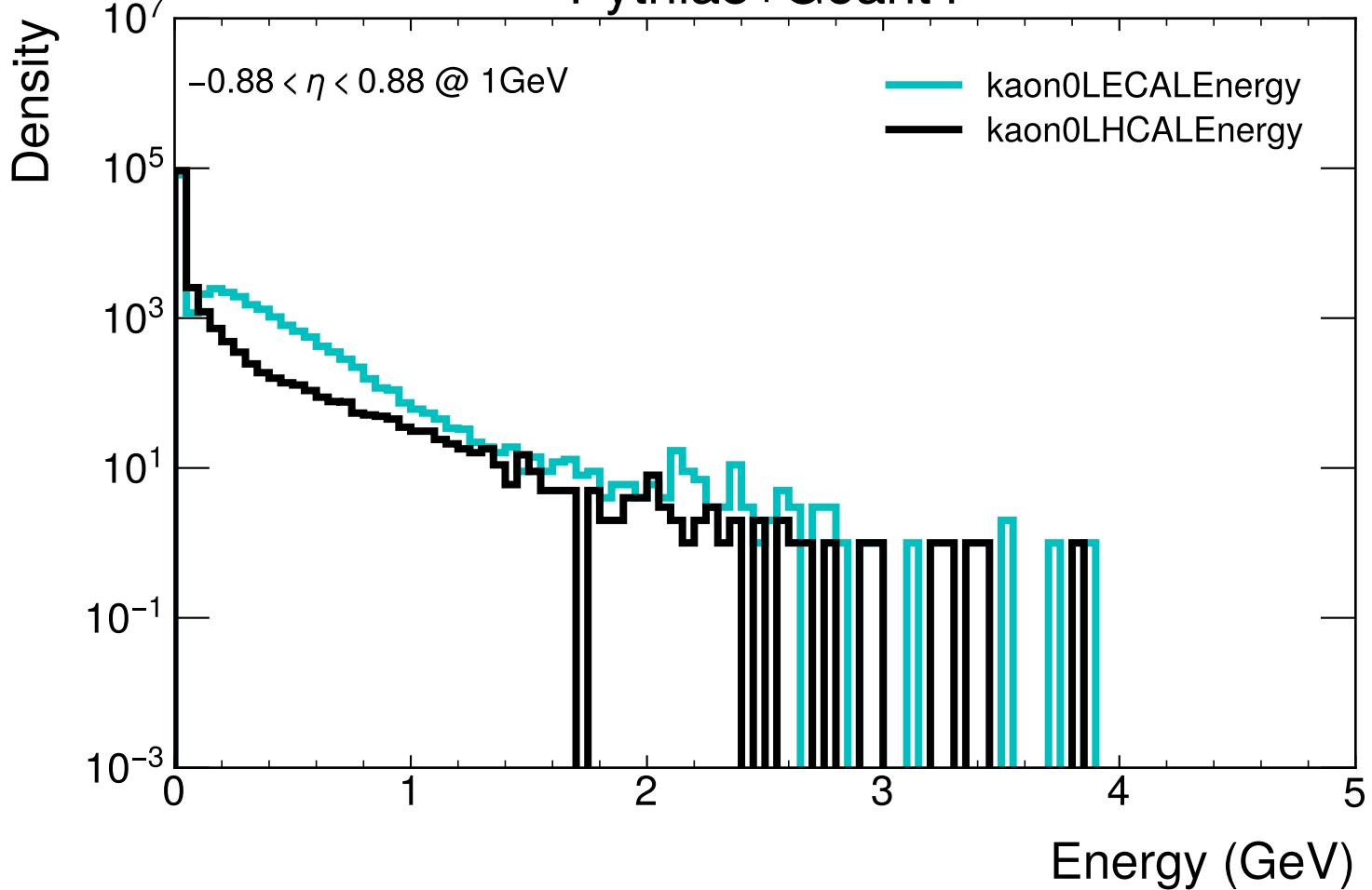


kaon0L@1GeV spanning  $0.76 < \eta < 3.64$

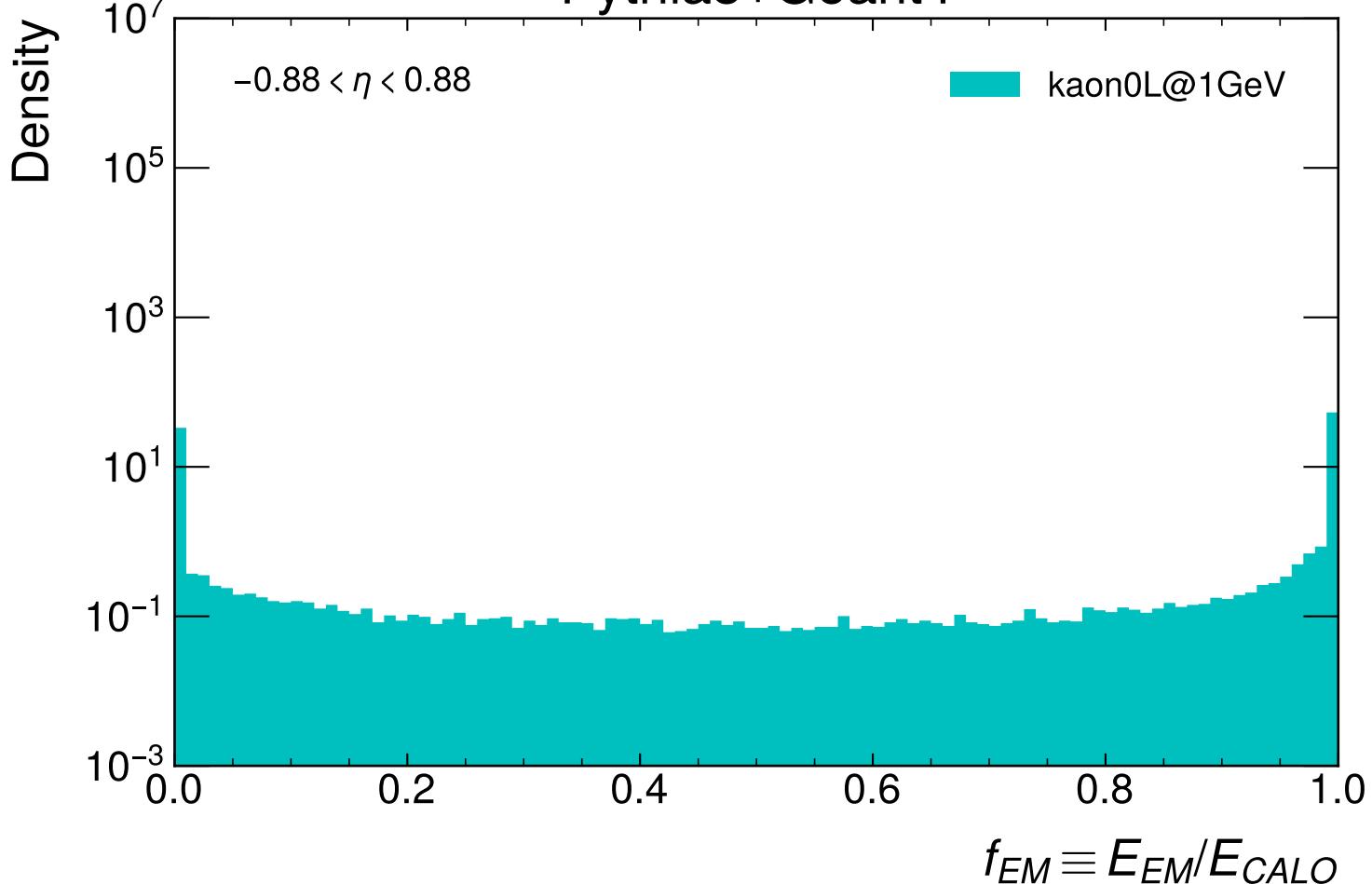


# ATHENA simulation [DD4hep]

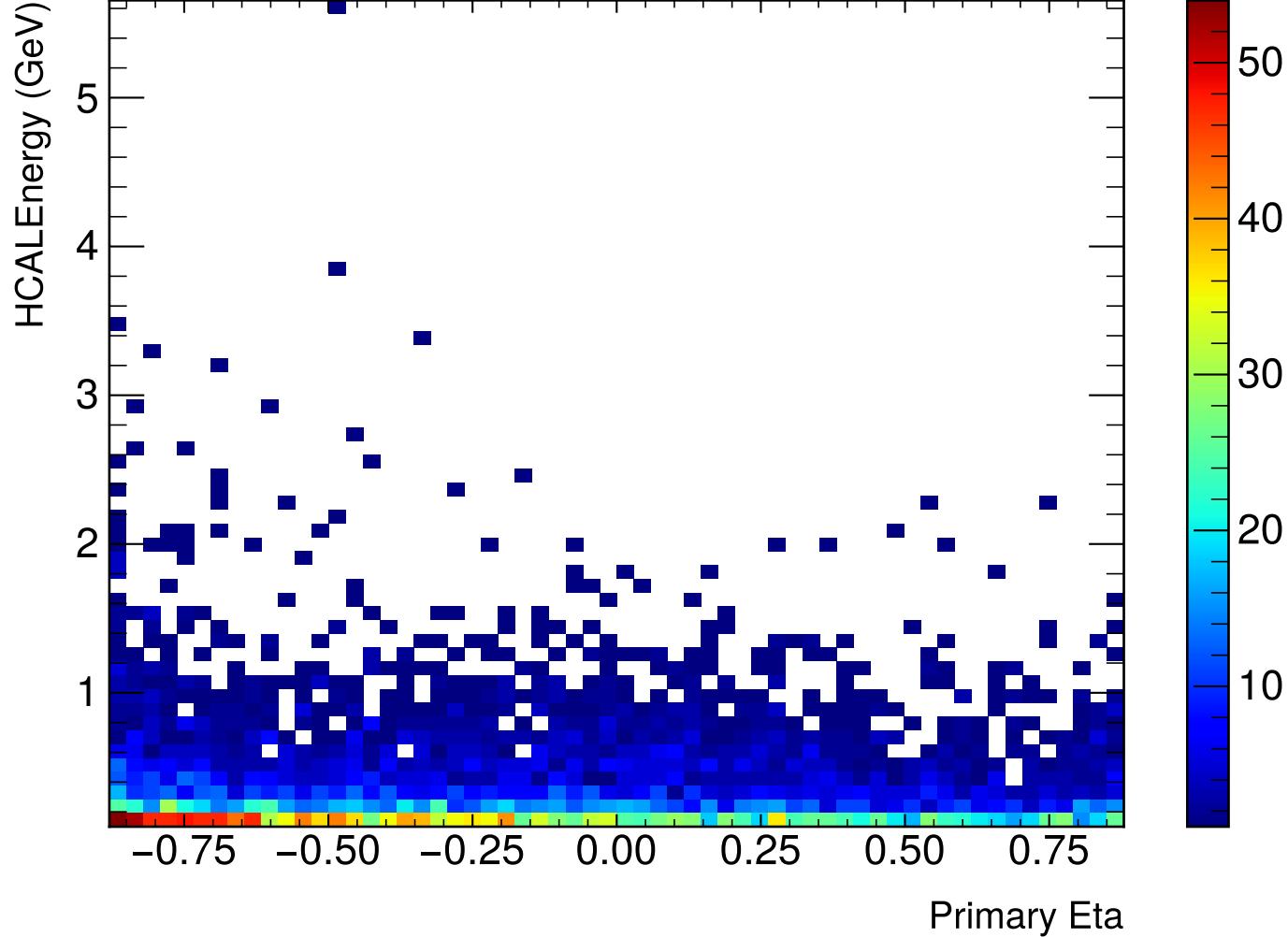
## Pythia8+Geant4



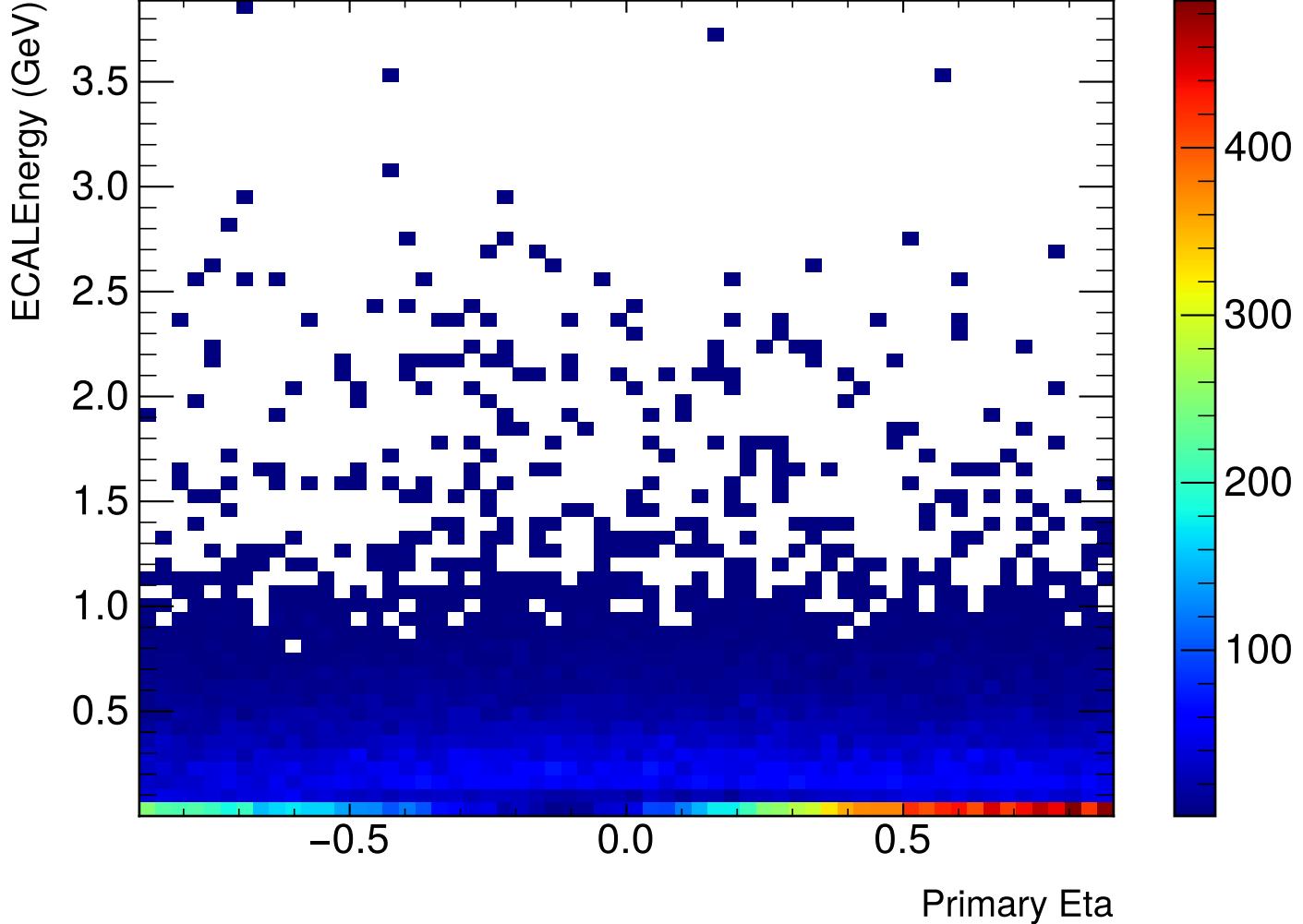
# ATHENA simulation [DD4hep] Pythia8+Geant4



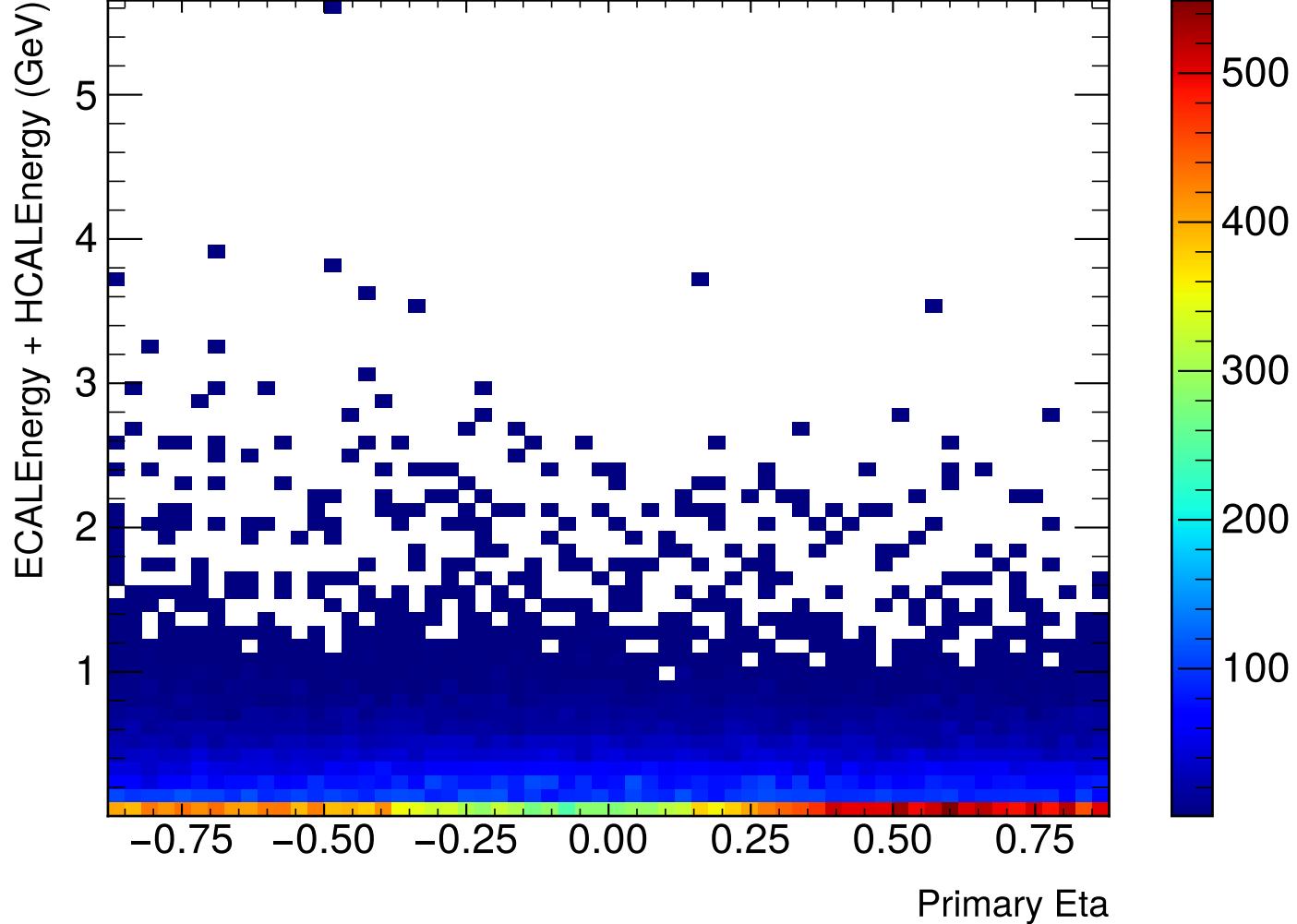
kaon0L@1GeV spanning  $-0.88 < \eta < 0.88$



kaon0L@1GeV spanning  $-0.88 < \eta < 0.88$

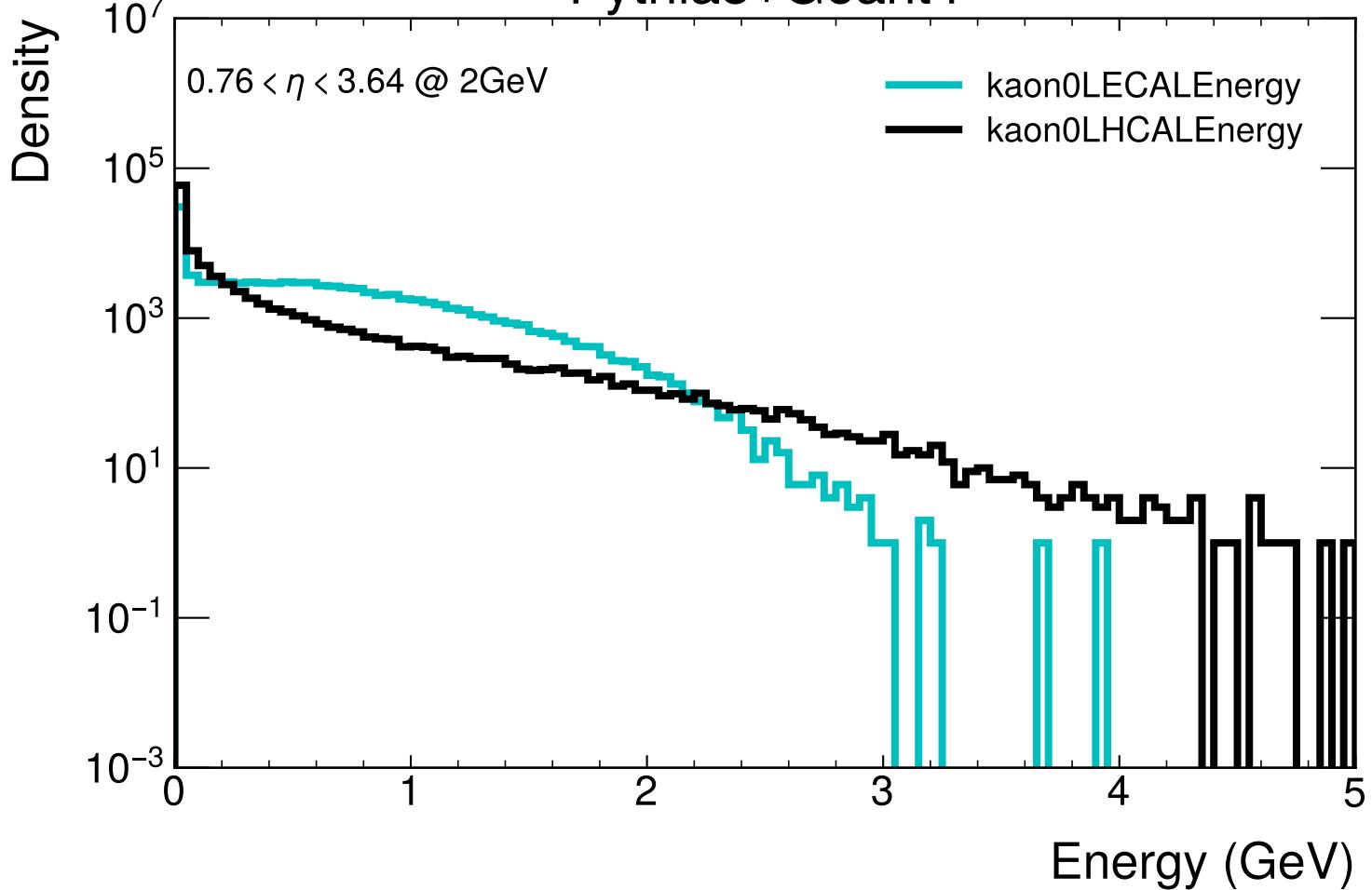


kaon0L@1GeV spanning  $-0.88 < \eta < 0.88$

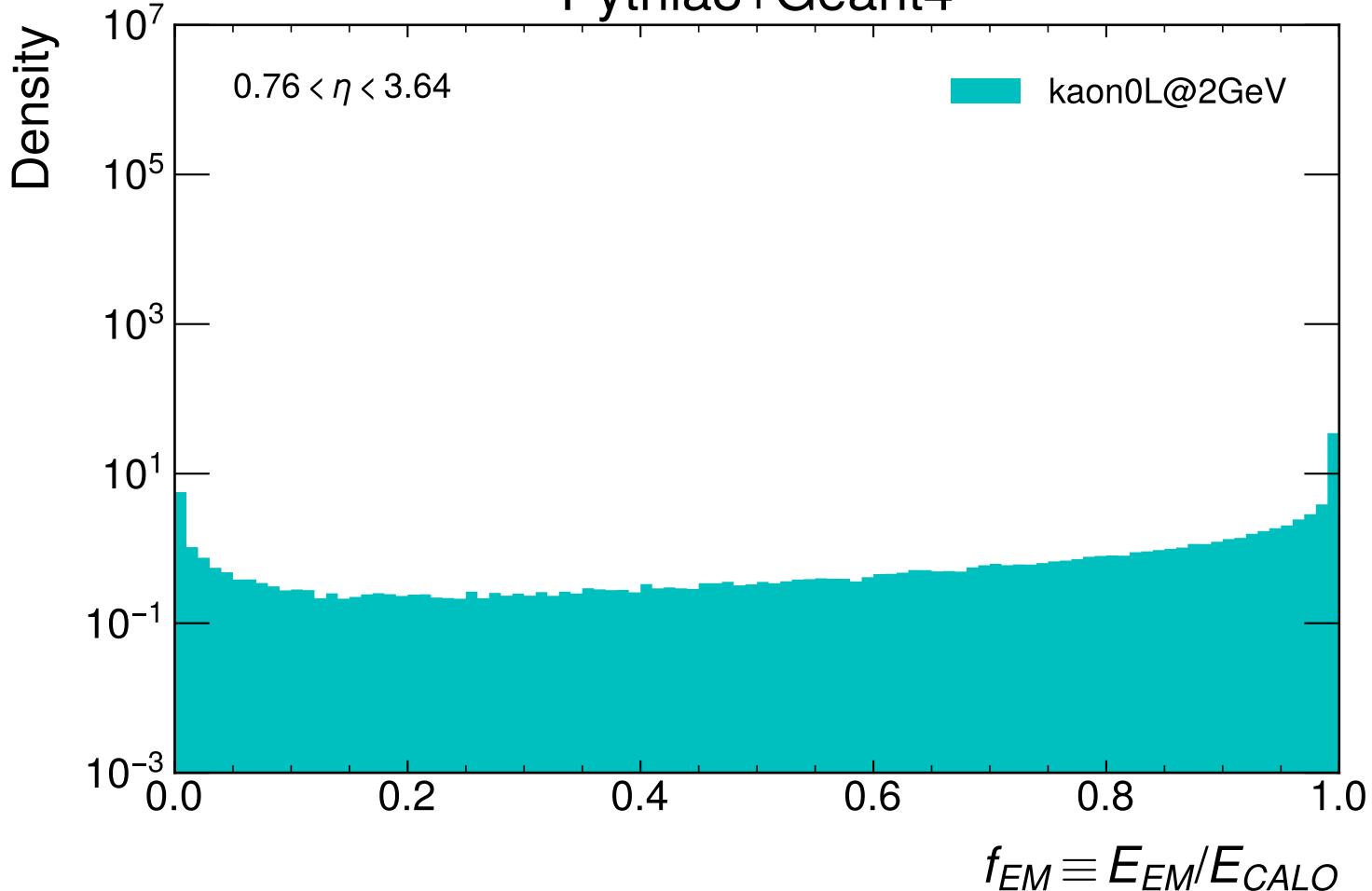


# ATHENA simulation [DD4hep]

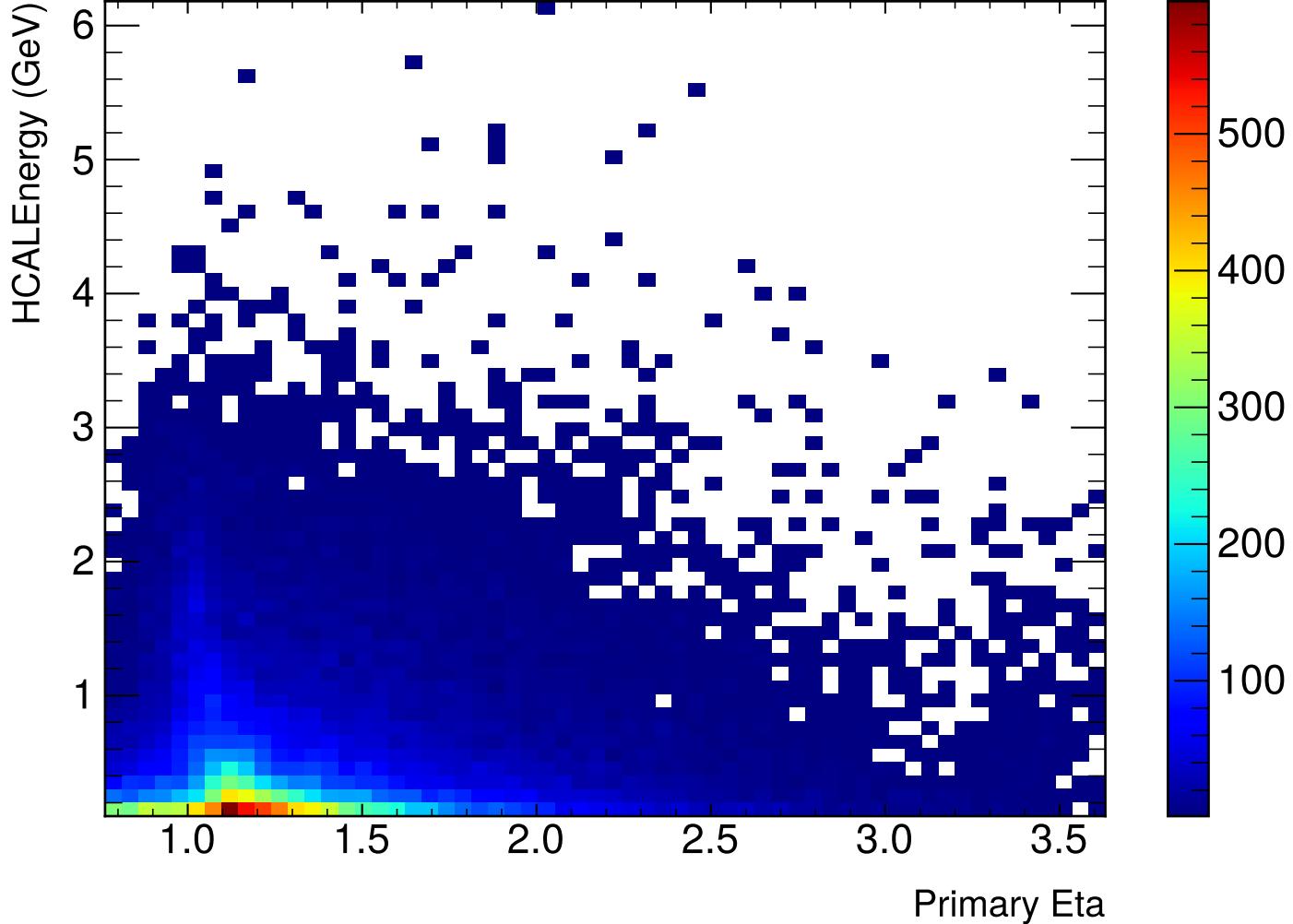
## Pythia8+Geant4



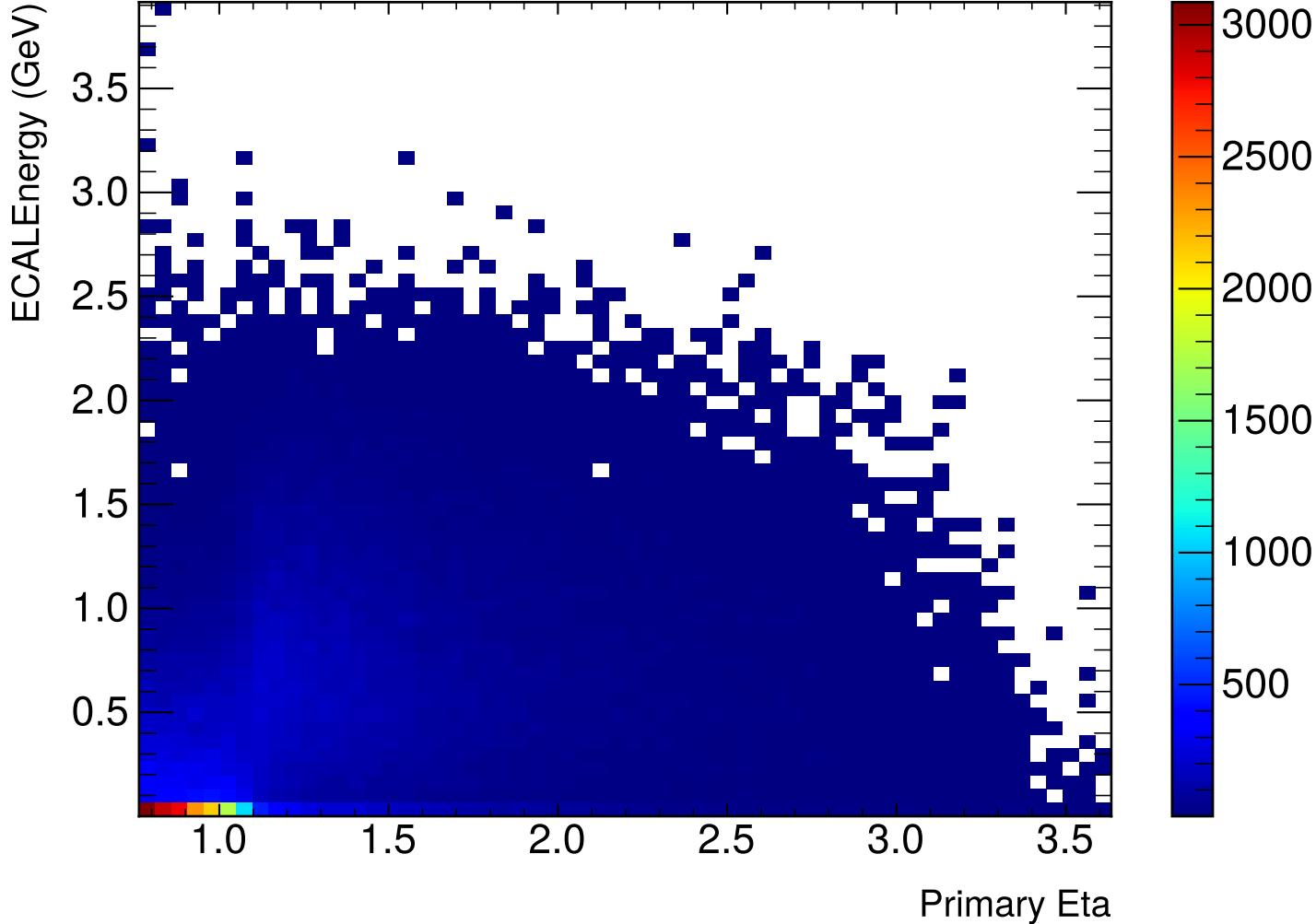
# ATHENA simulation [DD4hep] Pythia8+Geant4



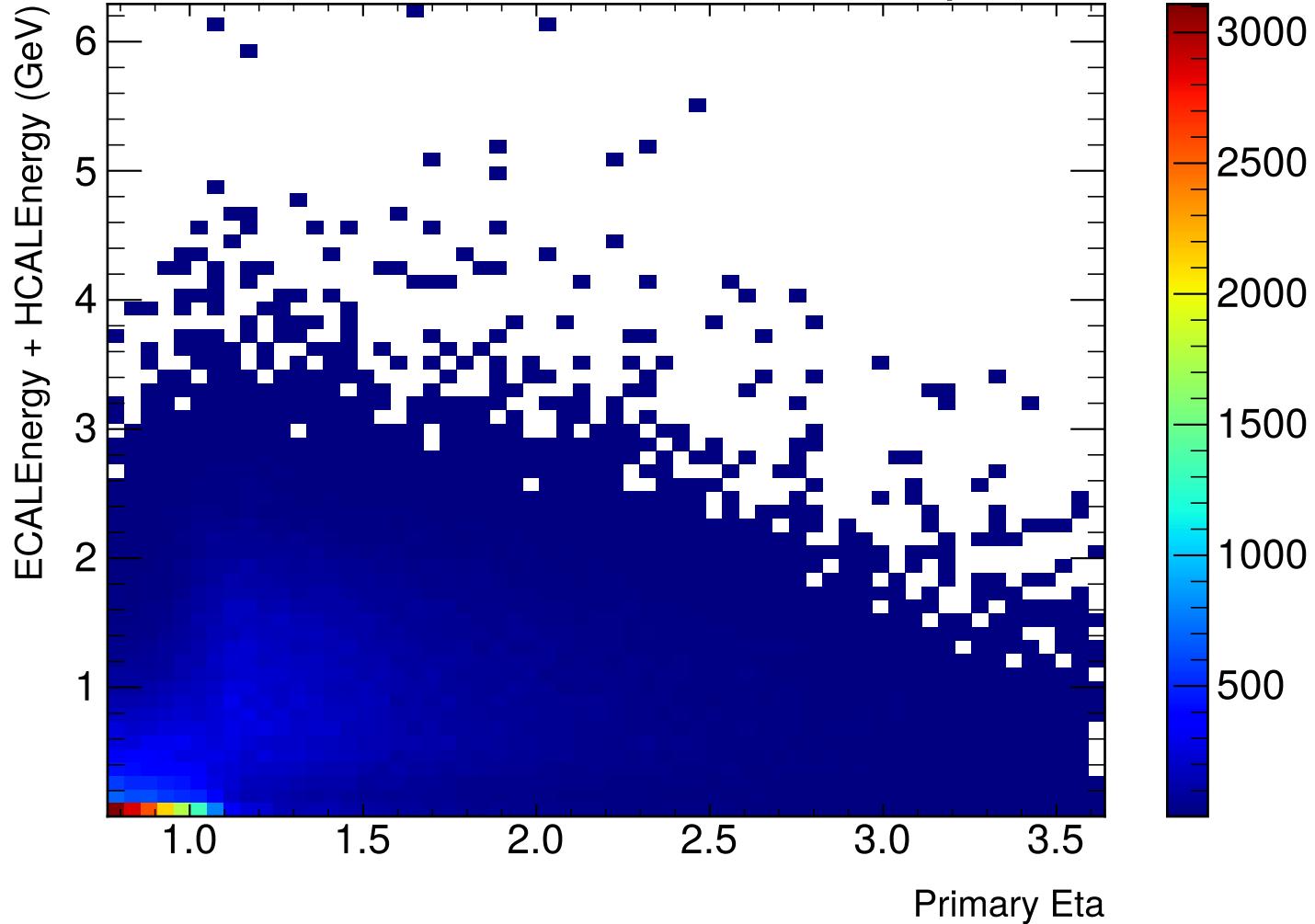
kaon0L@2GeV spanning  $0.76 < \eta < 3.64$



kaon0L@2GeV spanning  $0.76 < \eta < 3.64$

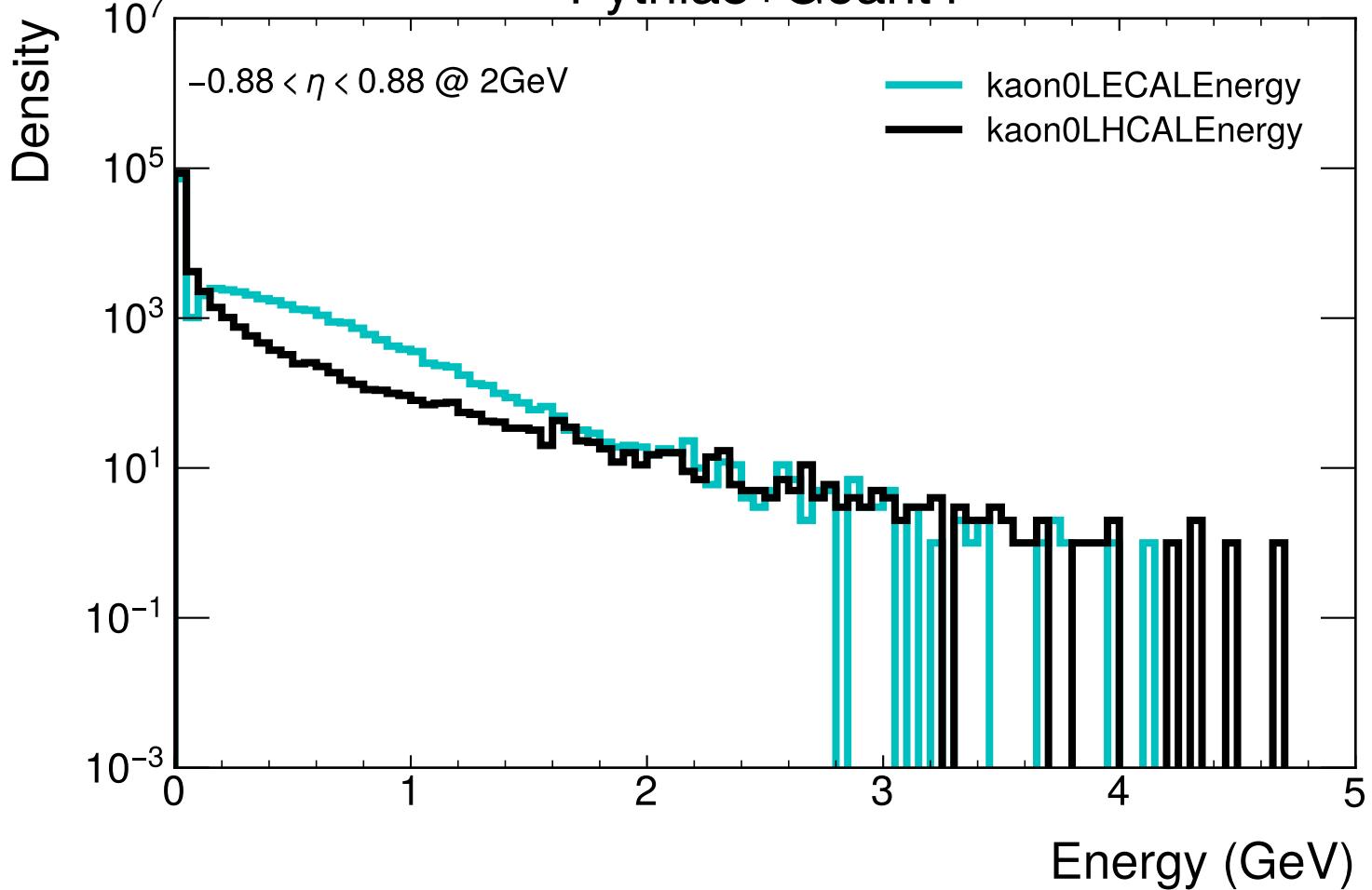


kaon0L@2GeV spanning  $0.76 < \eta < 3.64$

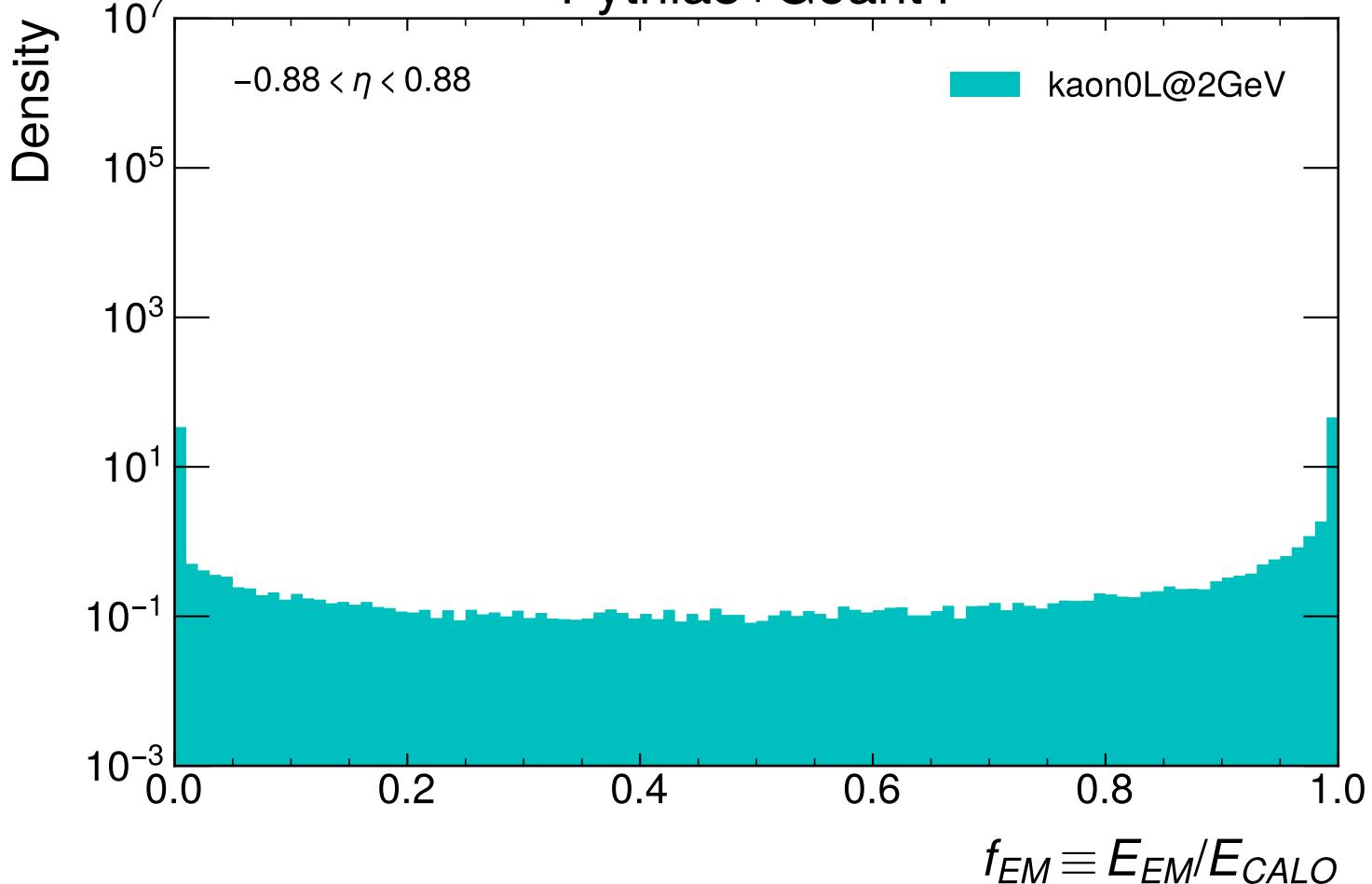


# ATHENA simulation [DD4hep]

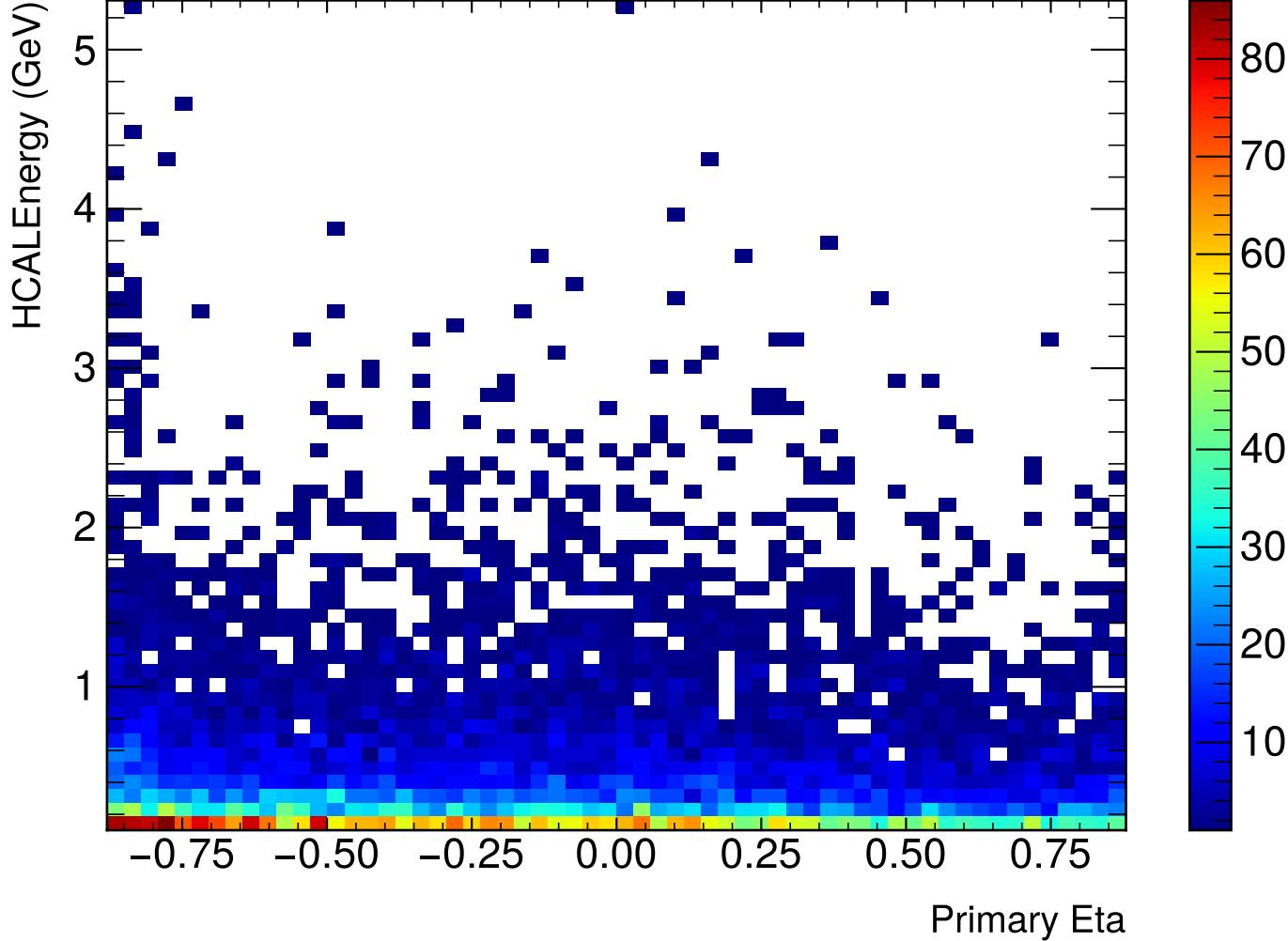
## Pythia8+Geant4



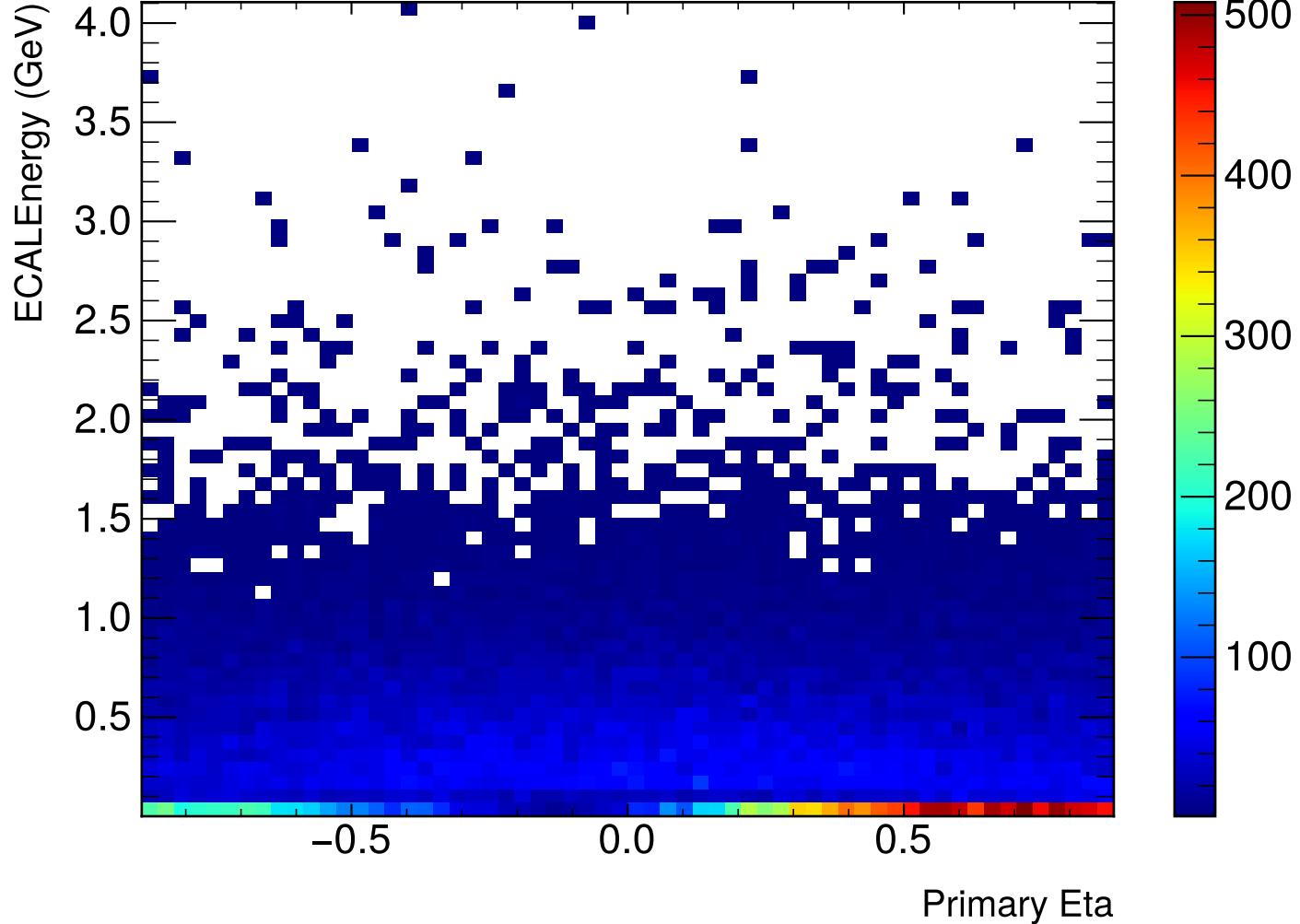
# ATHENA simulation [DD4hep] Pythia8+Geant4



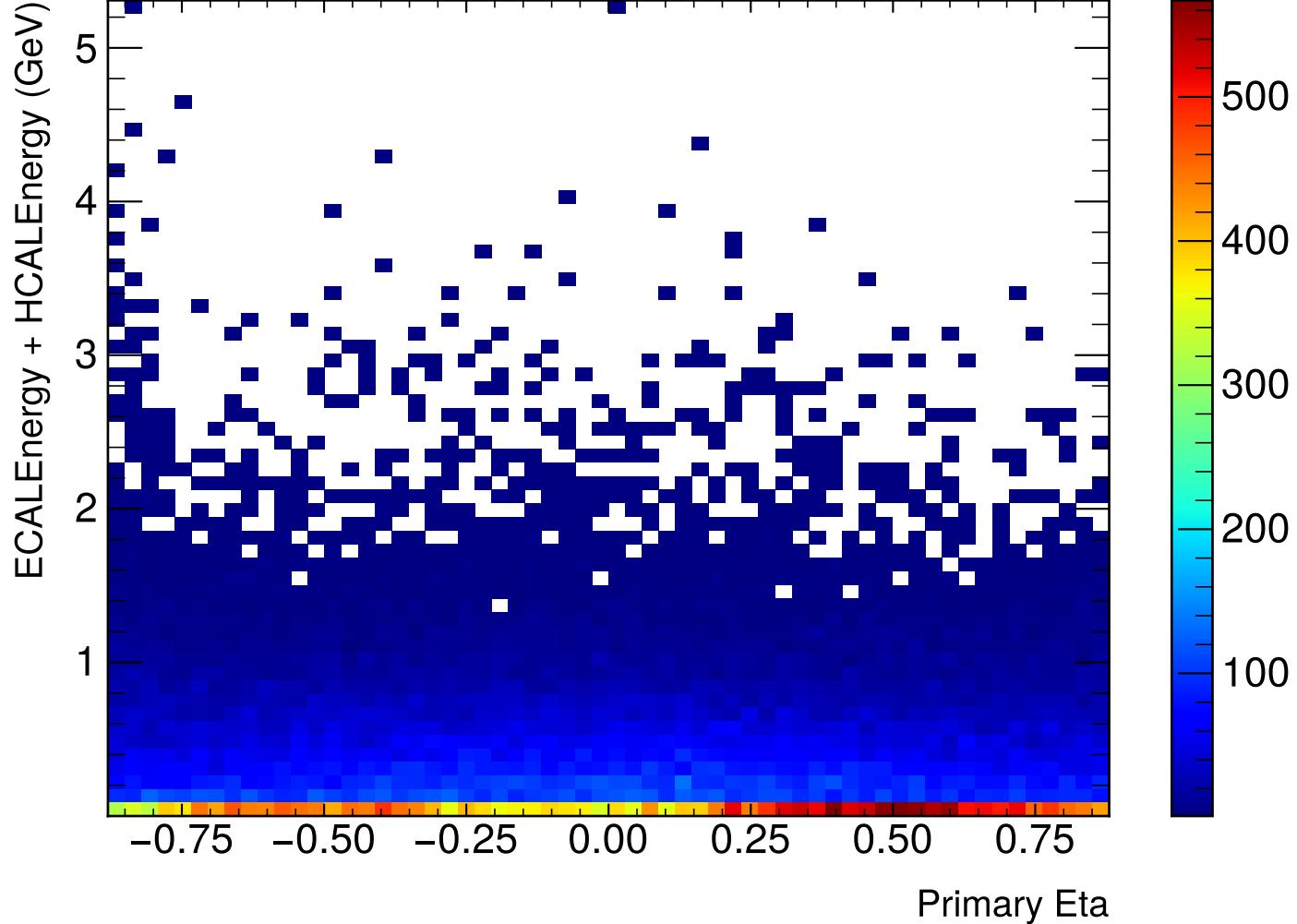
kaon0L@2GeV spanning  $-0.88 < \eta < 0.88$



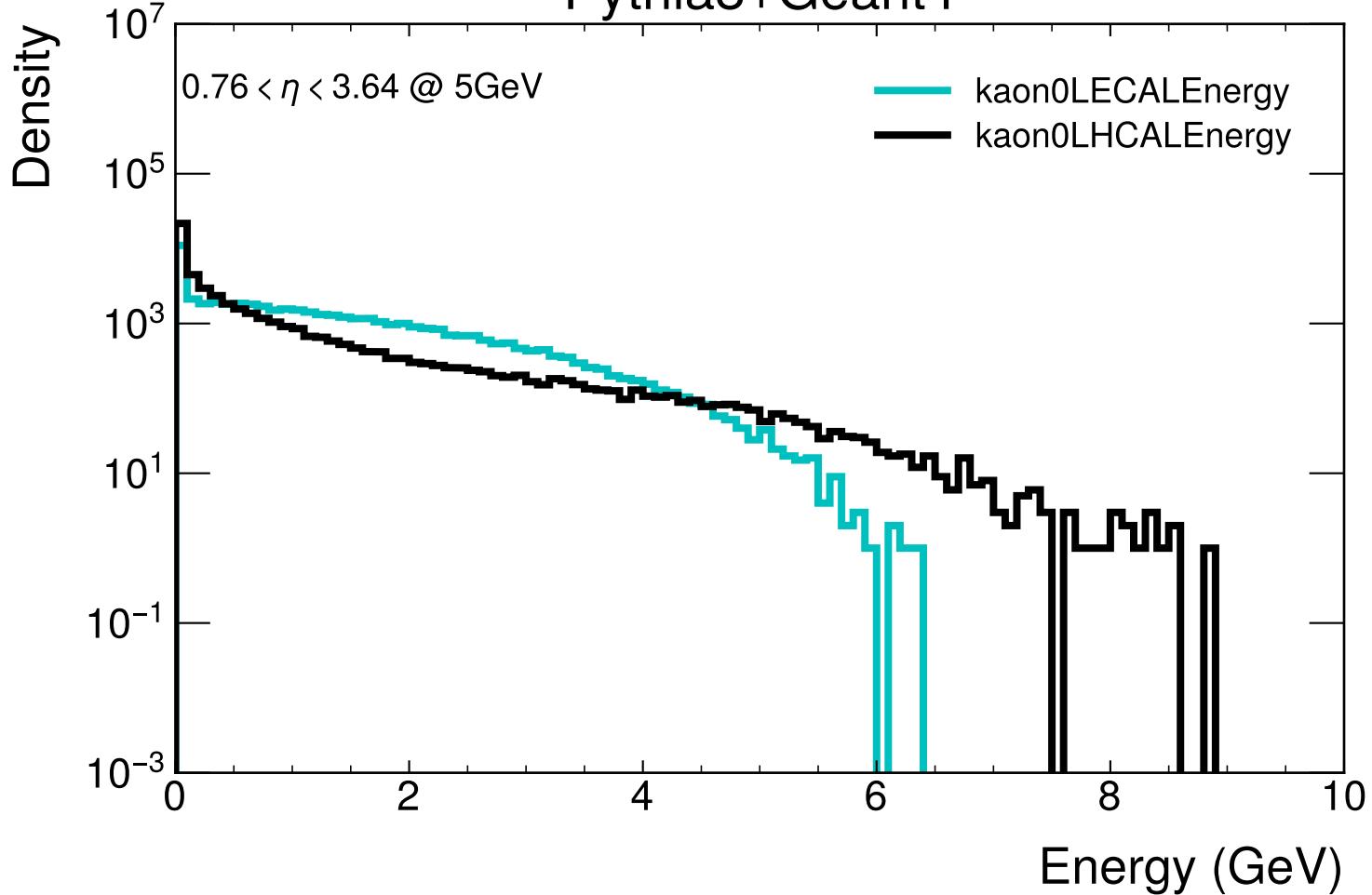
kaon0L@2GeV spanning  $-0.88 < \eta < 0.88$



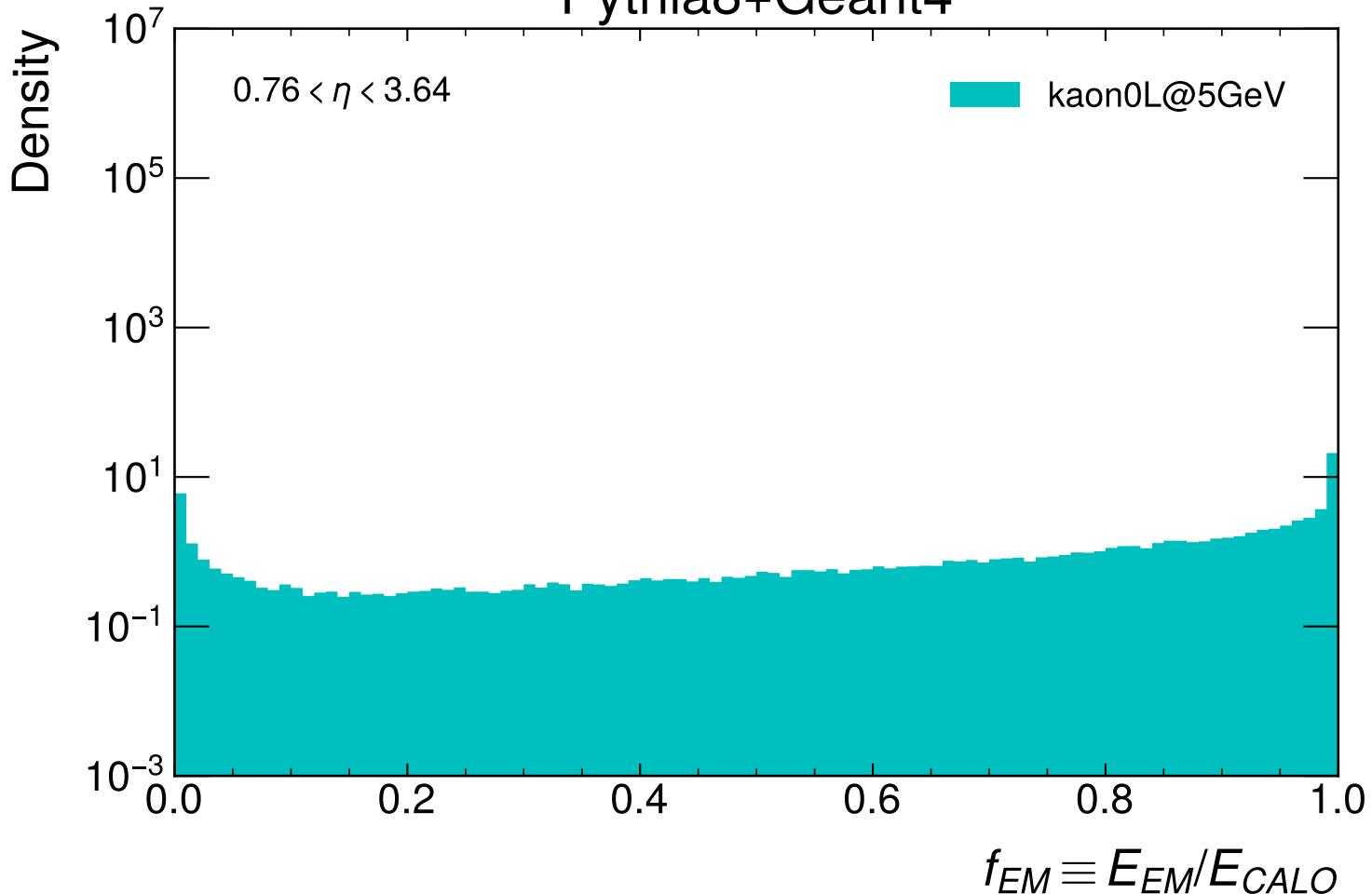
kaon0L@2GeV spanning  $-0.88 < \eta < 0.88$



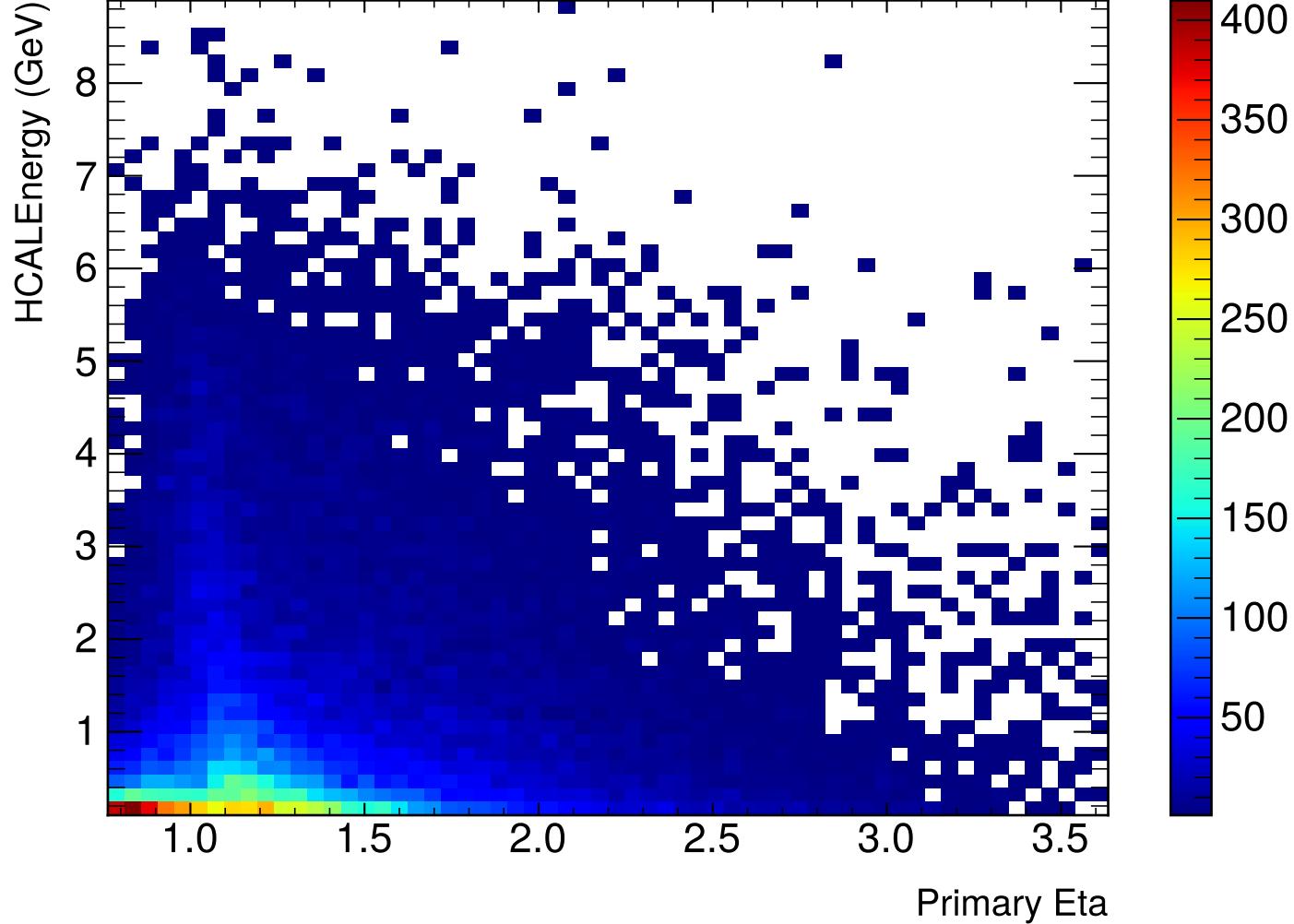
# ATHENA simulation [DD4hep] Pythia8+Geant4



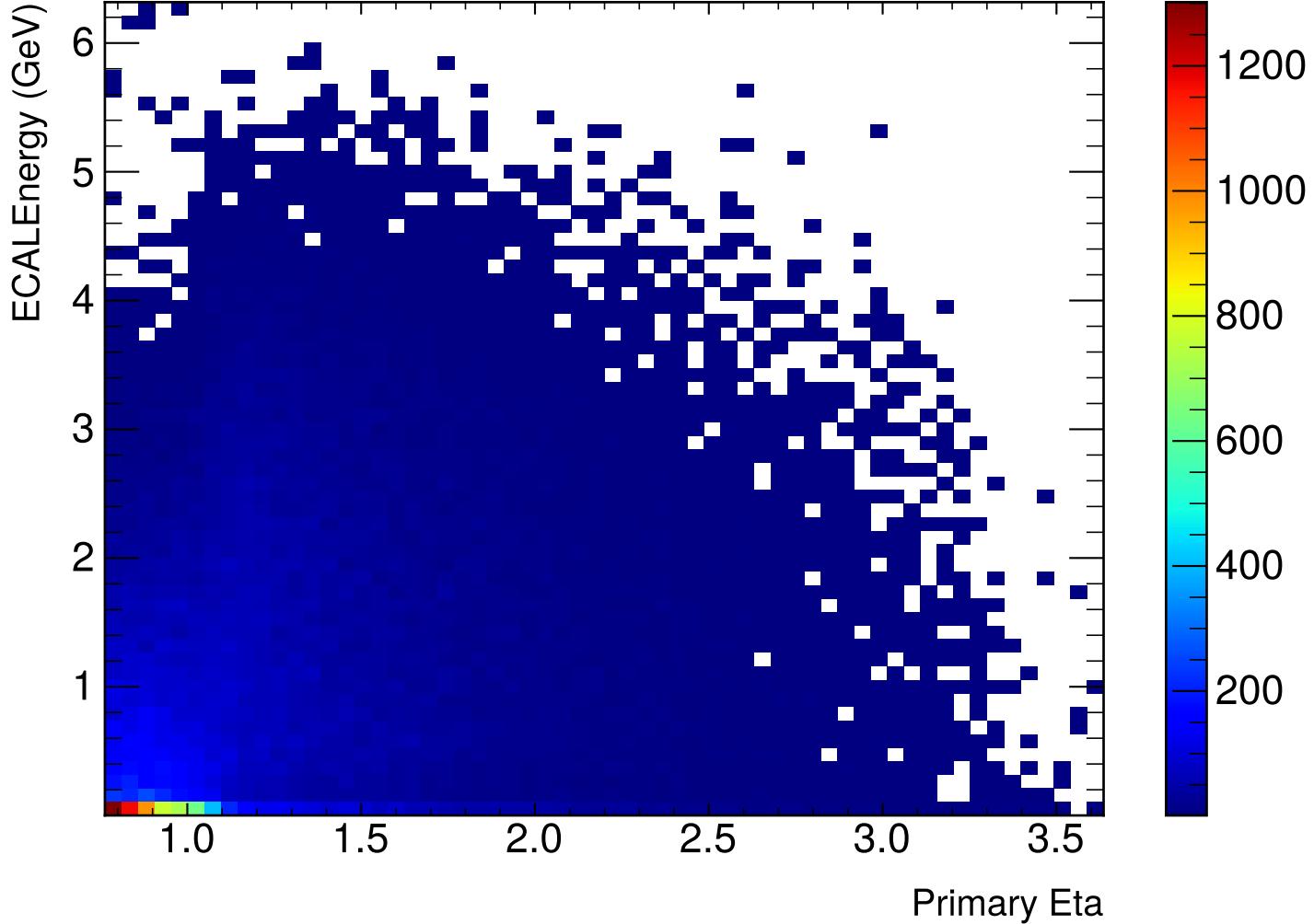
# ATHENA simulation [DD4hep] Pythia8+Geant4



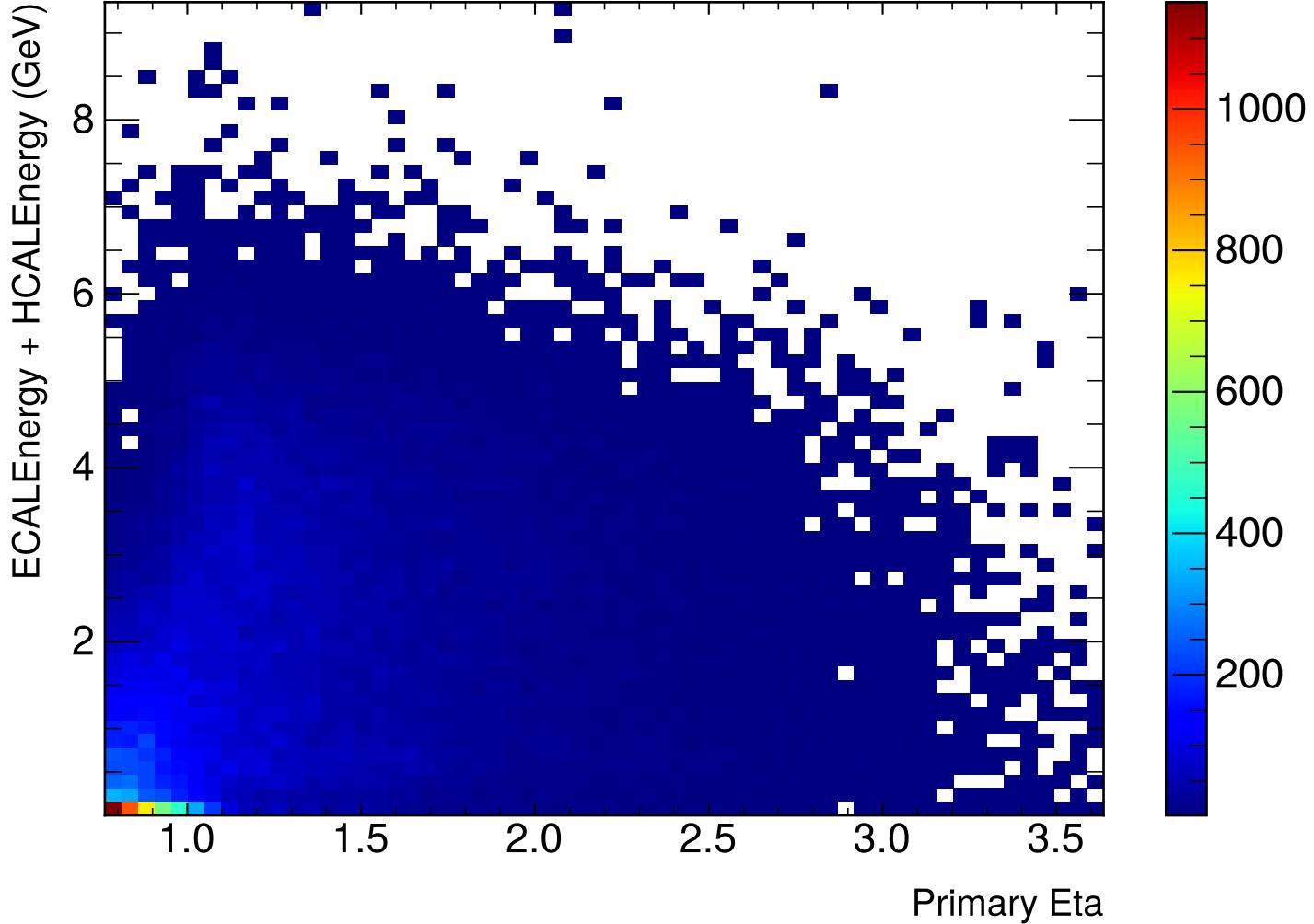
kaon0L@5GeV spanning  $0.76 < \eta < 3.64$



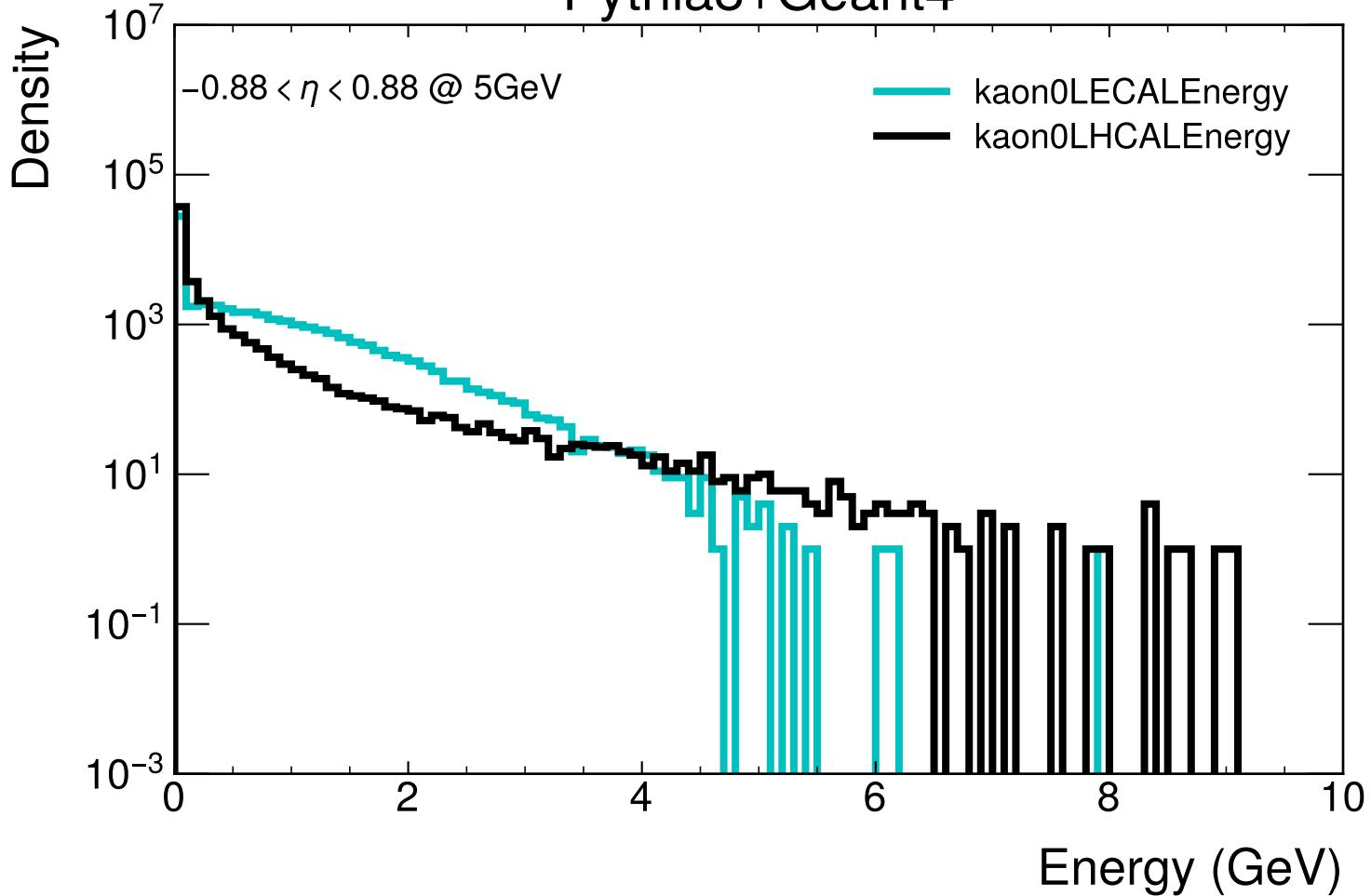
kaon0L@5GeV spanning  $0.76 < \eta < 3.64$



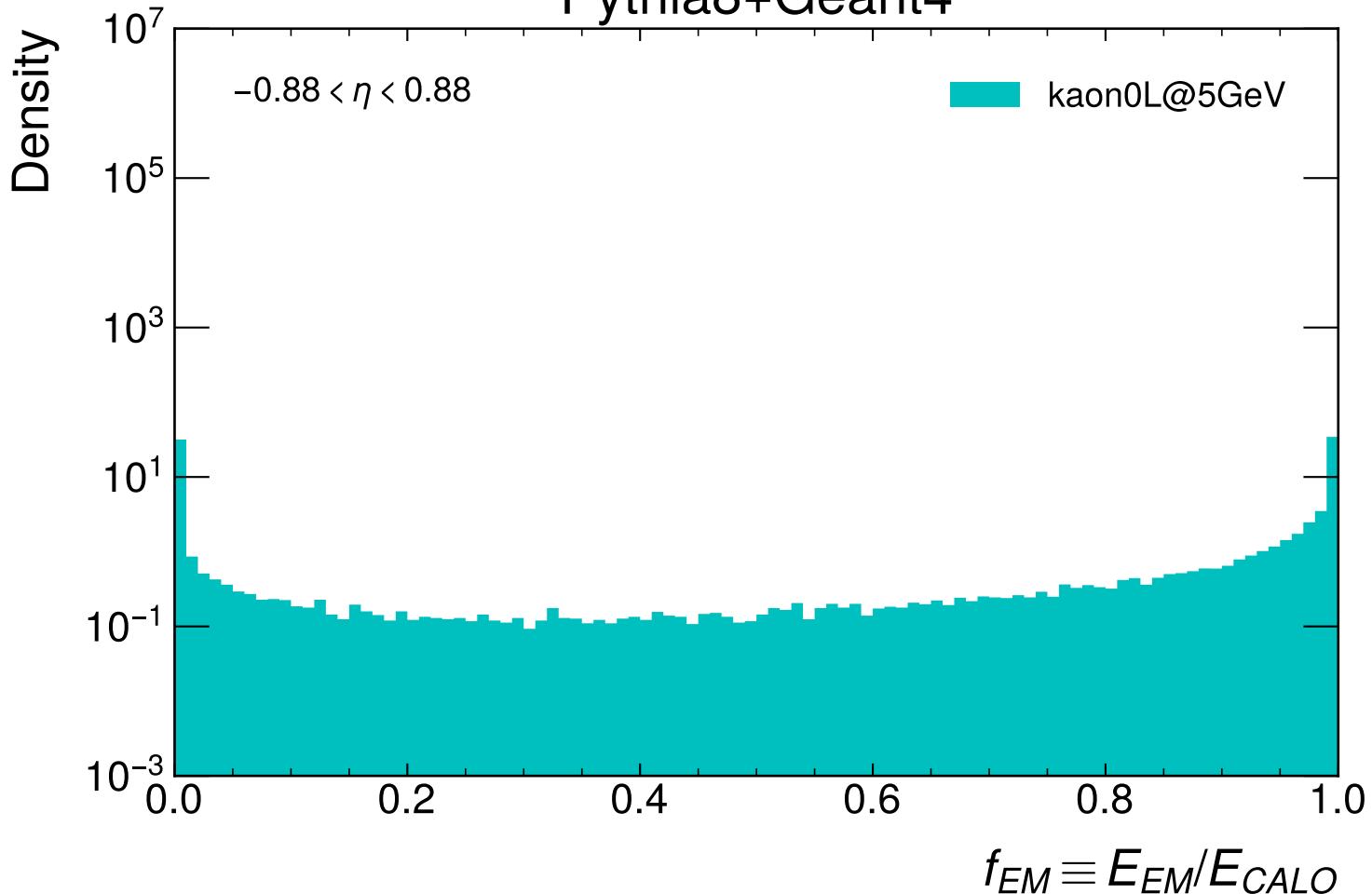
kaon0L@5GeV spanning  $0.76 < \eta < 3.64$



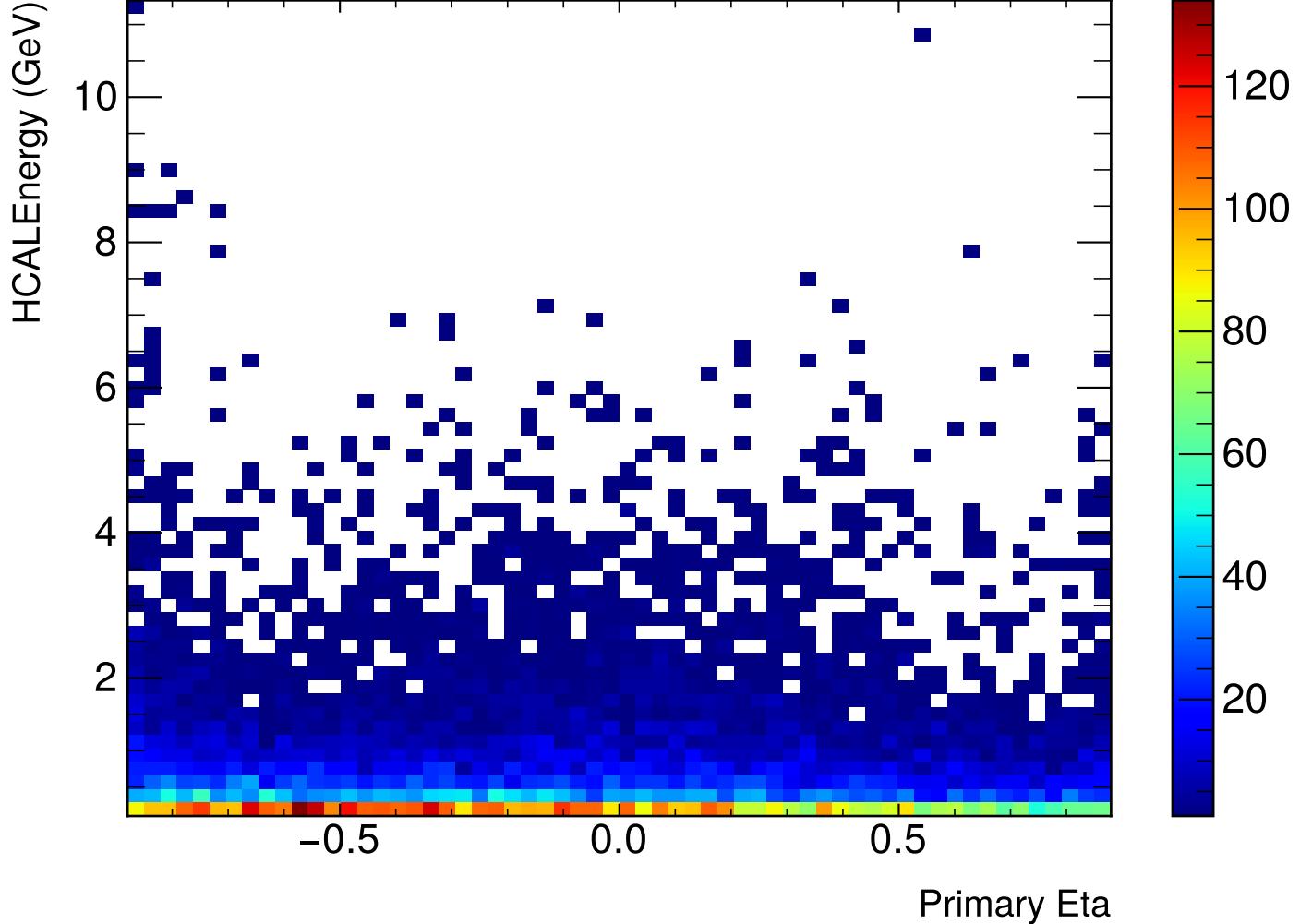
# ATHENA simulation [DD4hep] Pythia8+Geant4



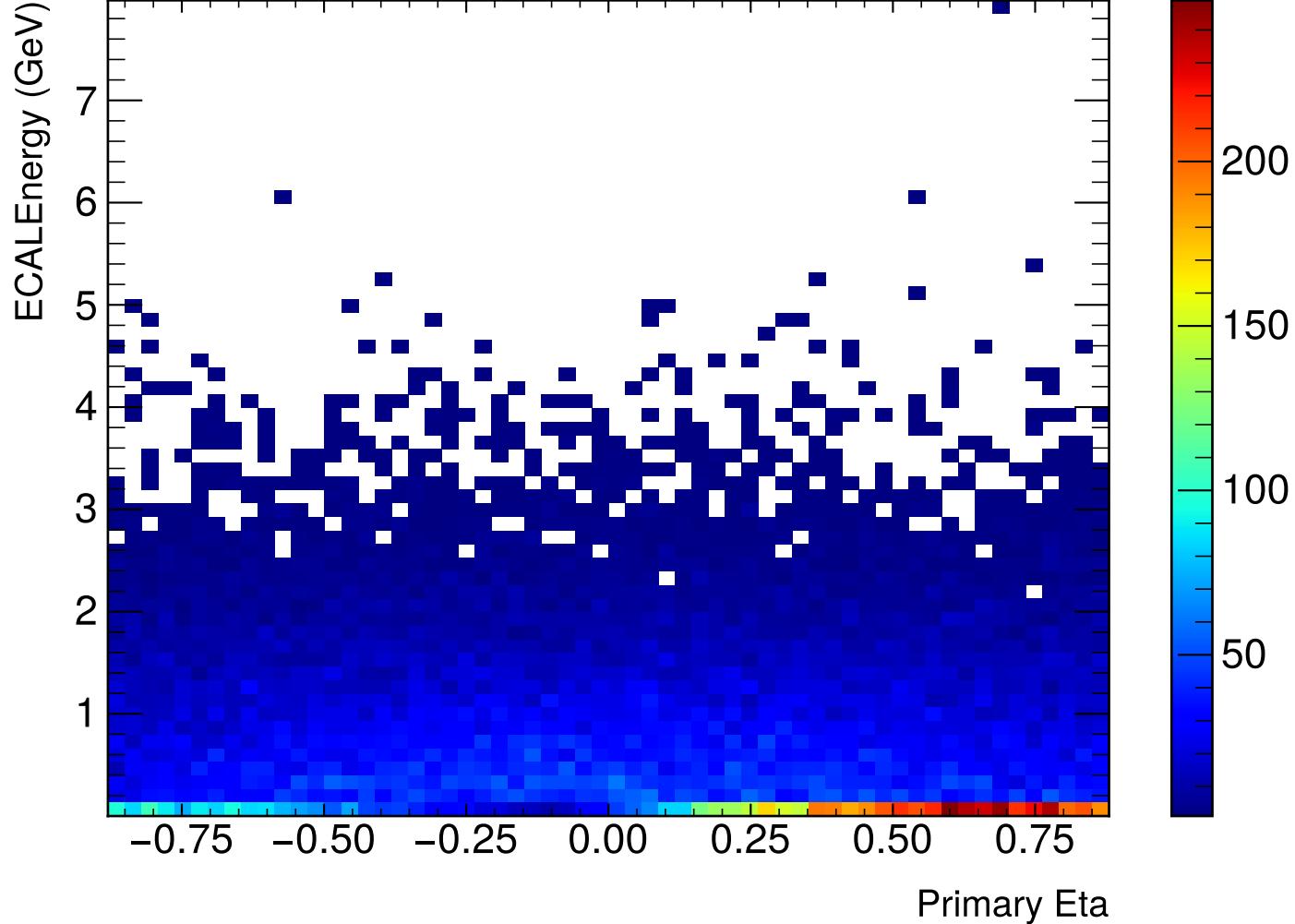
# ATHENA simulation [DD4hep] Pythia8+Geant4



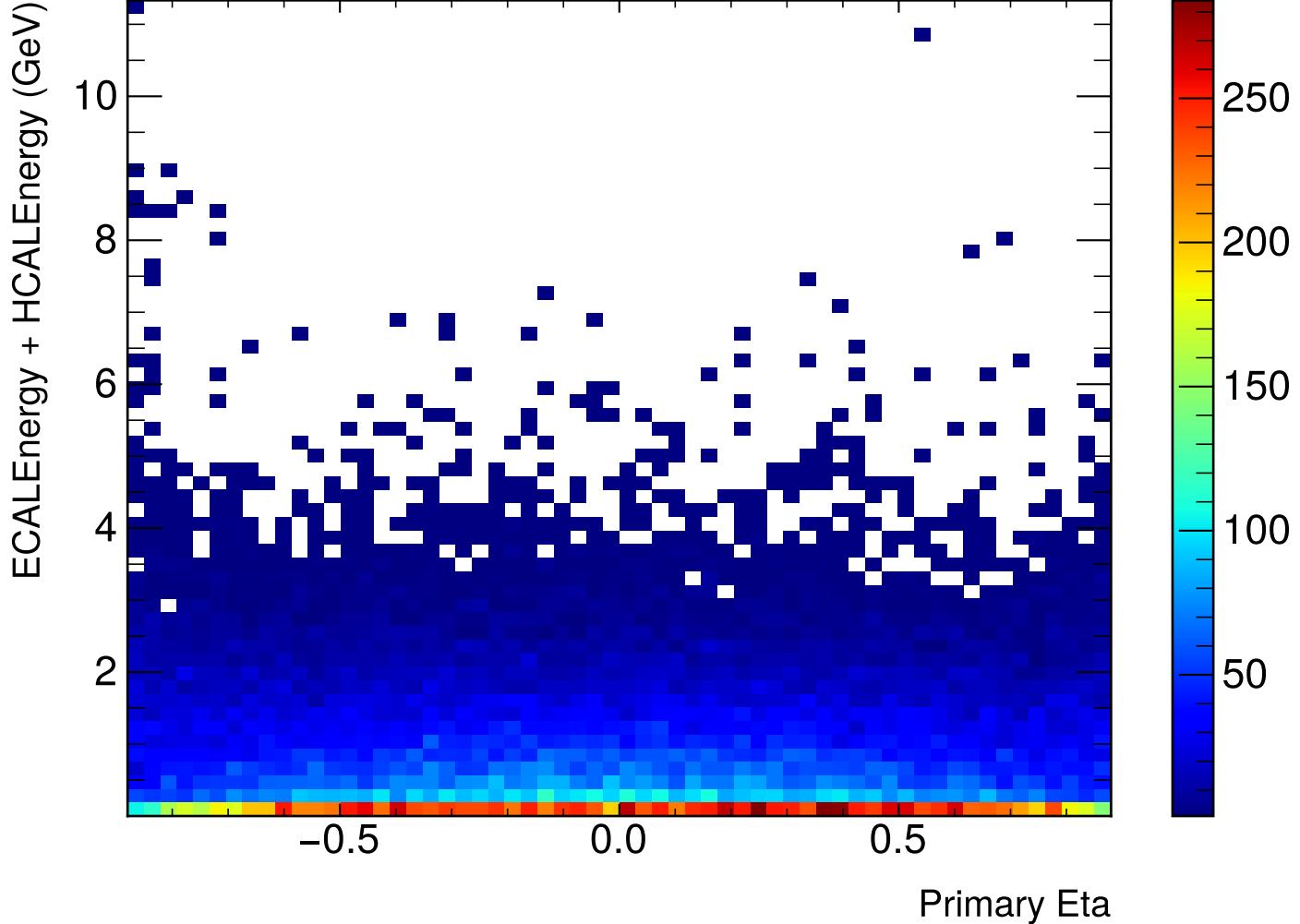
kaon0L@5GeV spanning  $-0.88 < \eta < 0.88$



kaon0L@5GeV spanning  $-0.88 < \eta < 0.88$

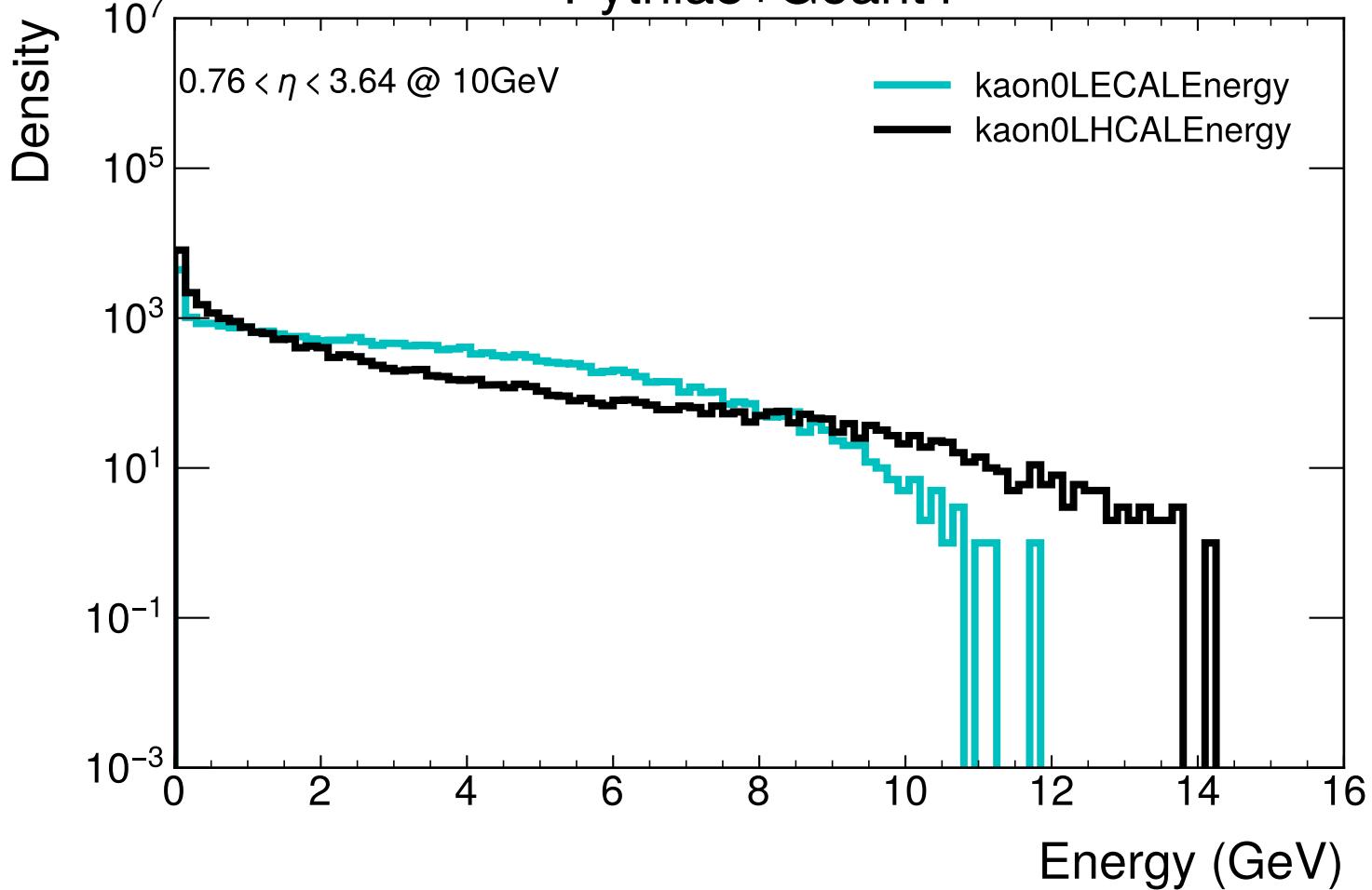


kaon0L@5GeV spanning  $-0.88 < \eta < 0.88$

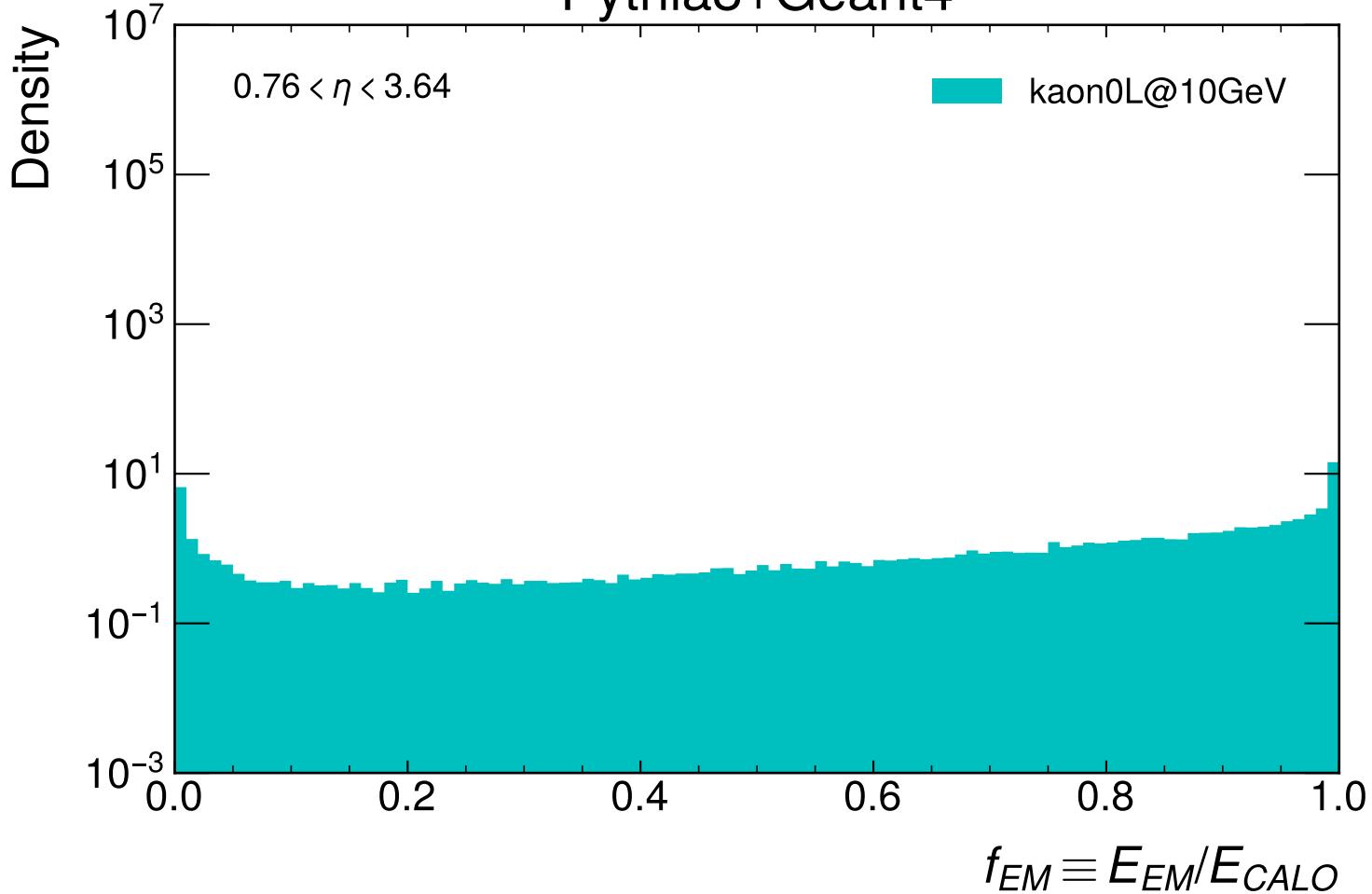


# ATHENA simulation [DD4hep]

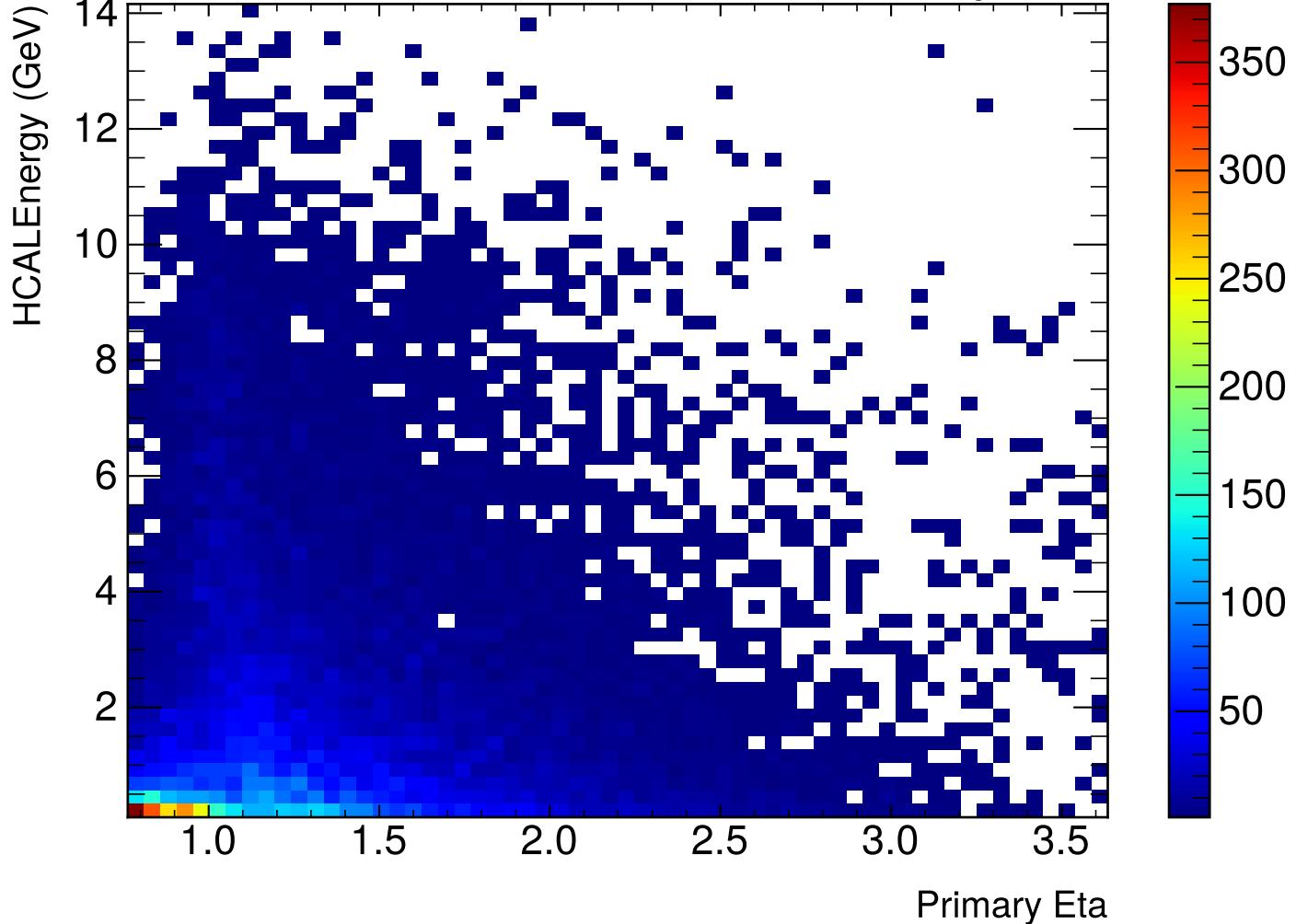
## Pythia8+Geant4



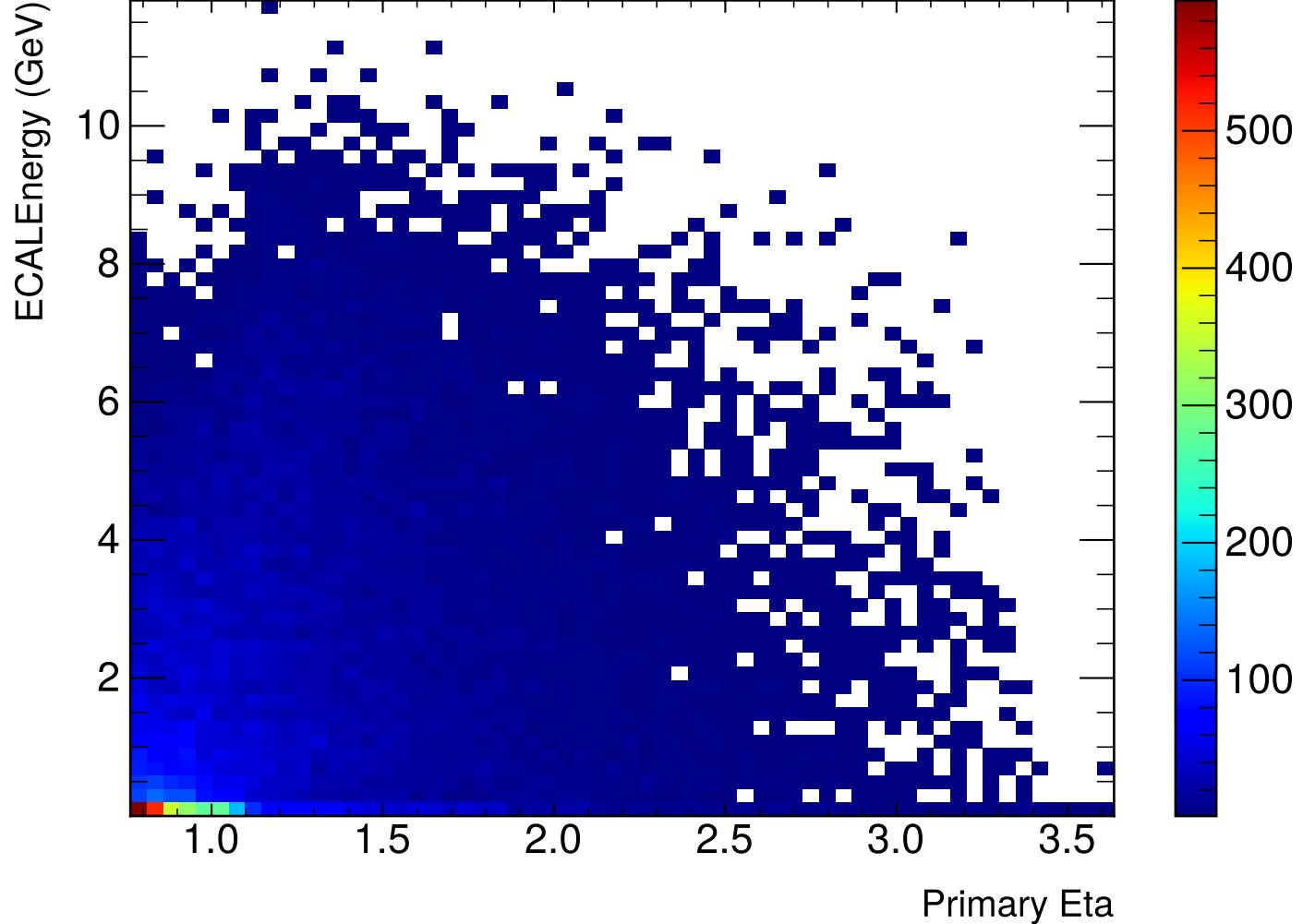
# ATHENA simulation [DD4hep] Pythia8+Geant4



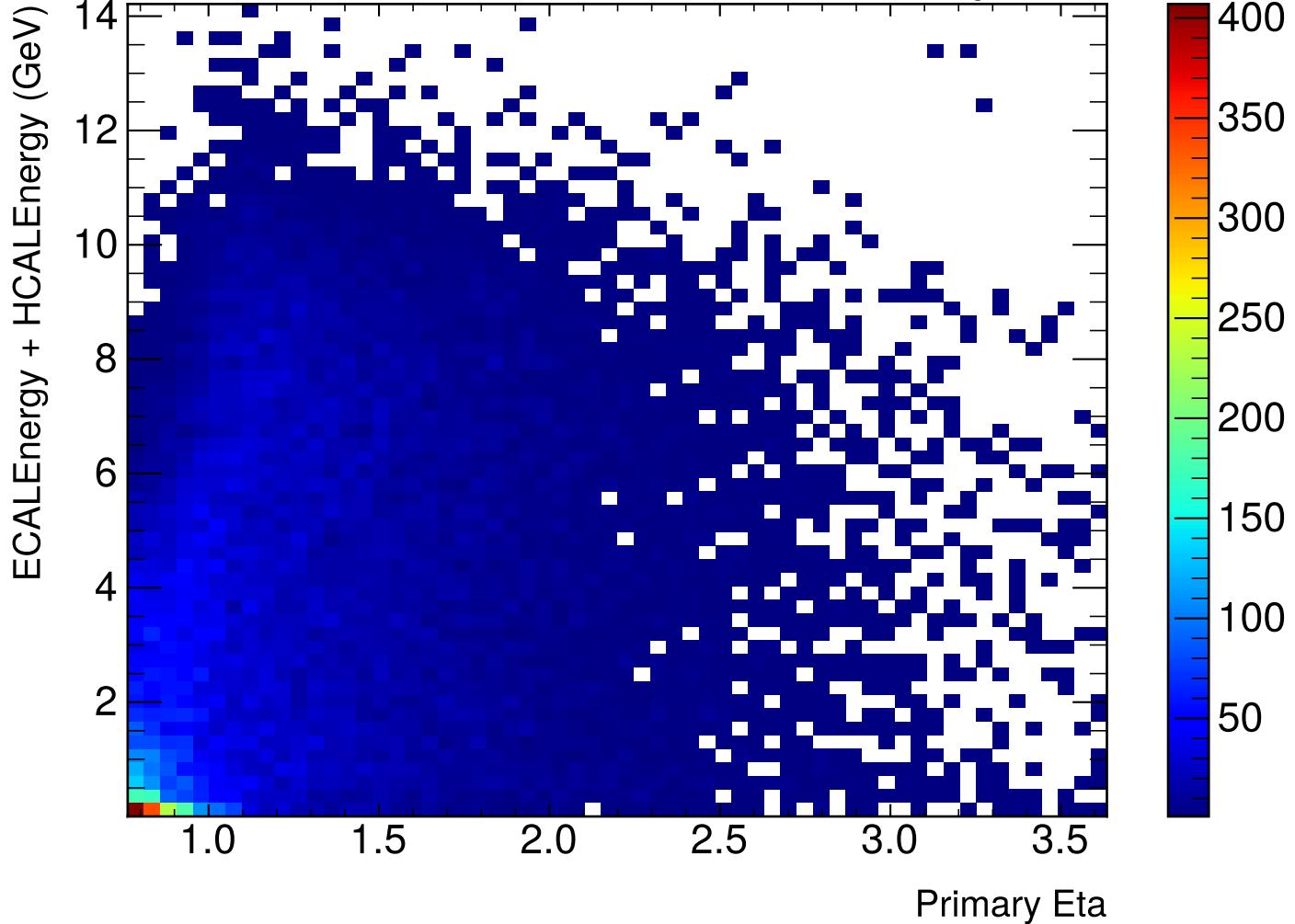
kaon0L@10GeV spanning  $0.76 < \eta < 3.64$



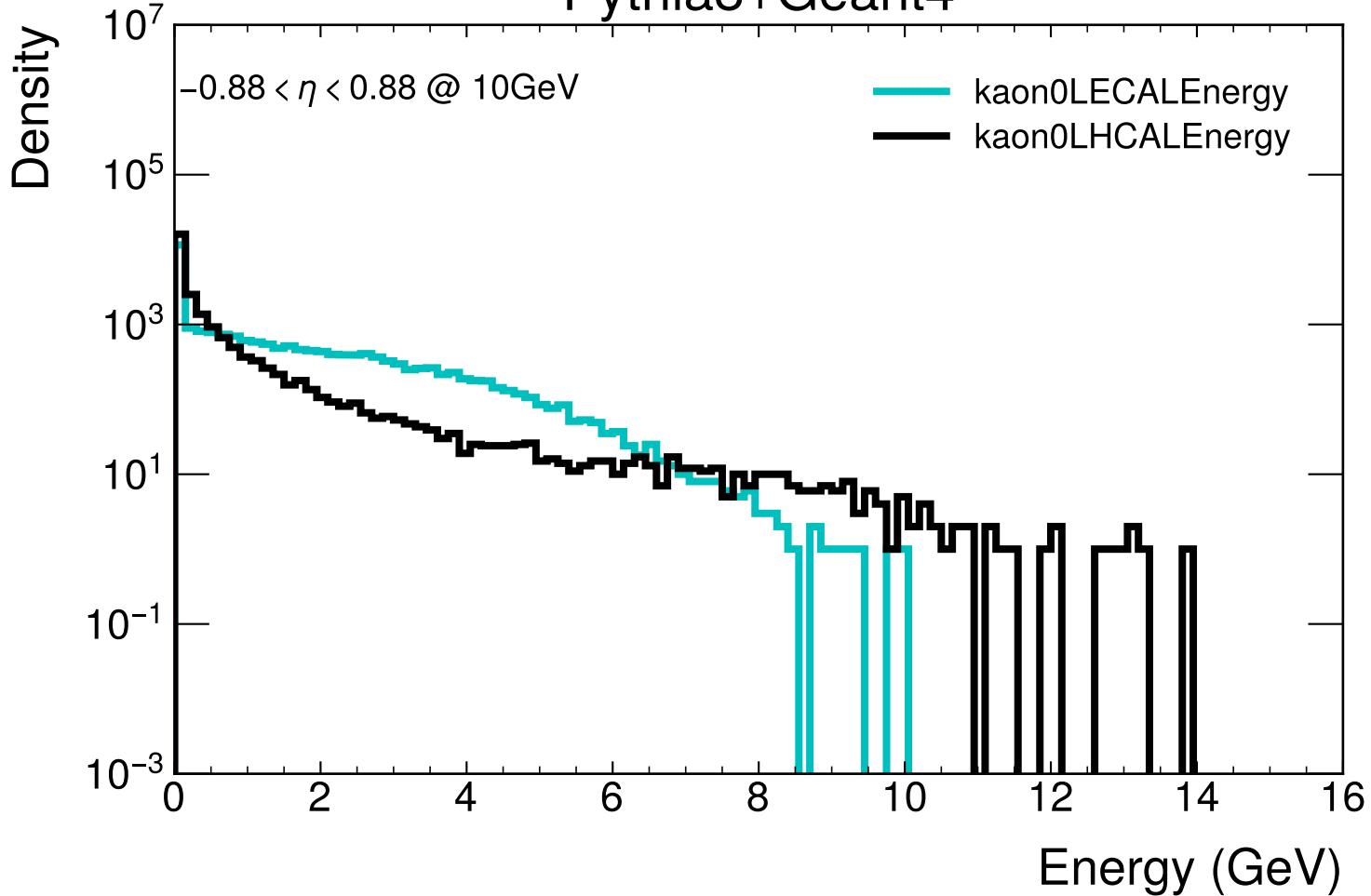
kaon0L@10GeV spanning  $0.76 < \eta < 3.64$



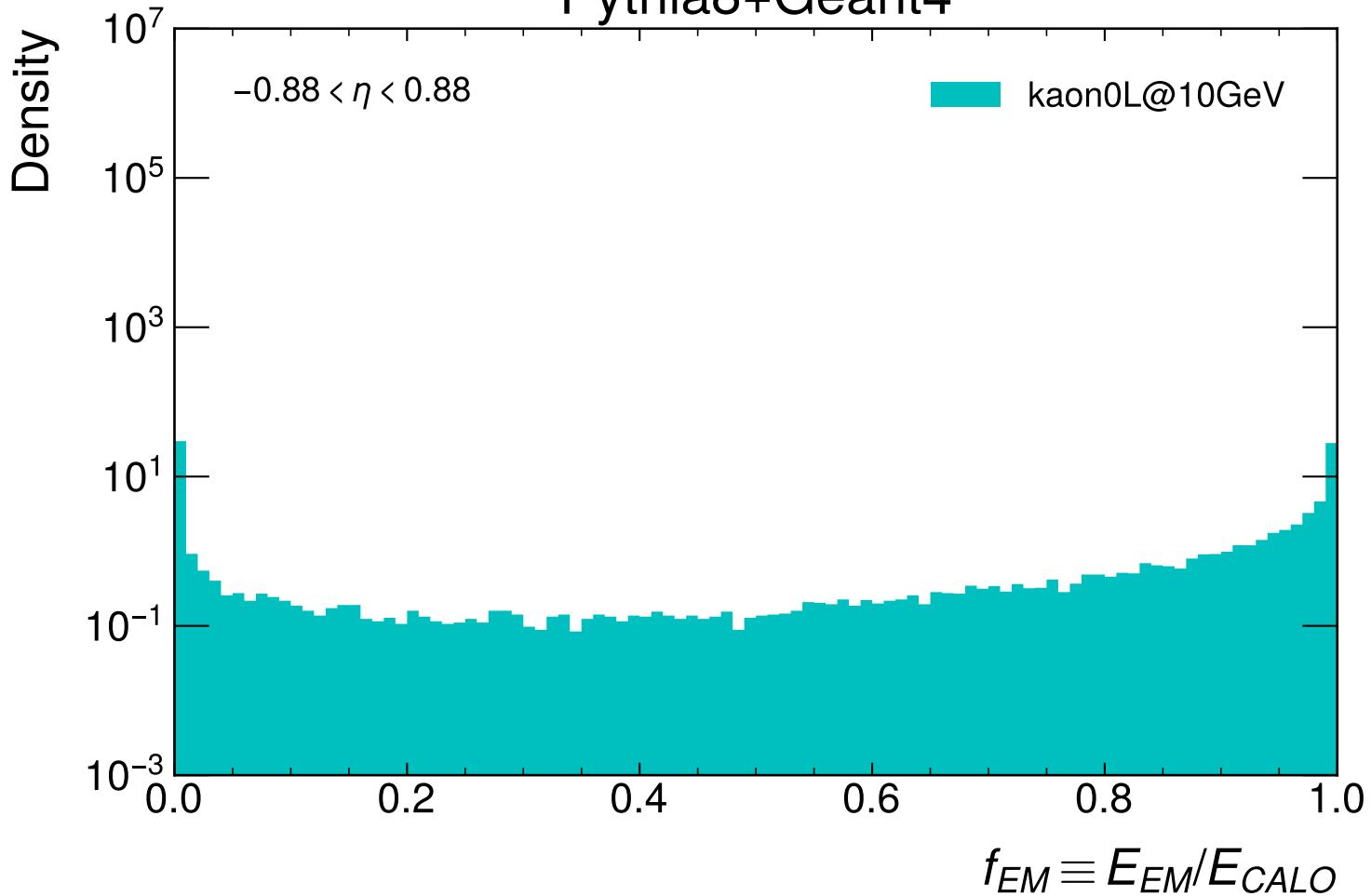
kaon0L@10GeV spanning  $0.76 < \eta < 3.64$



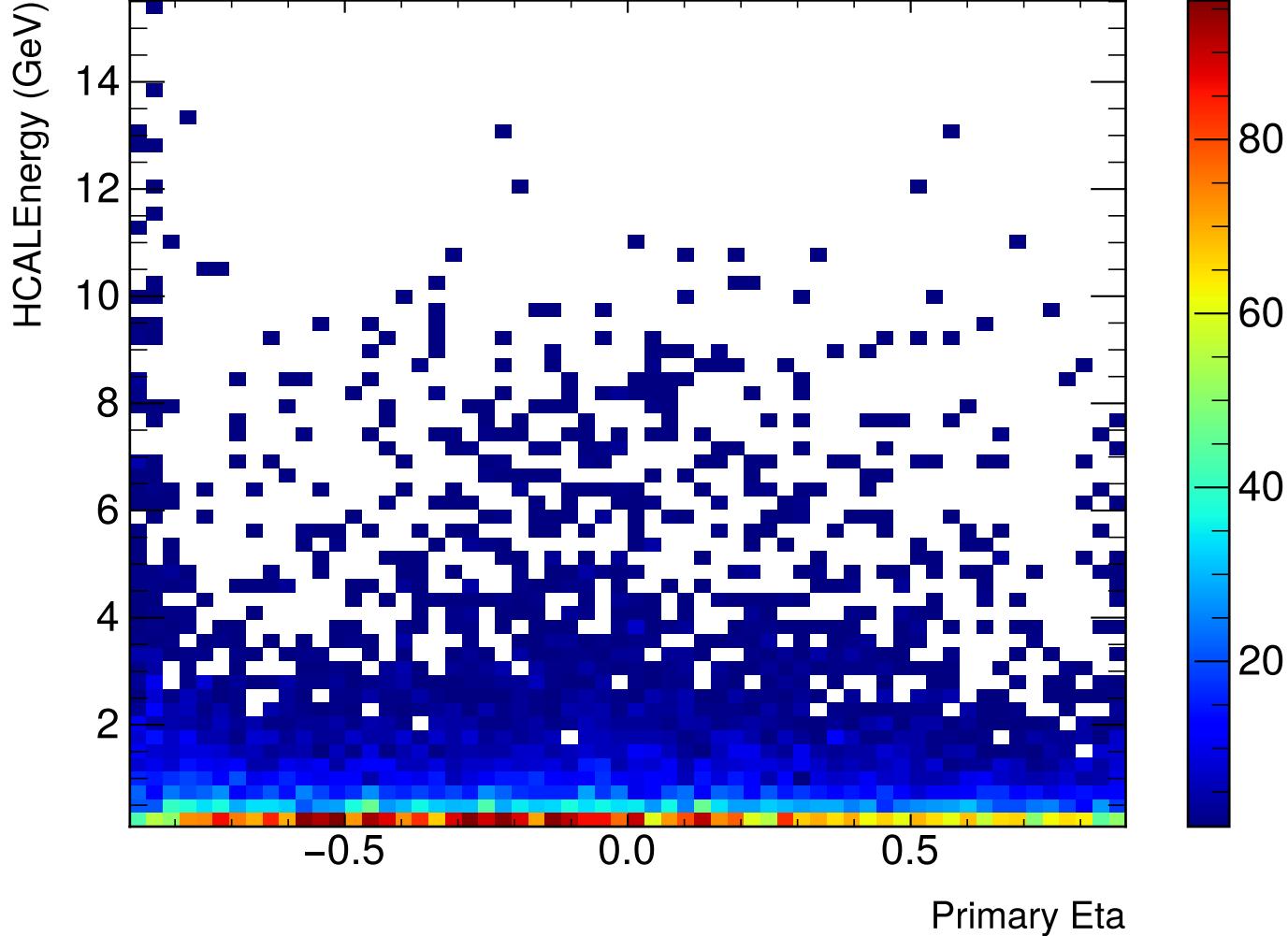
# ATHENA simulation [DD4hep] Pythia8+Geant4



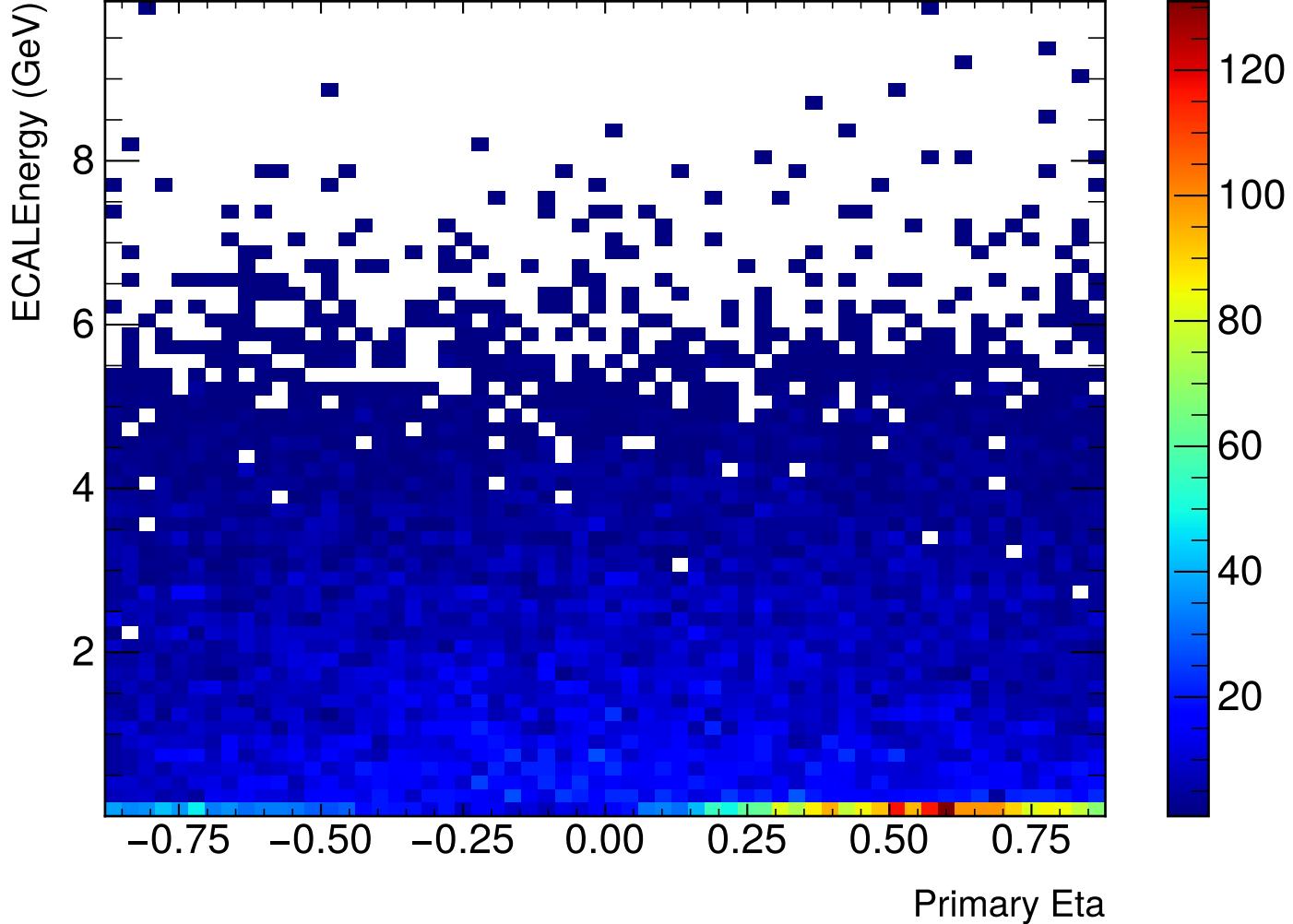
# ATHENA simulation [DD4hep] Pythia8+Geant4



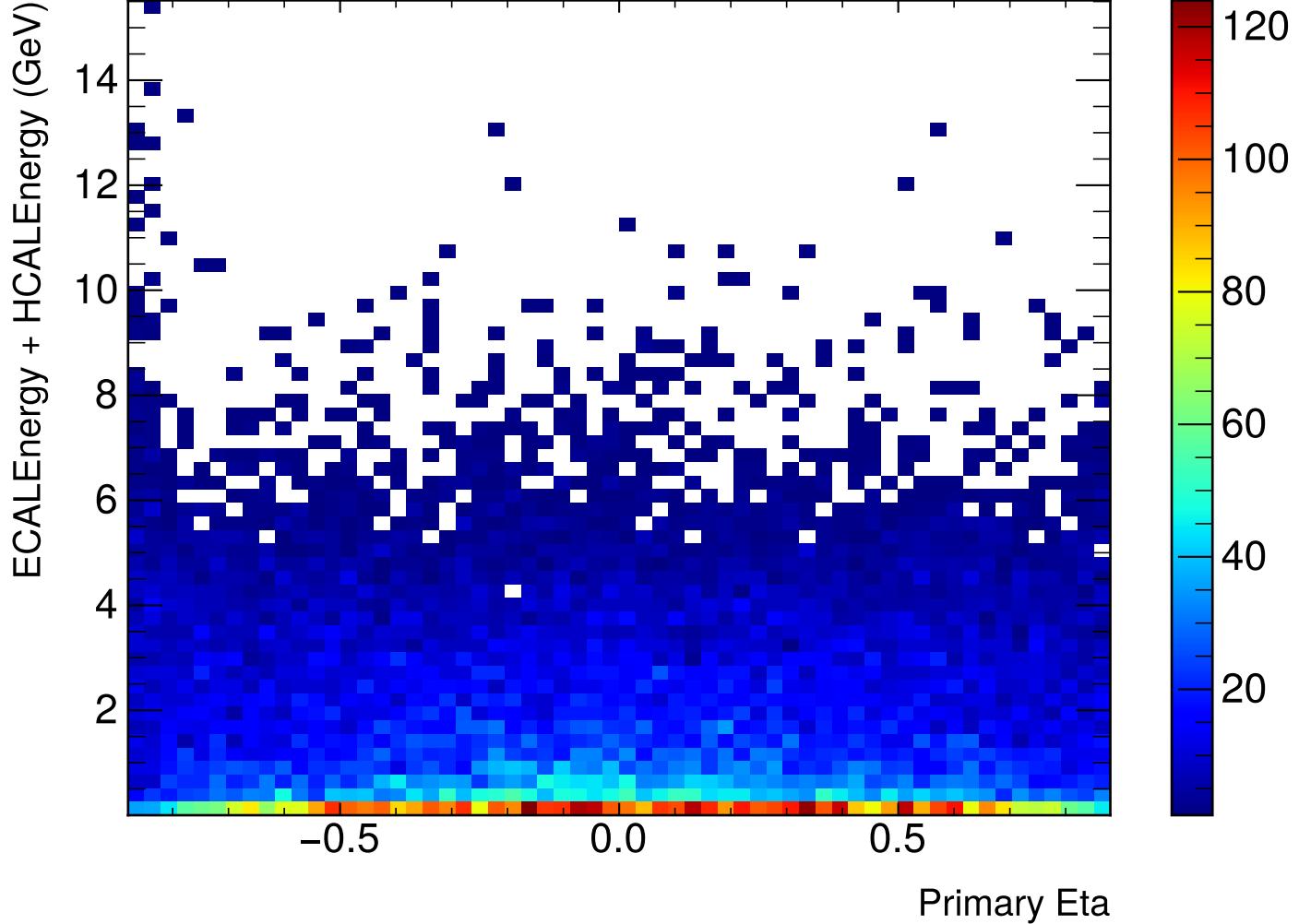
kaon0L@10GeV spanning  $-0.88 < \eta < 0.88$



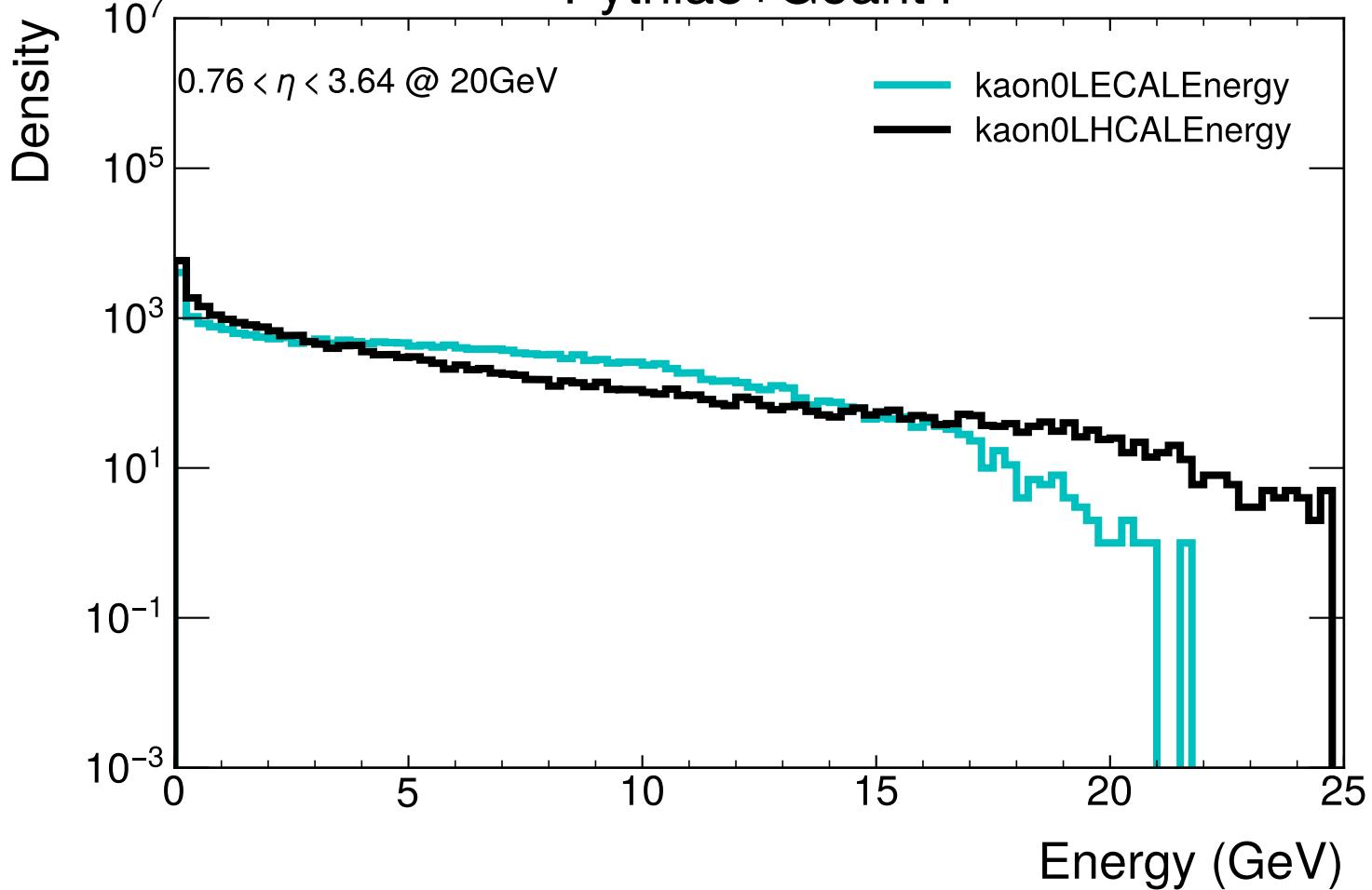
kaon0L@10GeV spanning  $-0.88 < \eta < 0.88$



kaon0L@10GeV spanning  $-0.88 < \eta < 0.88$

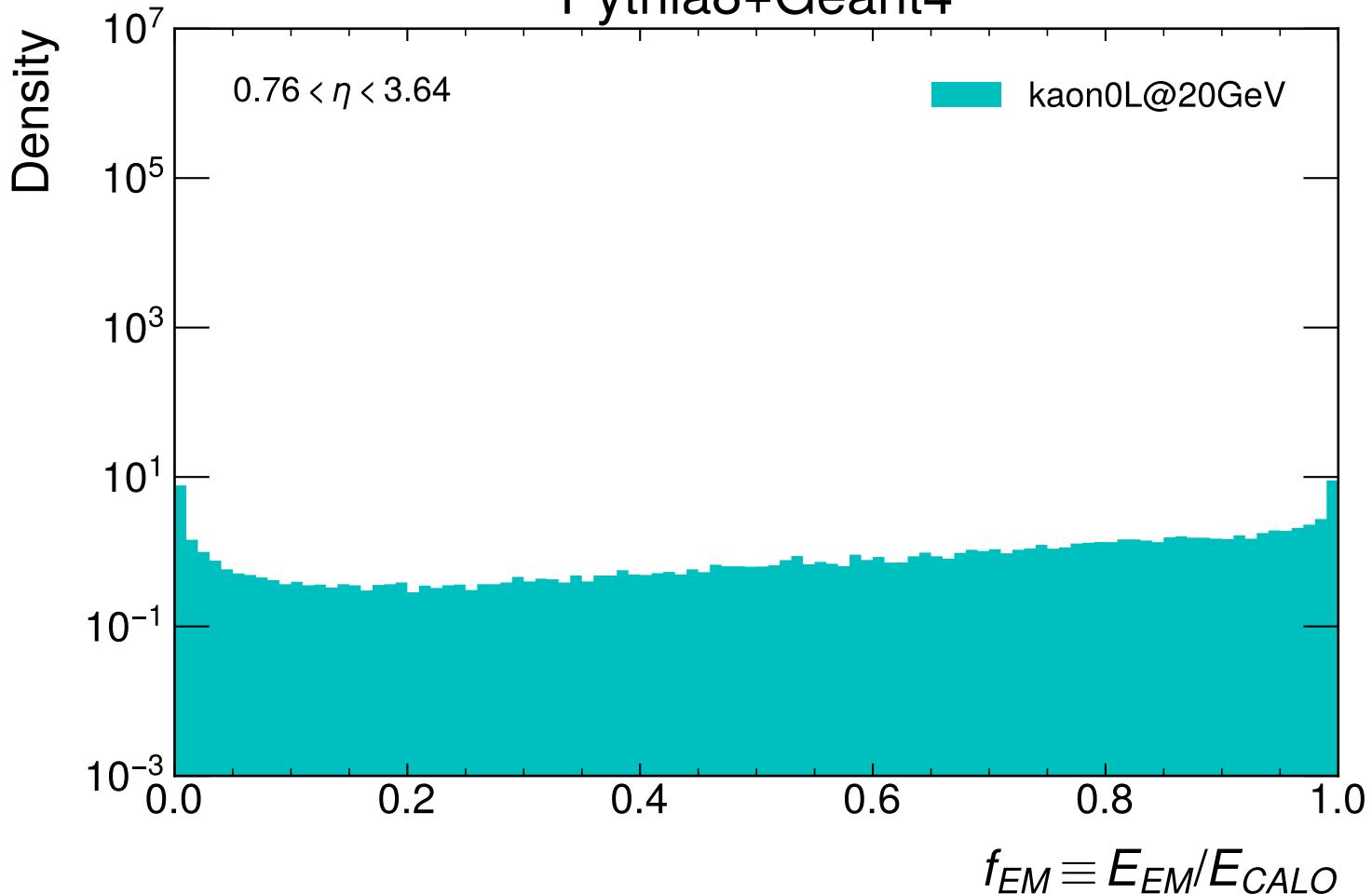


# ATHENA simulation [DD4hep] Pythia8+Geant4

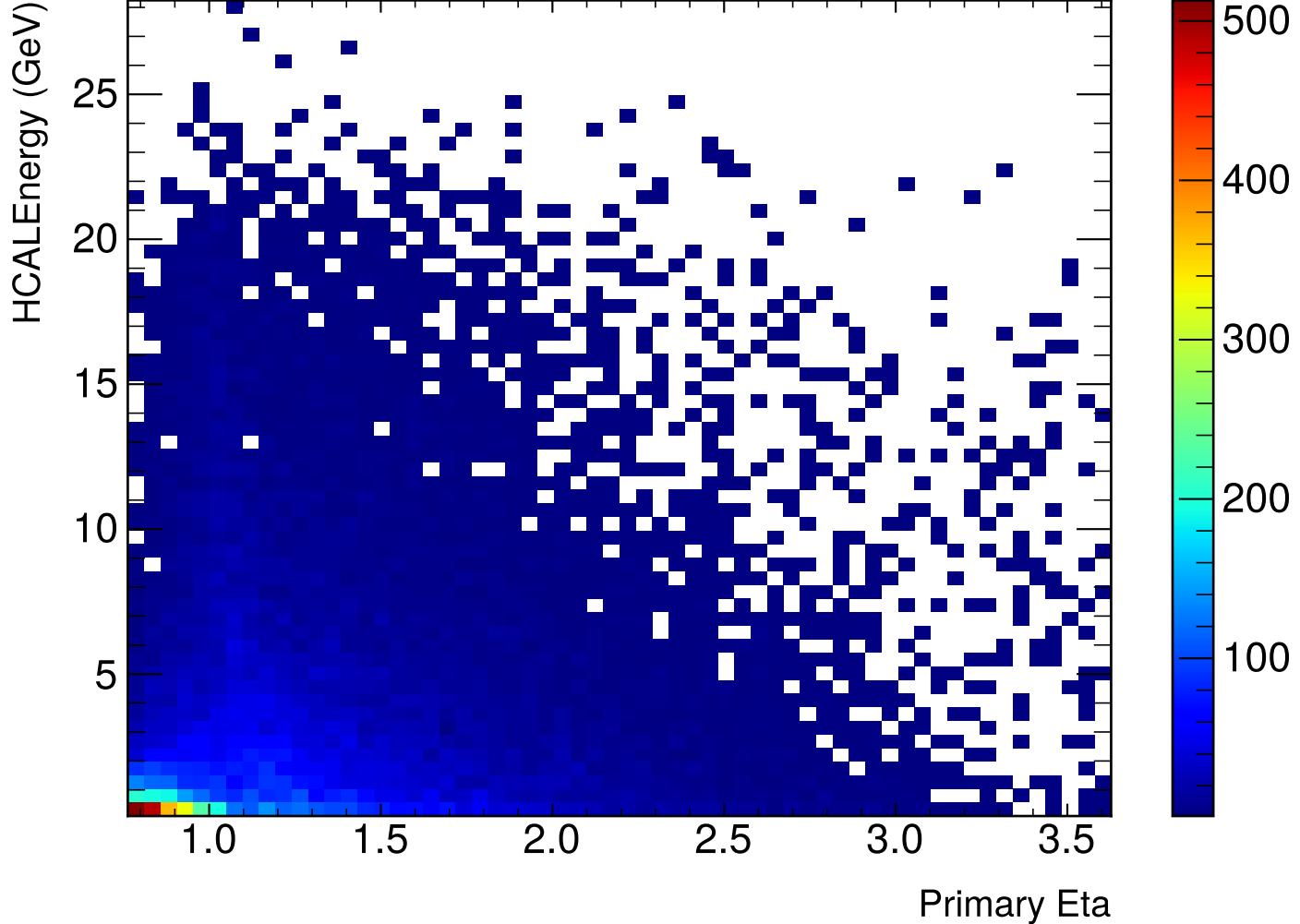


# ATHENA simulation [DD4hep]

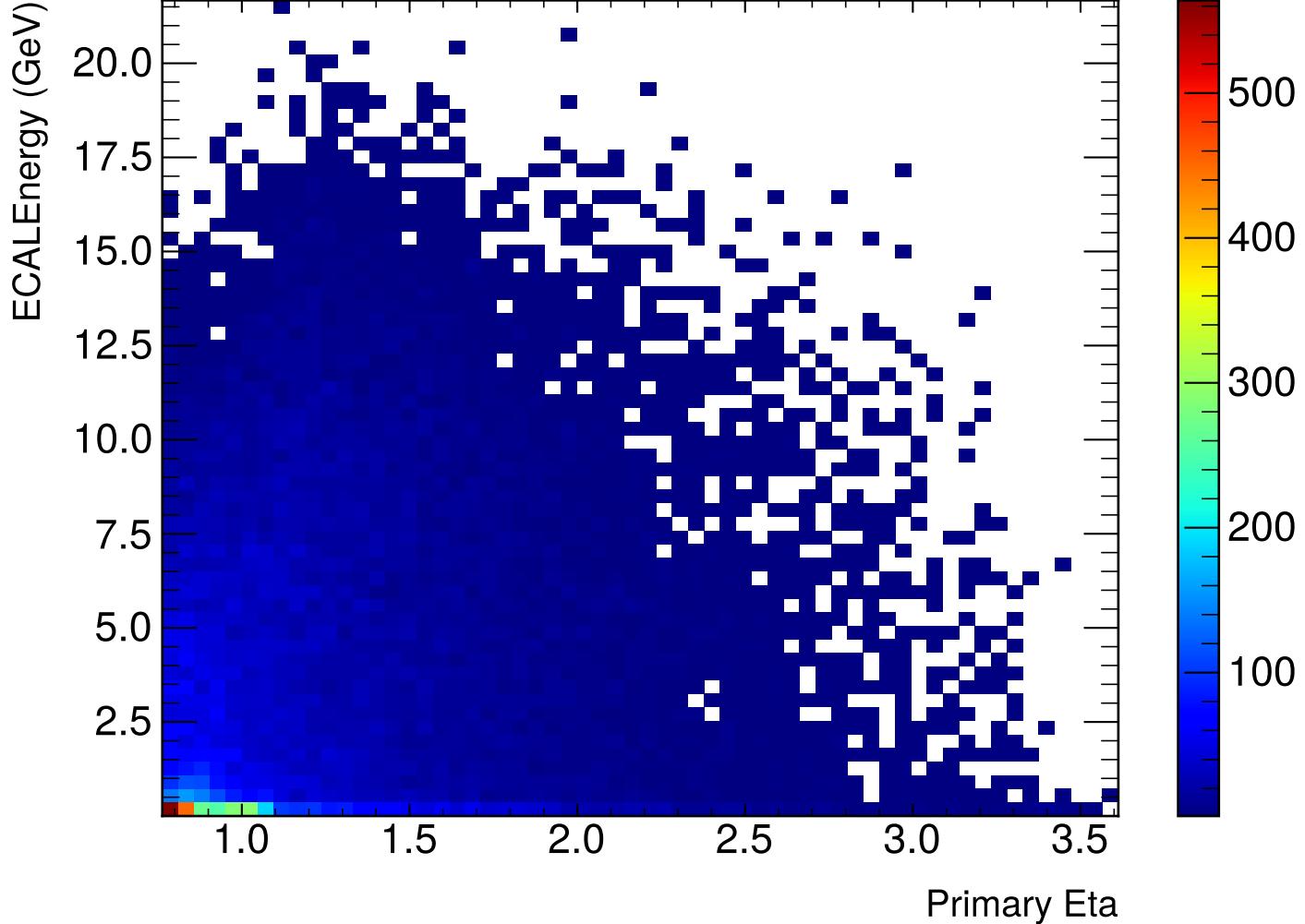
## Pythia8+Geant4



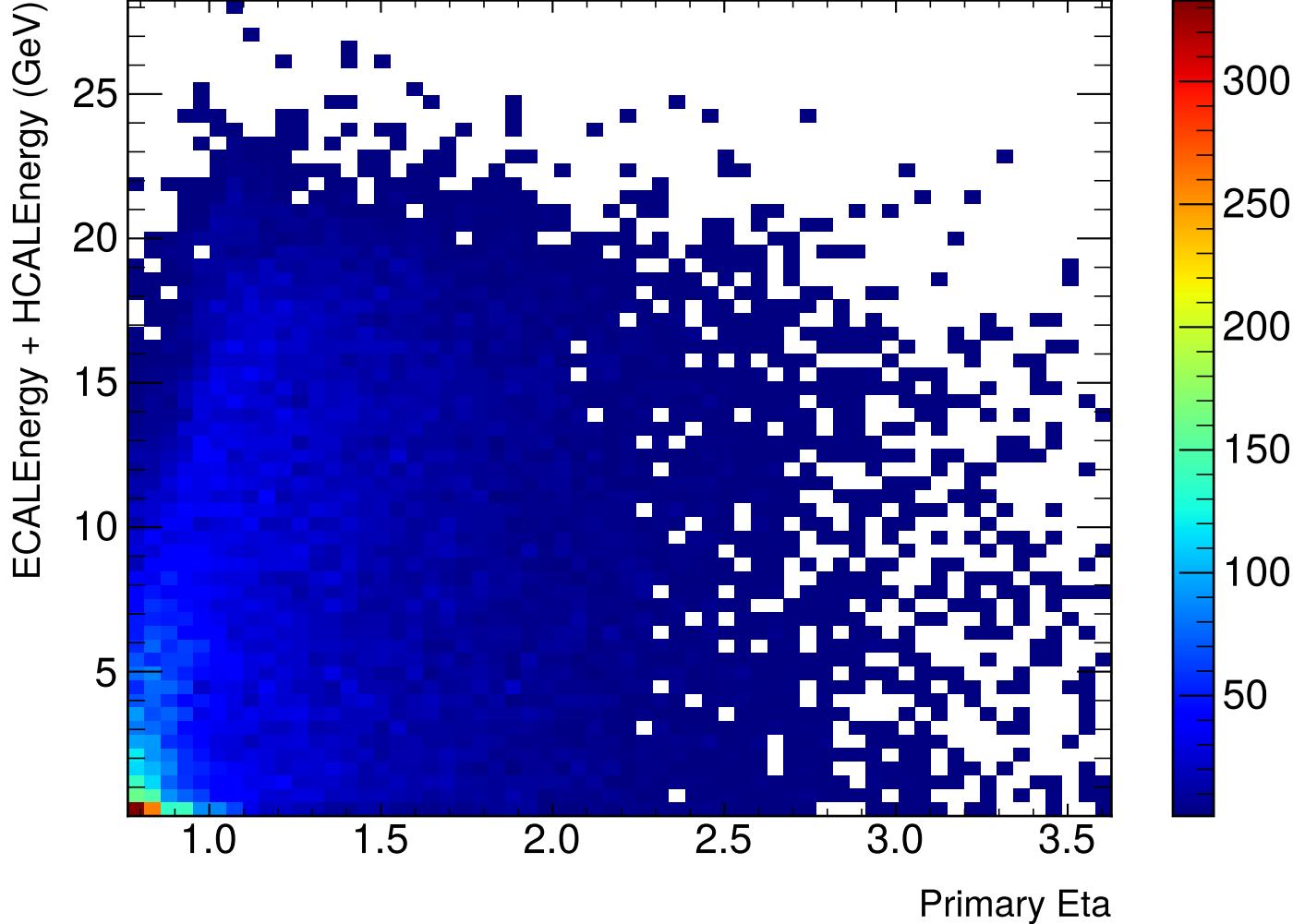
kaon0L@20GeV spanning  $0.76 < \eta < 3.64$



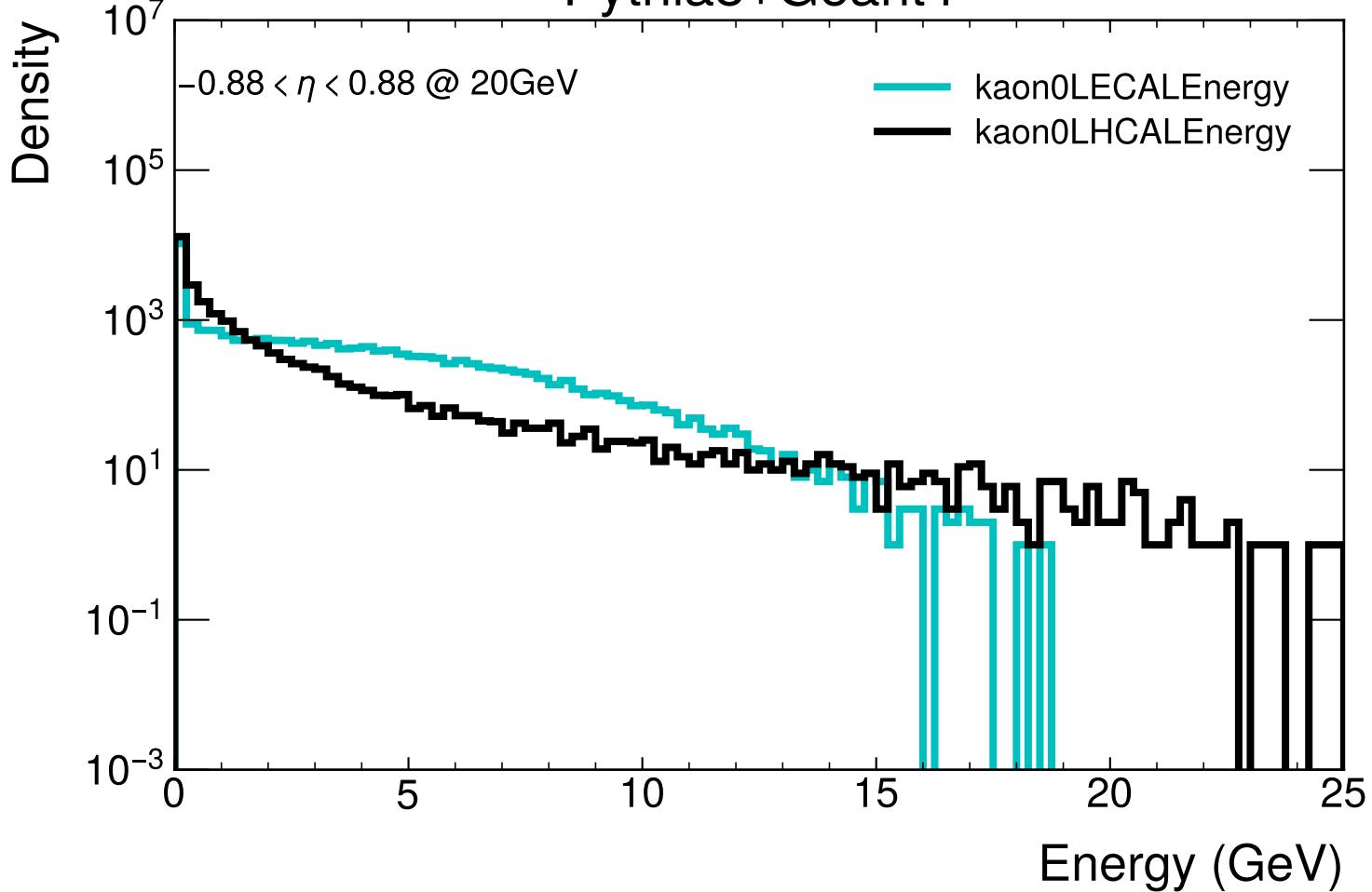
kaon0L@20GeV spanning  $0.76 < \eta < 3.64$



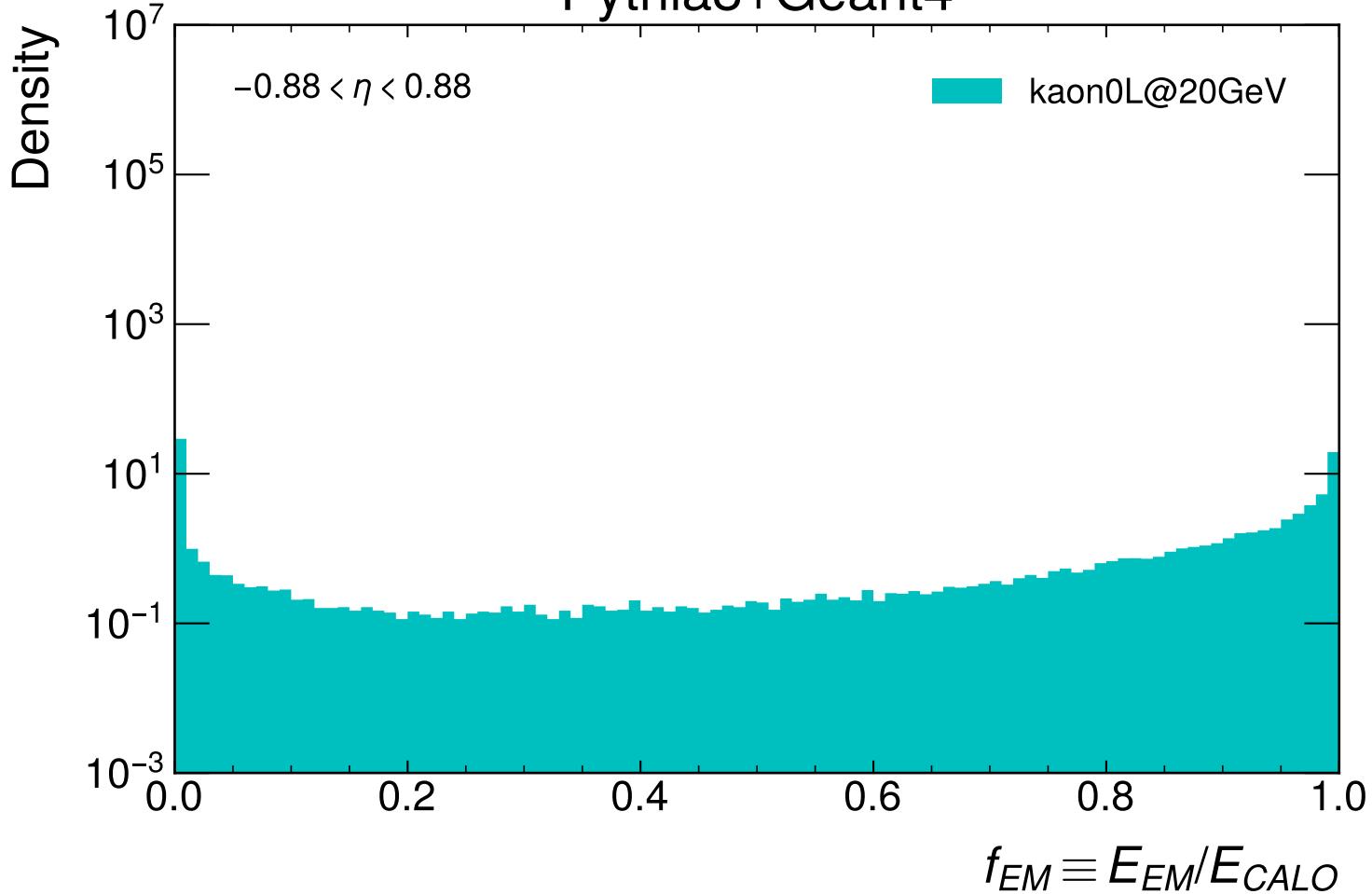
kaon0L@20GeV spanning  $0.76 < \eta < 3.64$



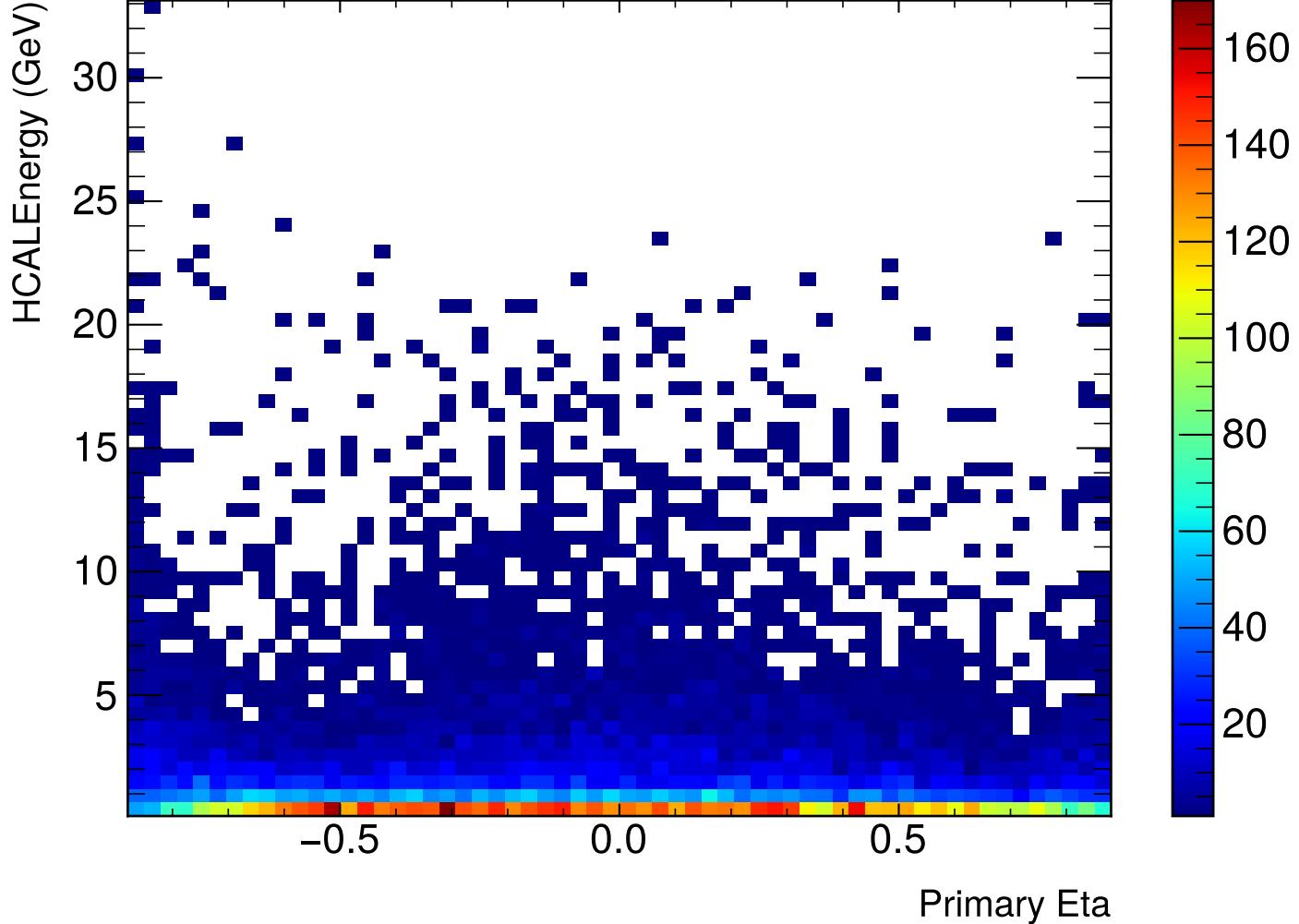
# ATHENA simulation [DD4hep] Pythia8+Geant4



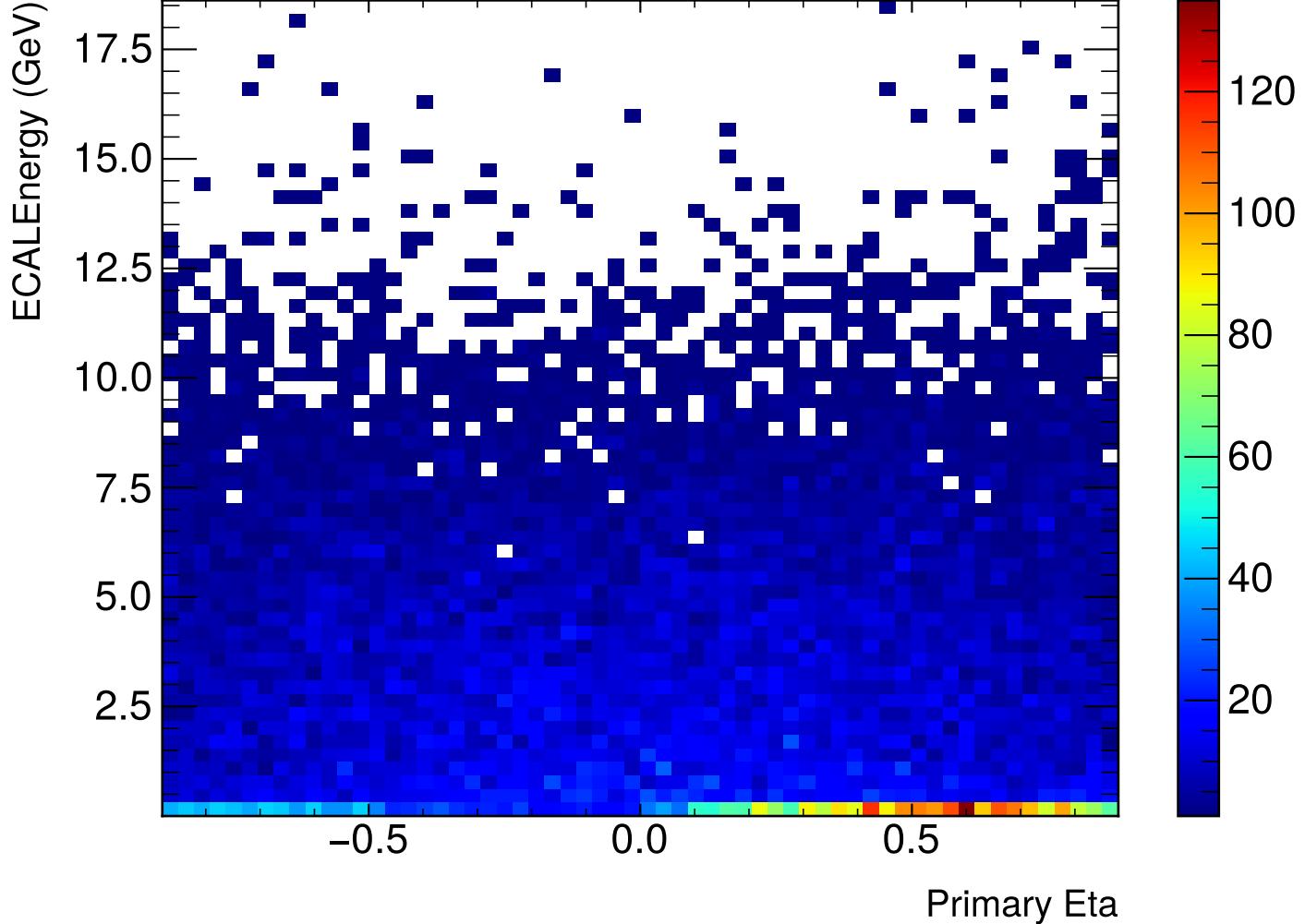
# ATHENA simulation [DD4hep] Pythia8+Geant4



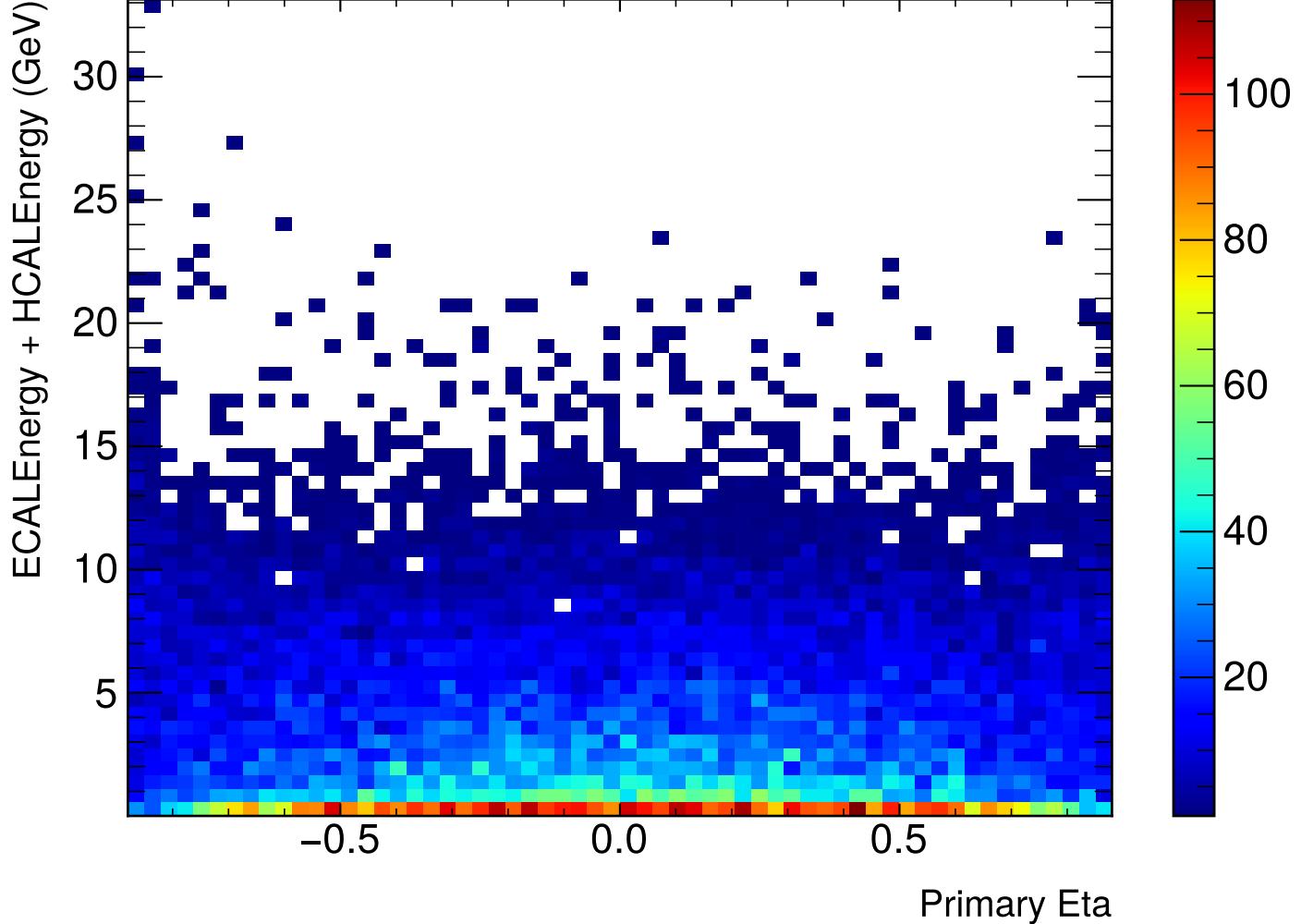
kaon0L@20GeV spanning  $-0.88 < \eta < 0.88$



kaon0L@20GeV spanning  $-0.88 < \eta < 0.88$

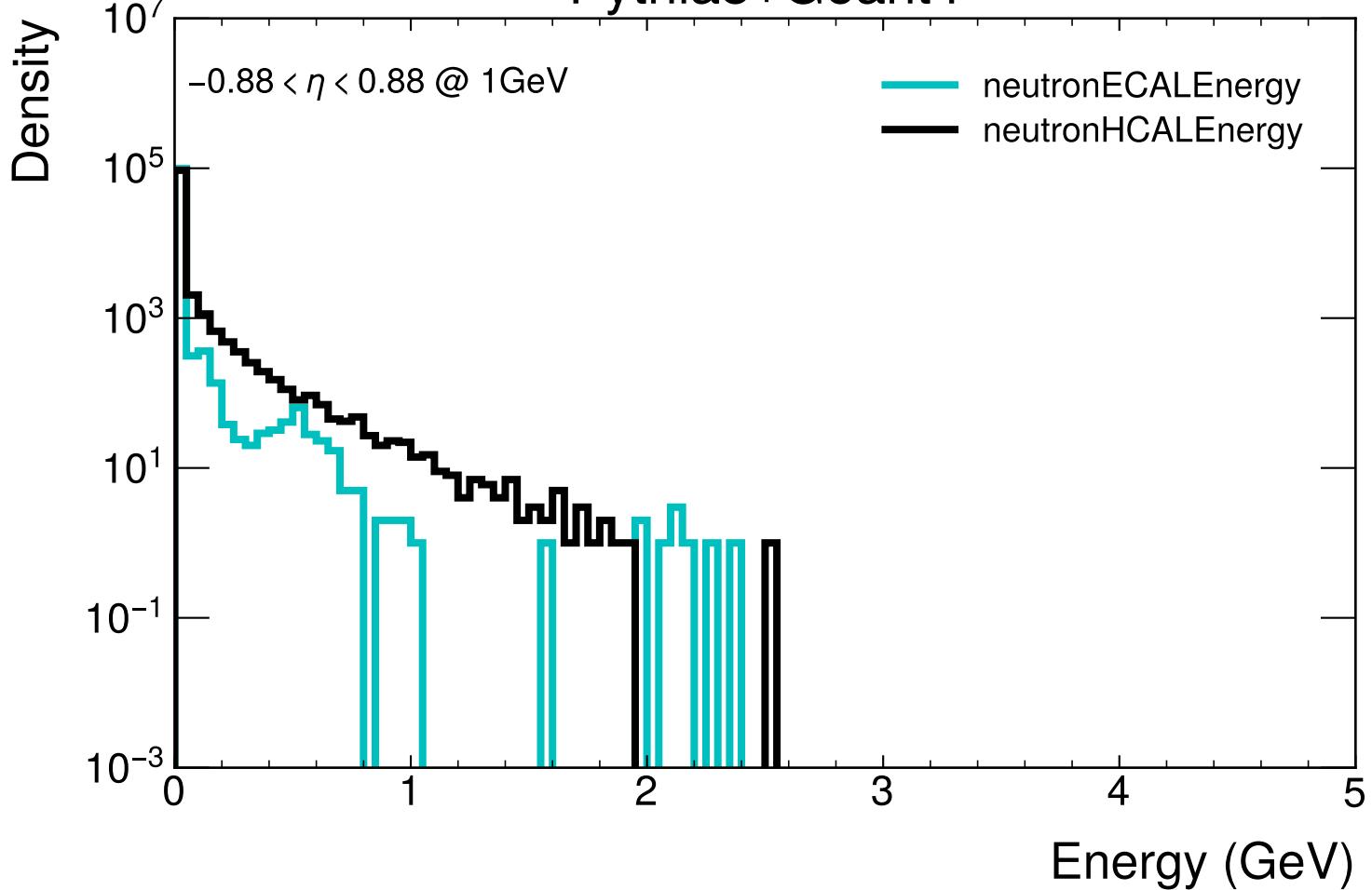


kaon0L@20GeV spanning  $-0.88 < \eta < 0.88$

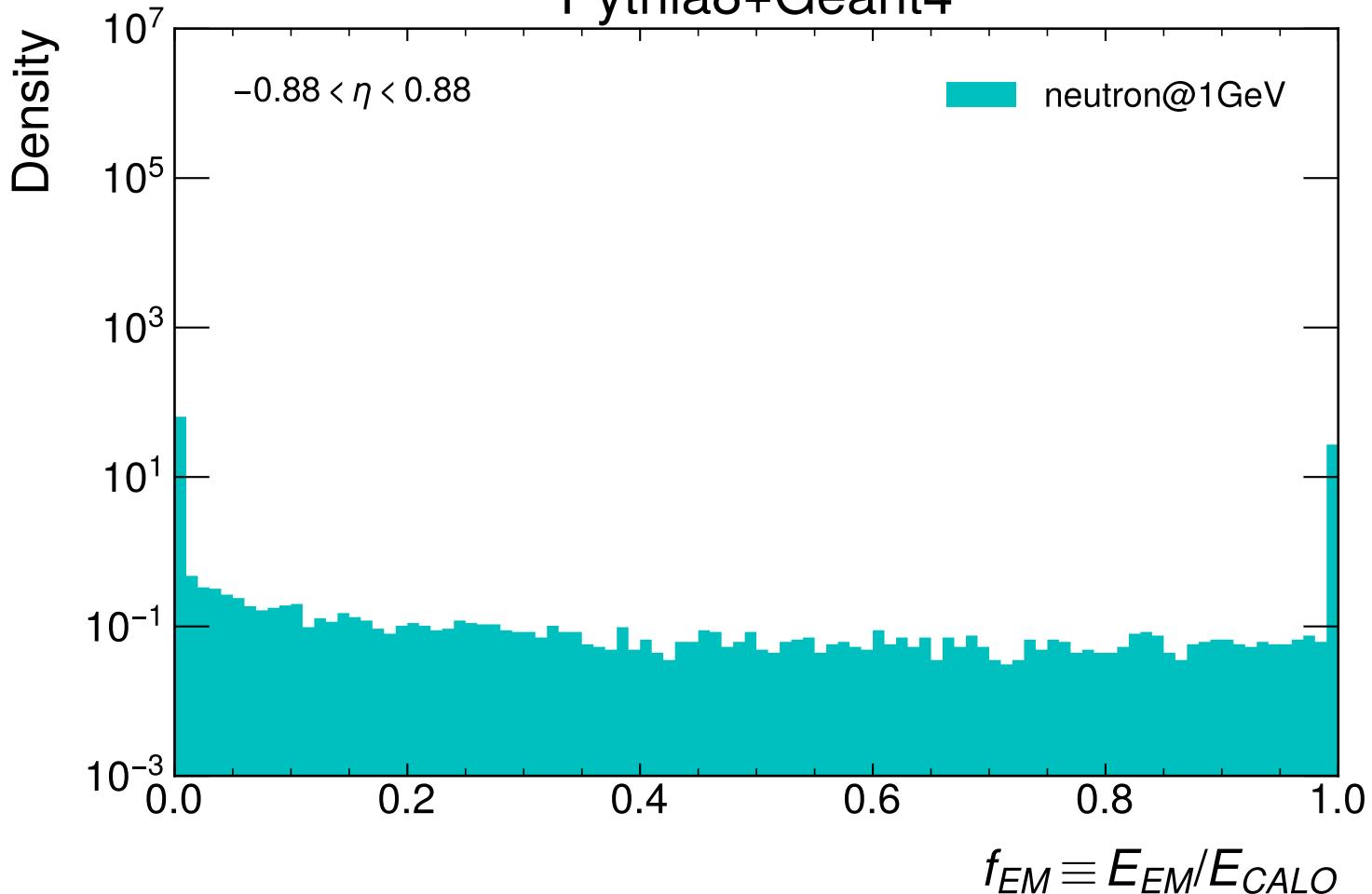


# ATHENA simulation [DD4hep]

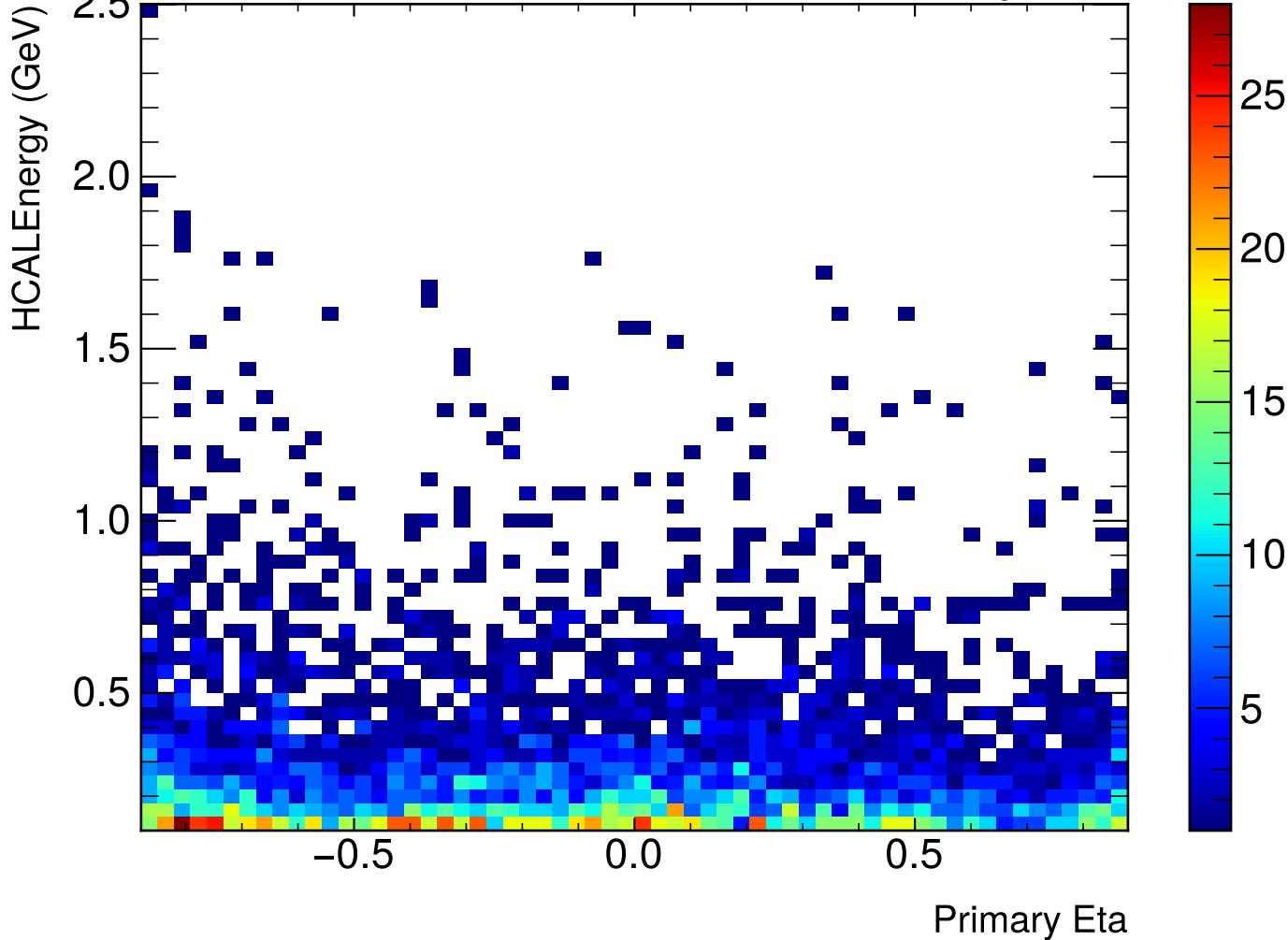
## Pythia8+Geant4



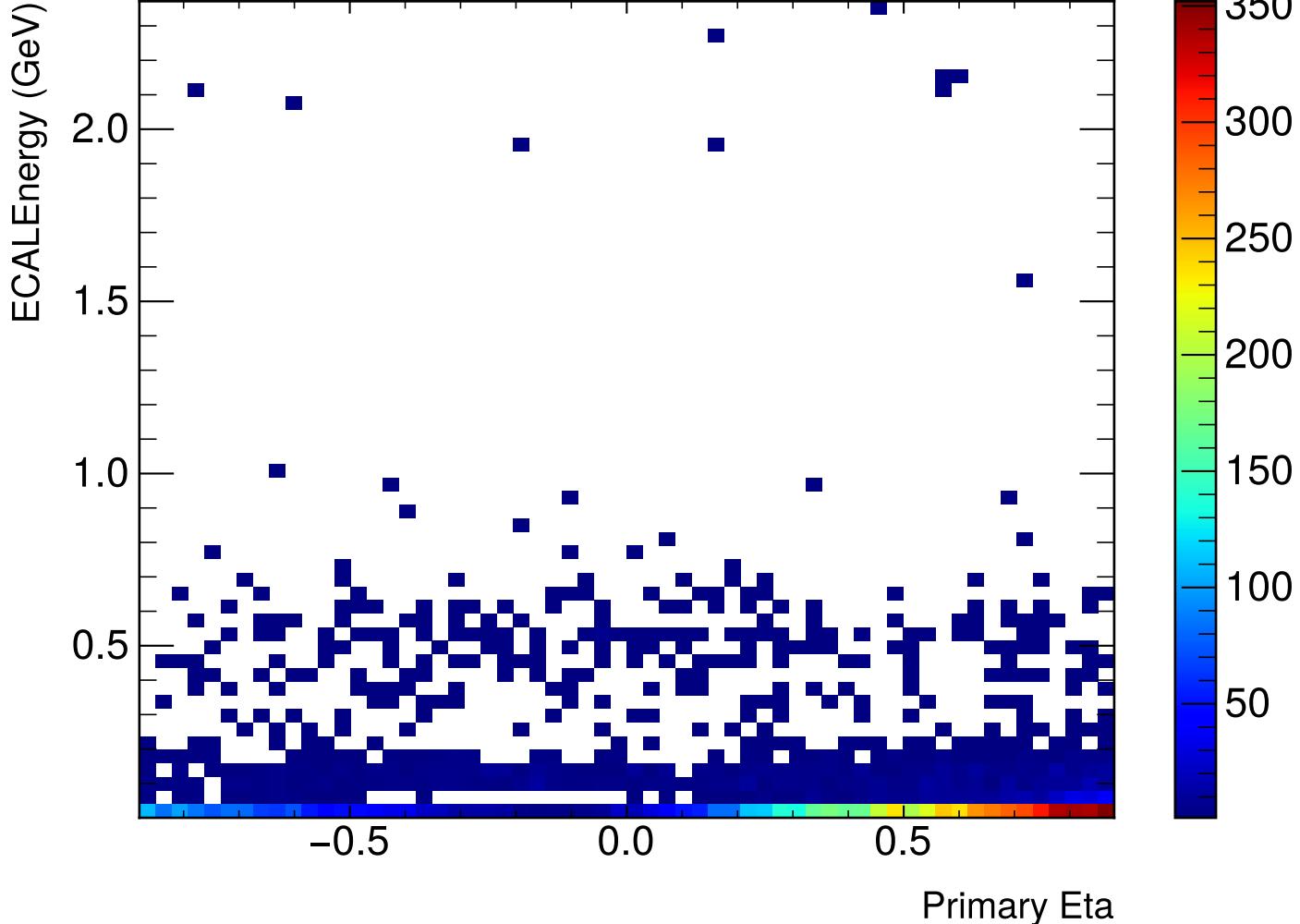
# ATHENA simulation [DD4hep] Pythia8+Geant4



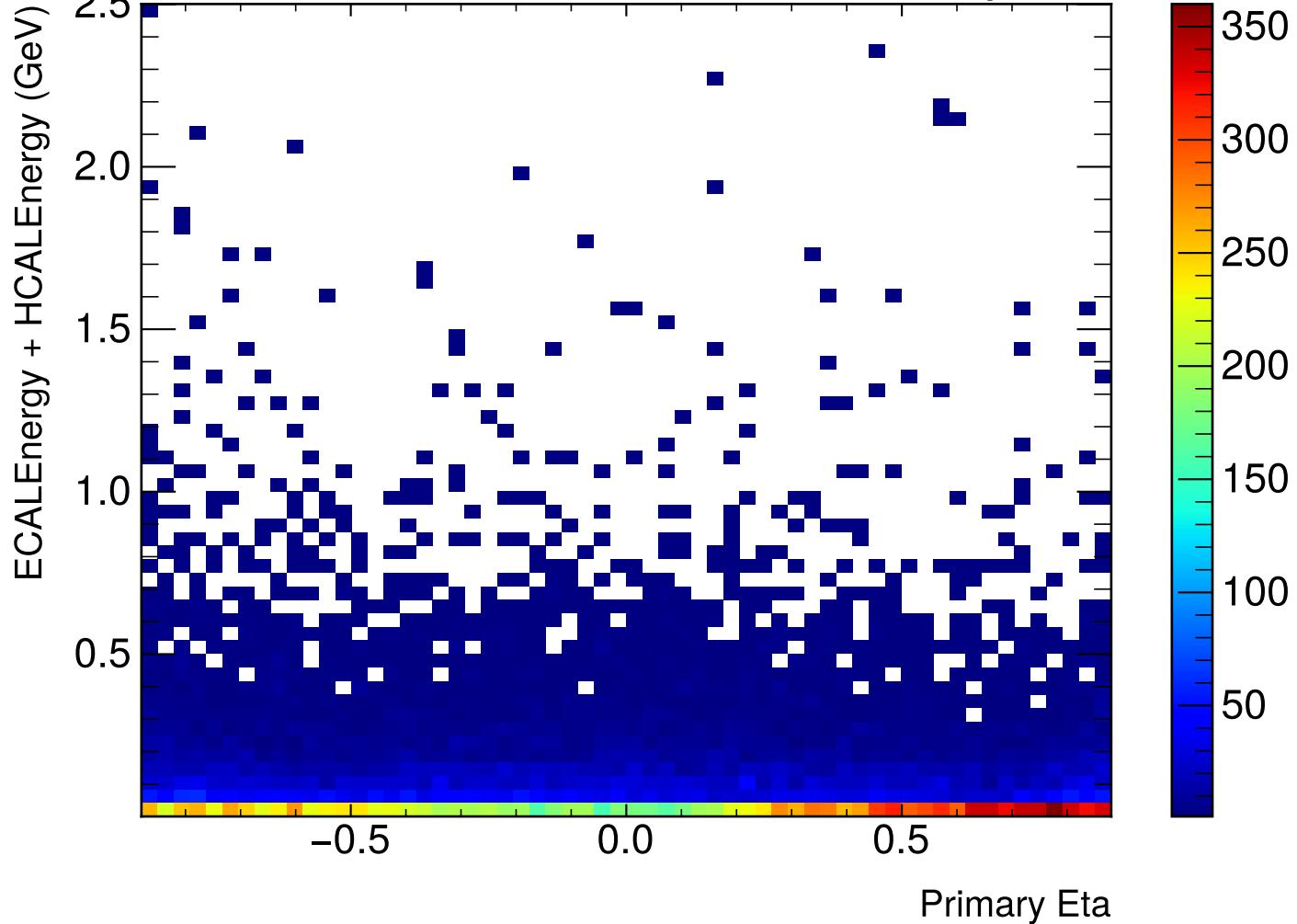
neutron@1GeV spanning  $-0.88 < \eta < 0.88$



neutron@1GeV spanning  $-0.88 < \eta < 0.88$

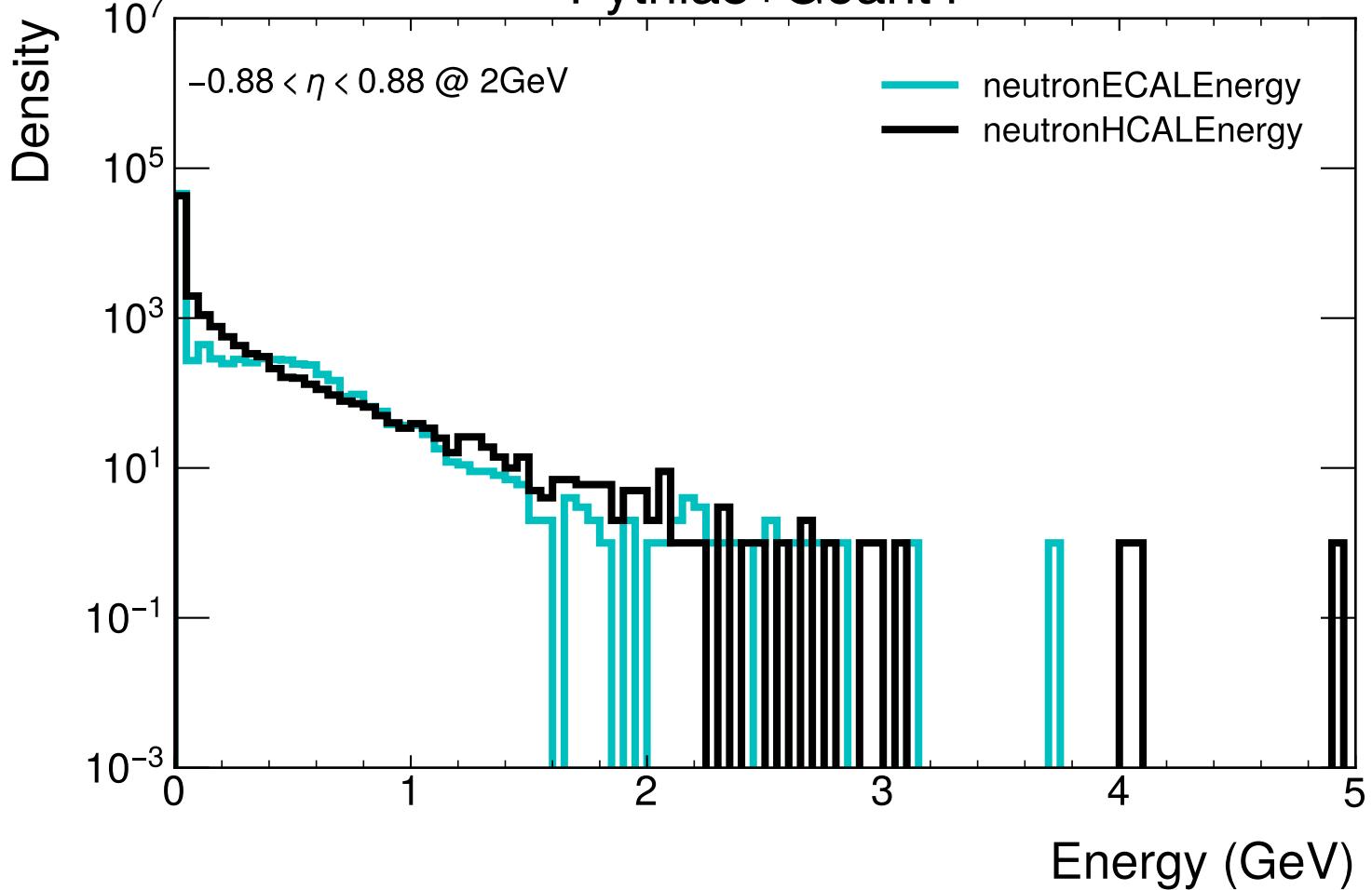


neutron@1GeV spanning  $-0.88 < \eta < 0.88$

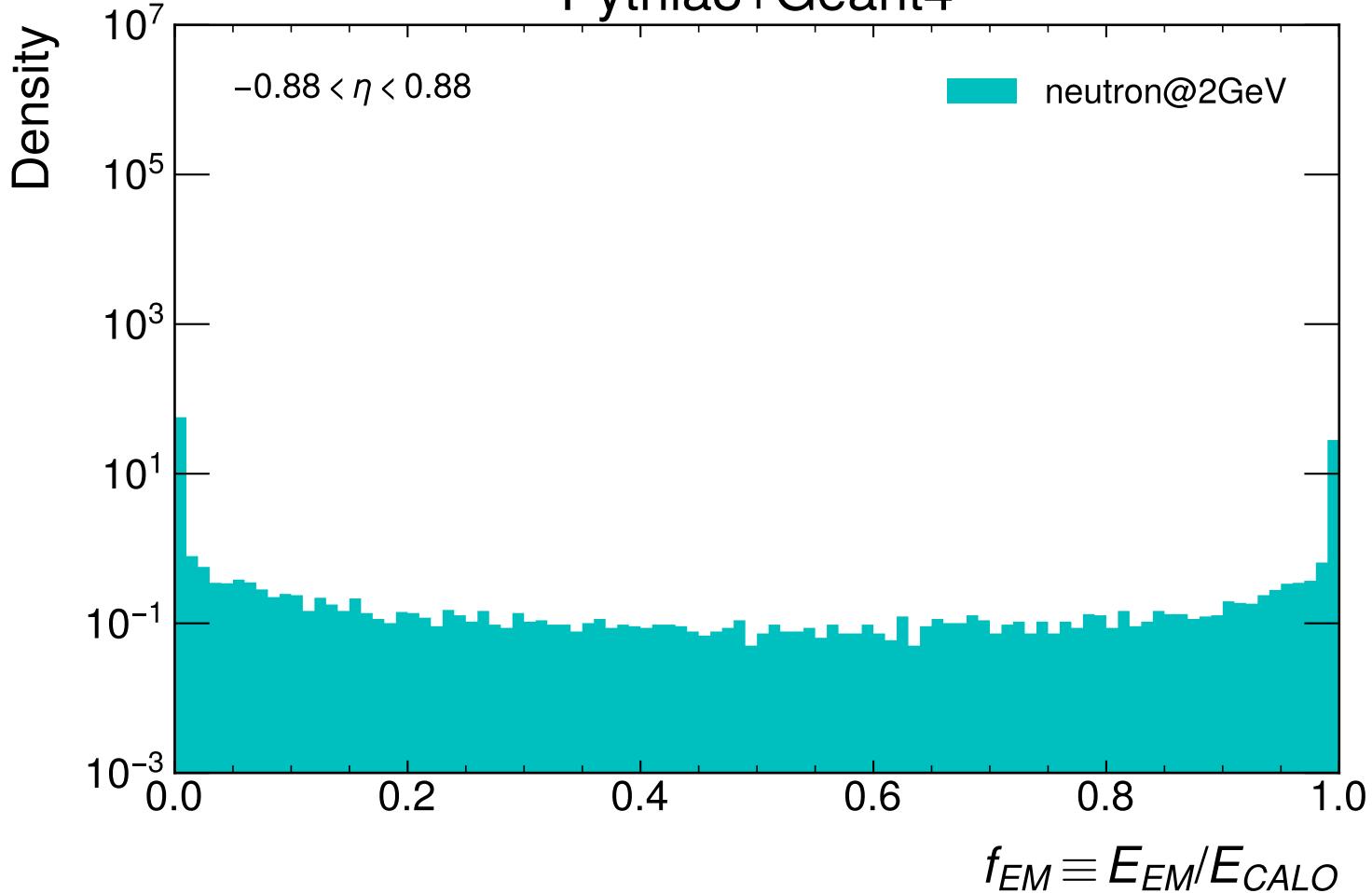


# ATHENA simulation [DD4hep]

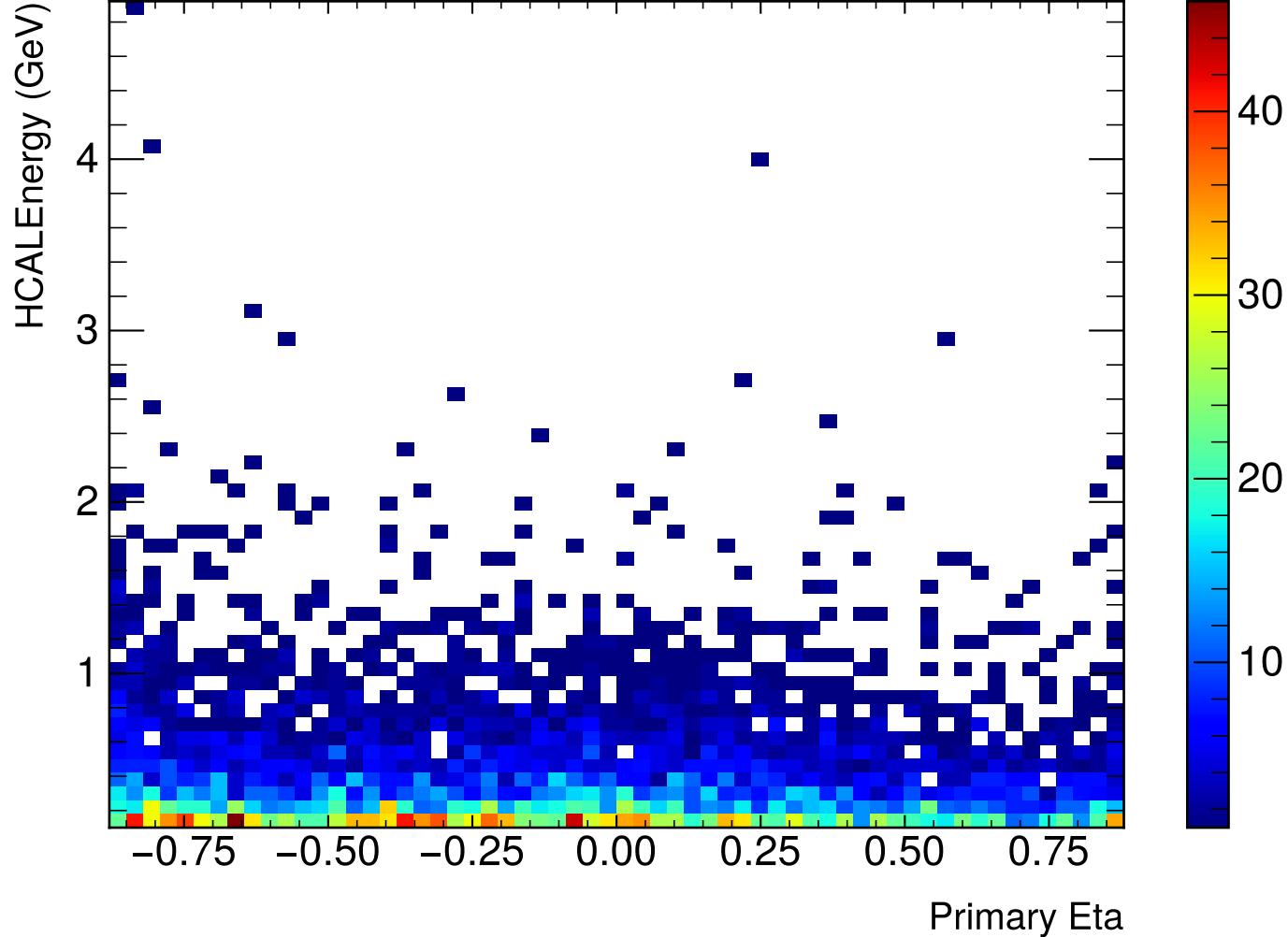
## Pythia8+Geant4



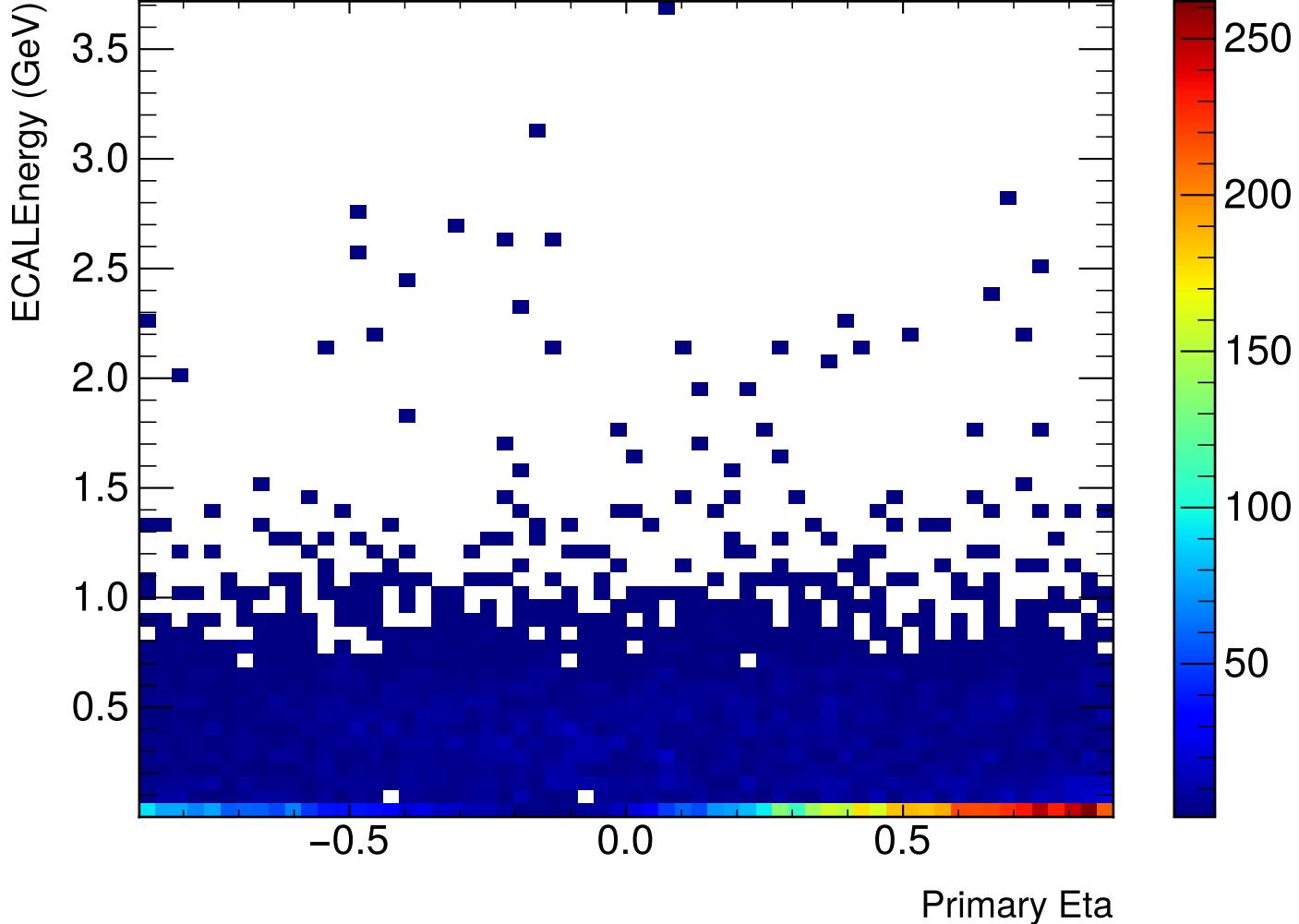
# ATHENA simulation [DD4hep] Pythia8+Geant4



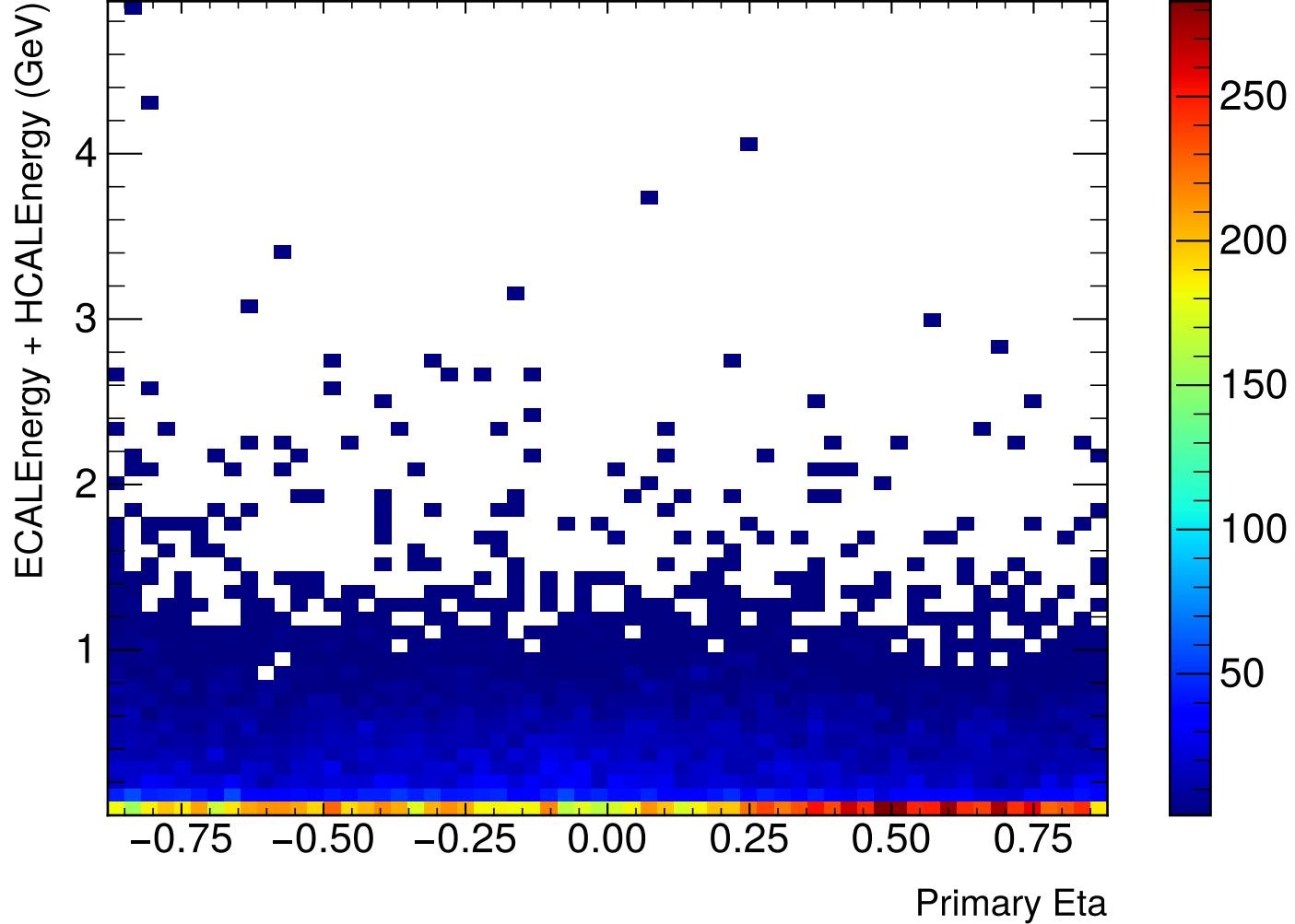
neutron@2GeV spanning  $-0.88 < \eta < 0.88$



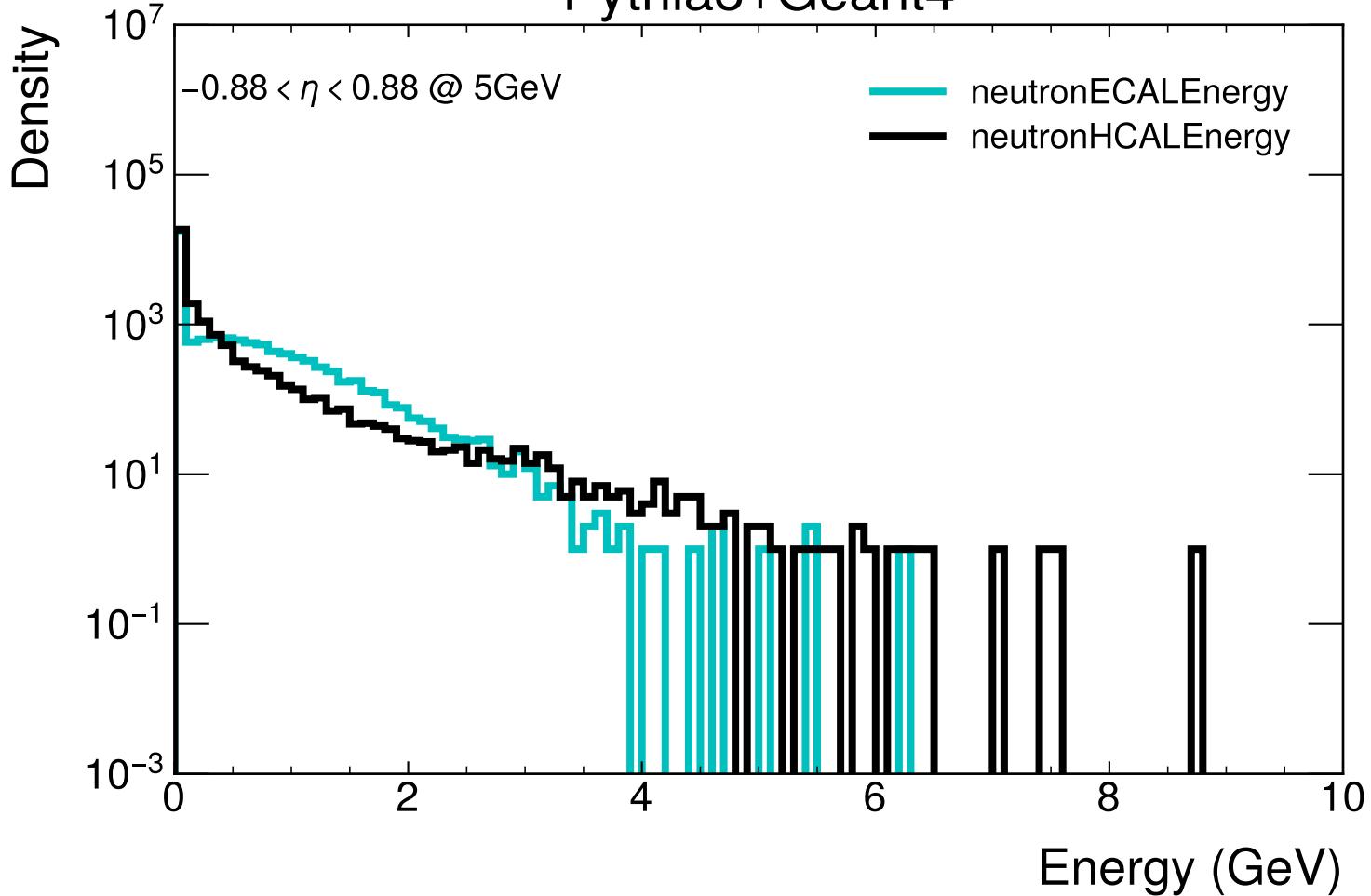
neutron@2GeV spanning  $-0.88 < \eta < 0.88$



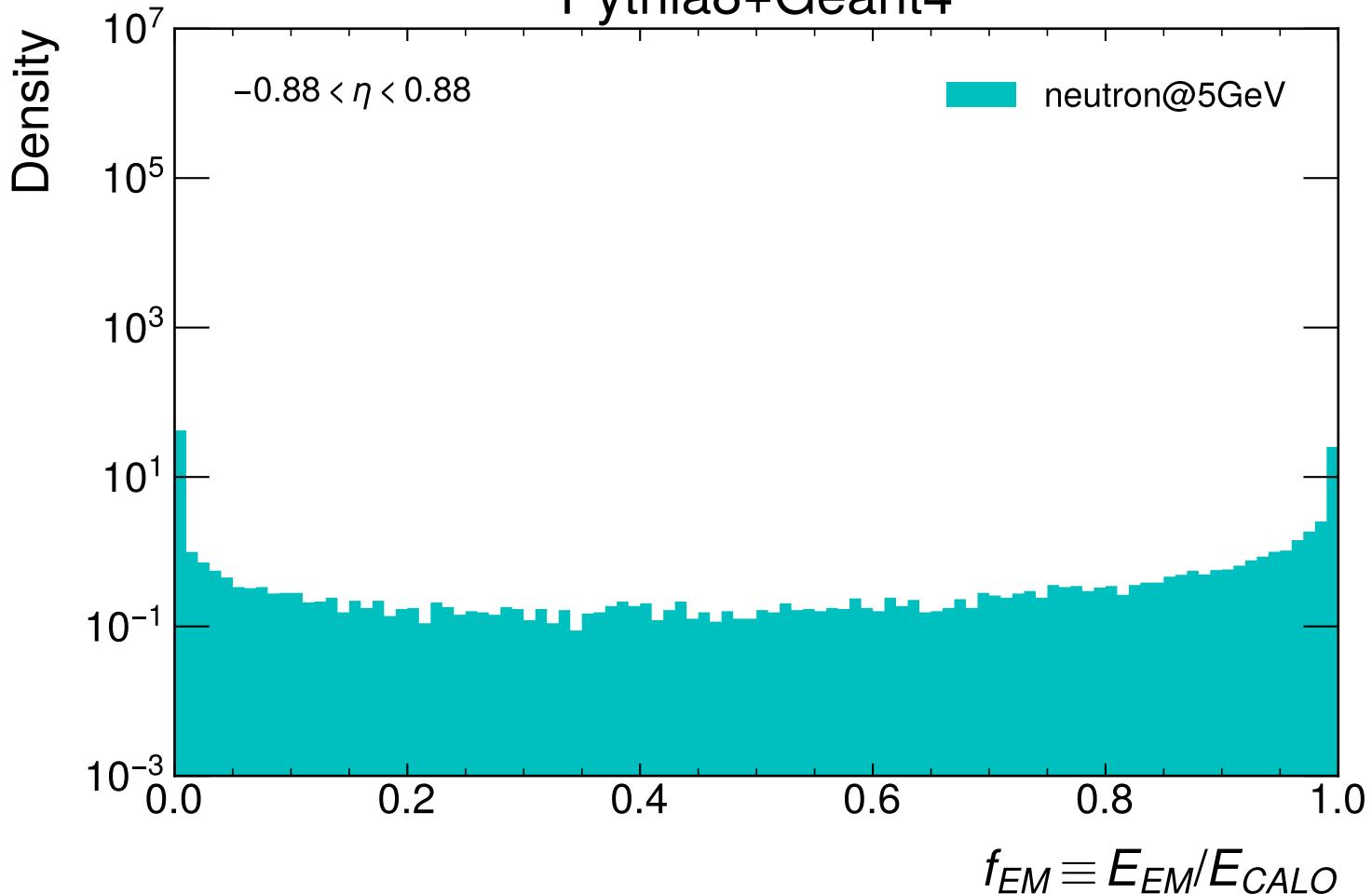
neutron@2GeV spanning  $-0.88 < \eta < 0.88$



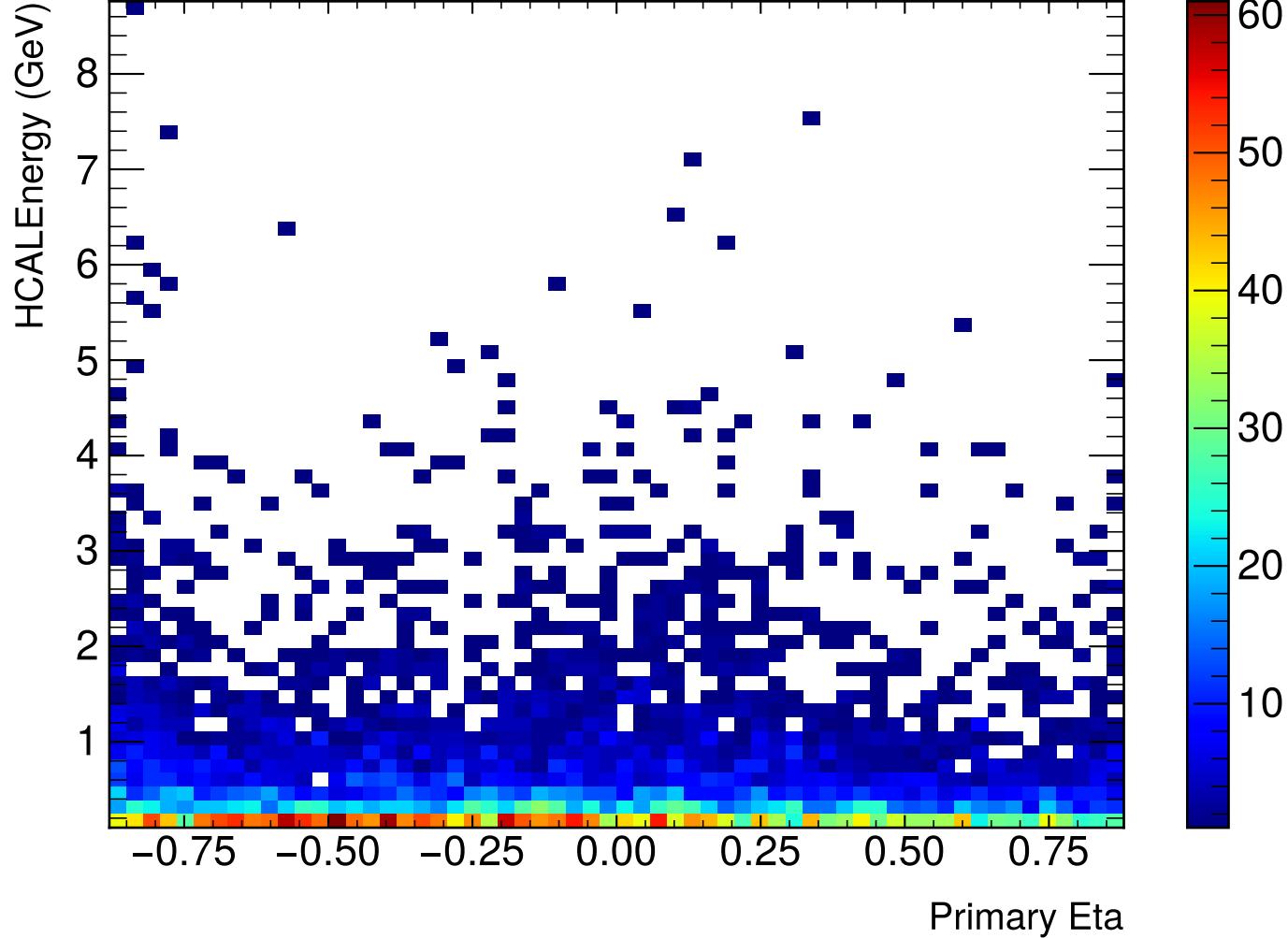
# ATHENA simulation [DD4hep] Pythia8+Geant4



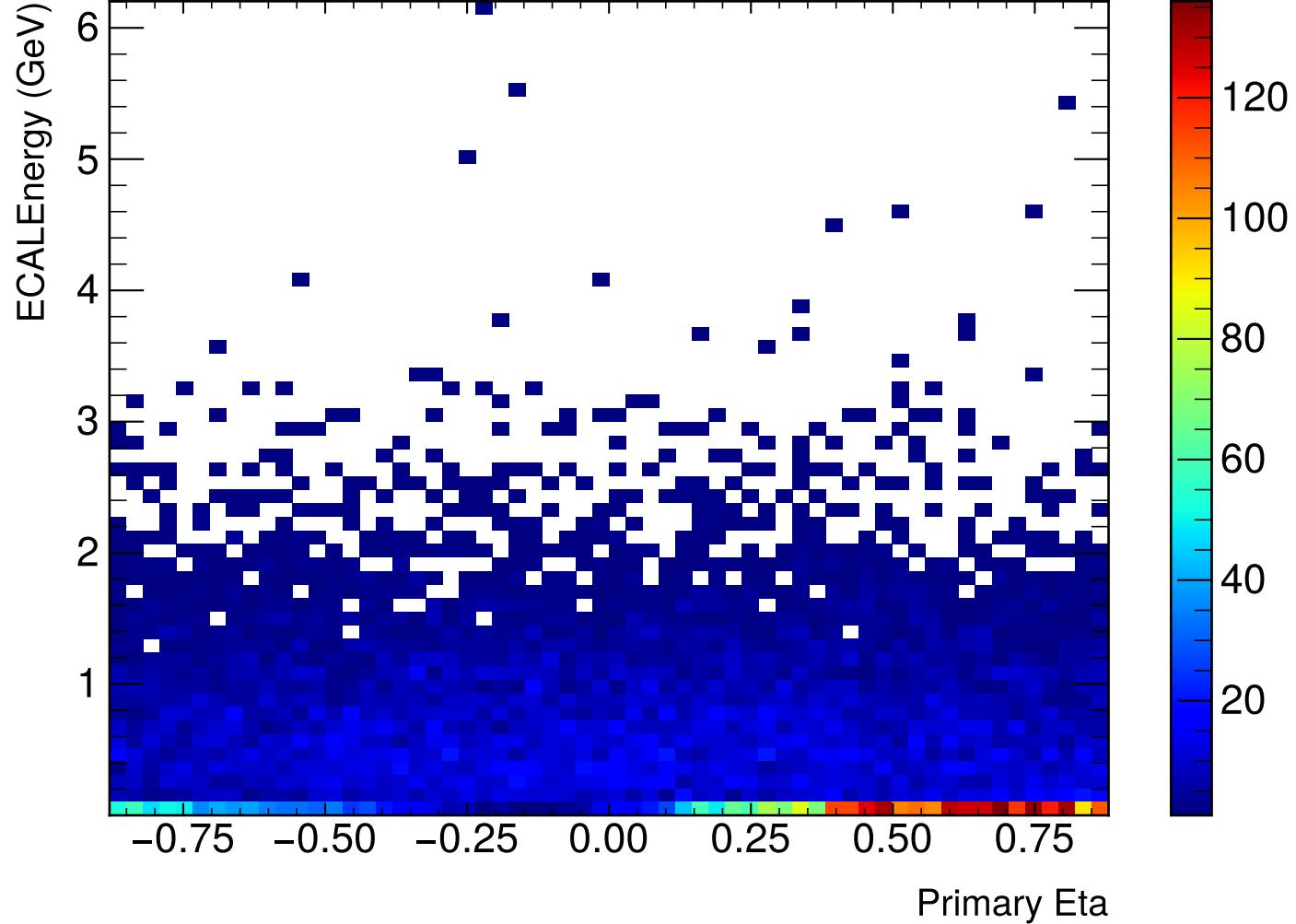
# ATHENA simulation [DD4hep] Pythia8+Geant4



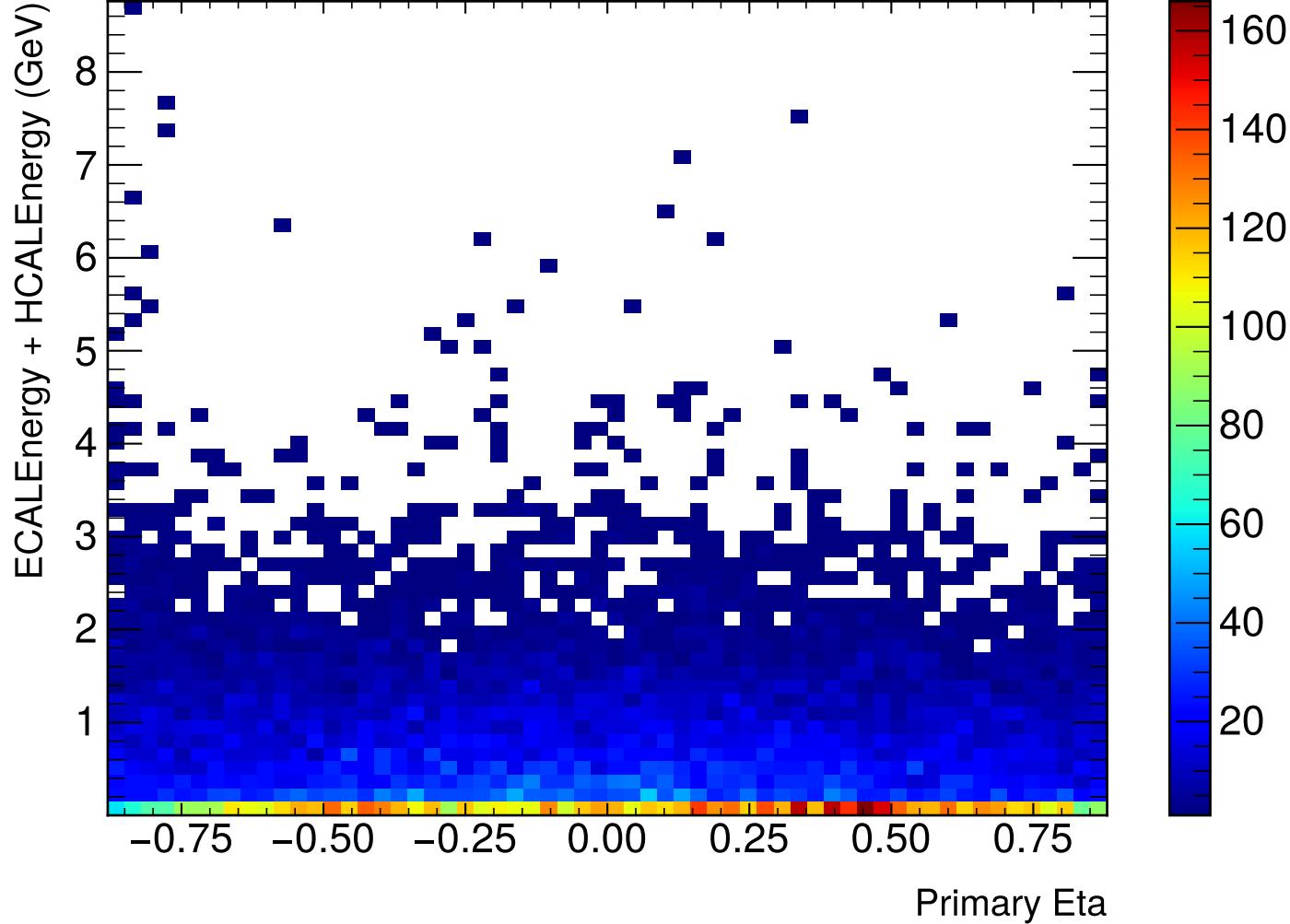
neutron@5GeV spanning  $-0.88 < \eta < 0.88$



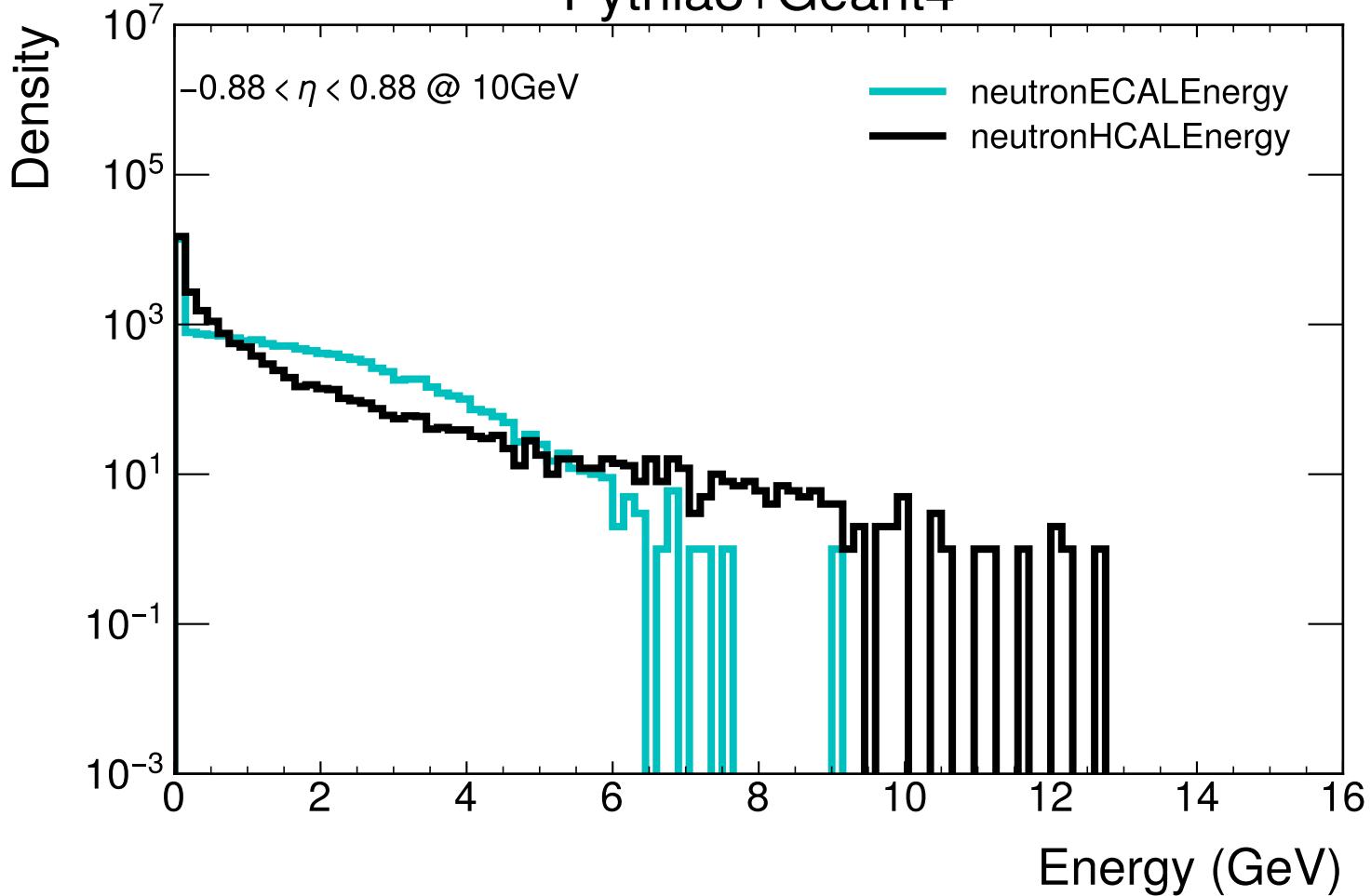
neutron@5GeV spanning  $-0.88 < \eta < 0.88$



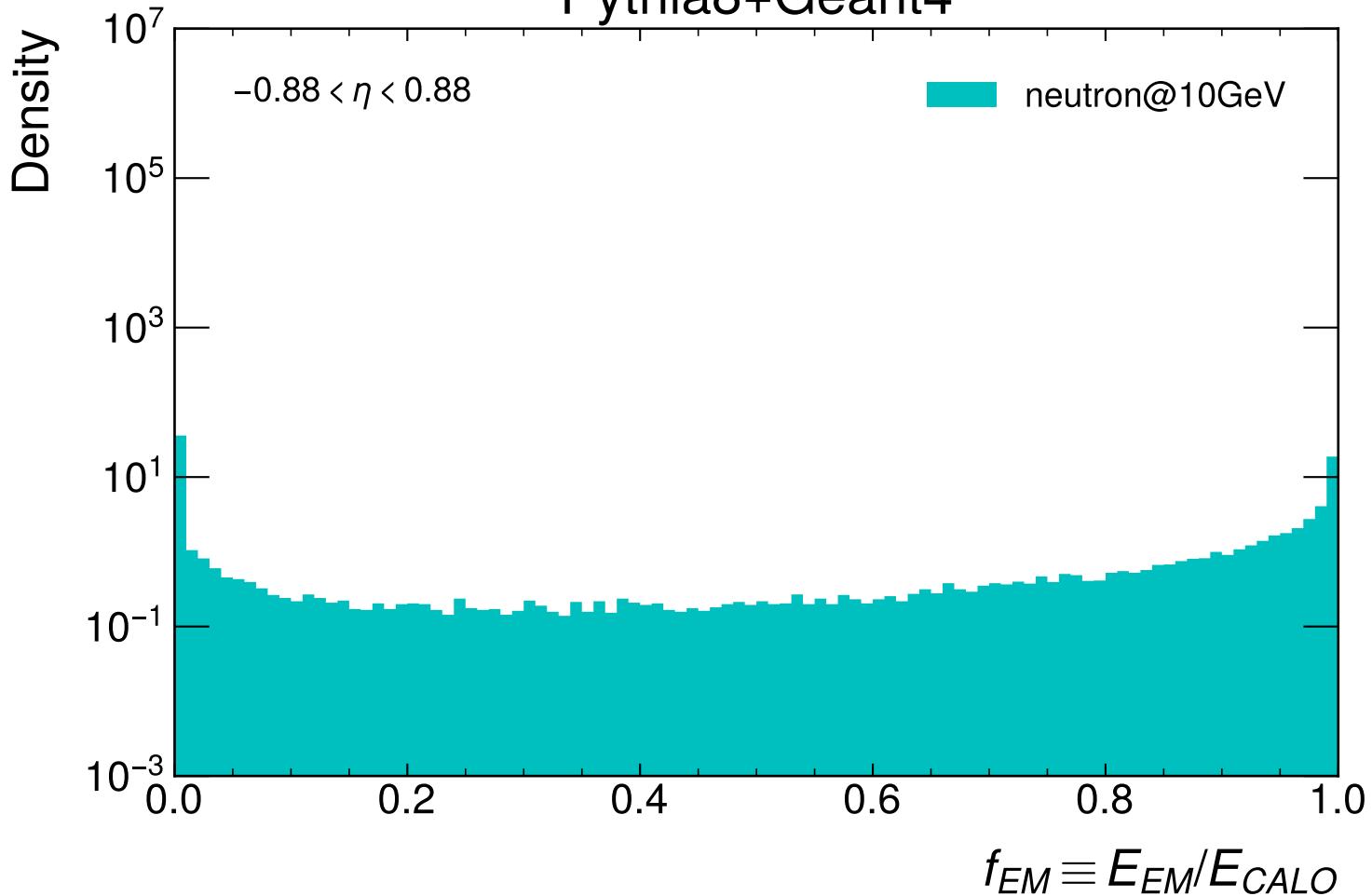
neutron@5GeV spanning  $-0.88 < \eta < 0.88$



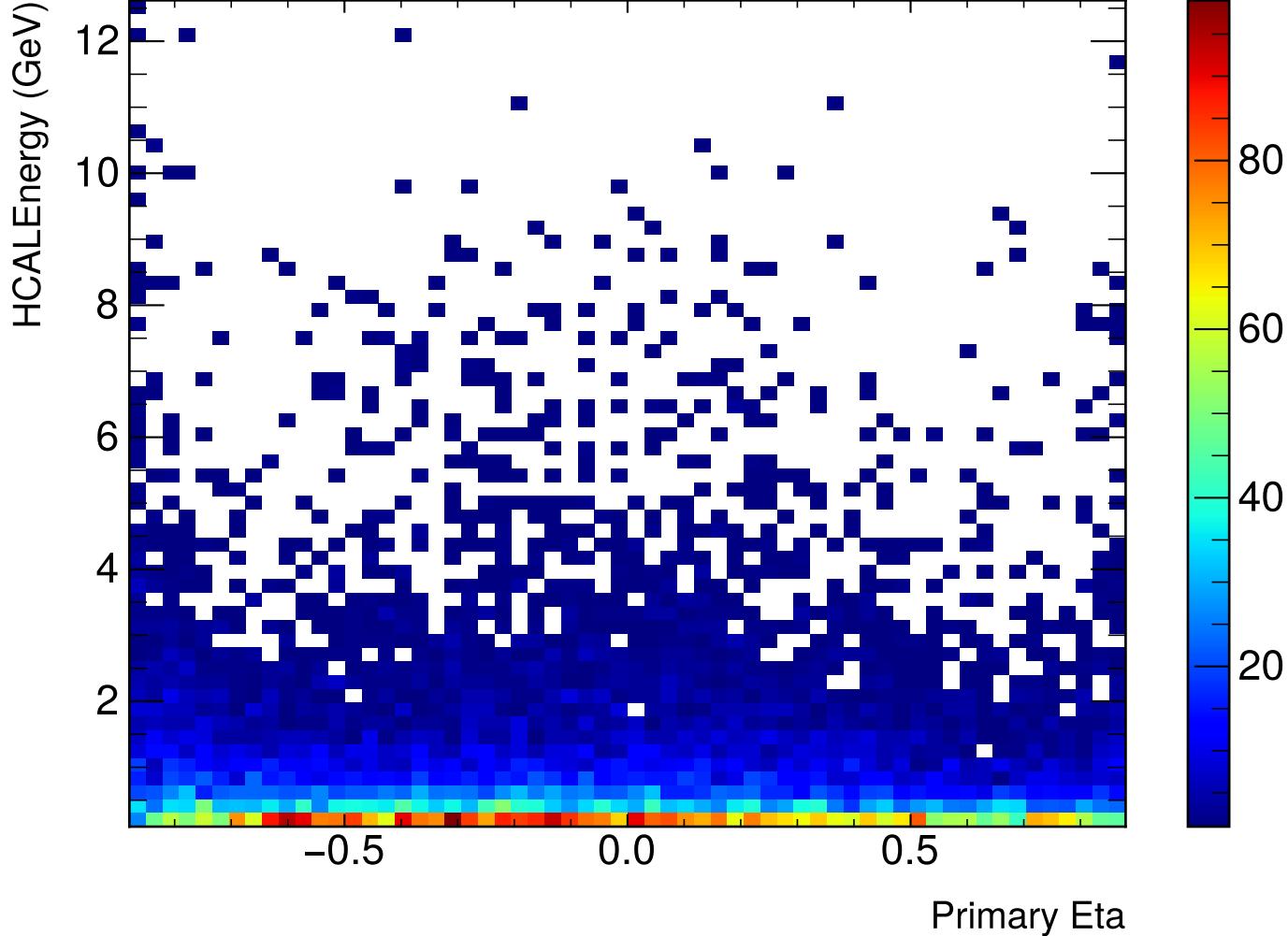
# ATHENA simulation [DD4hep] Pythia8+Geant4



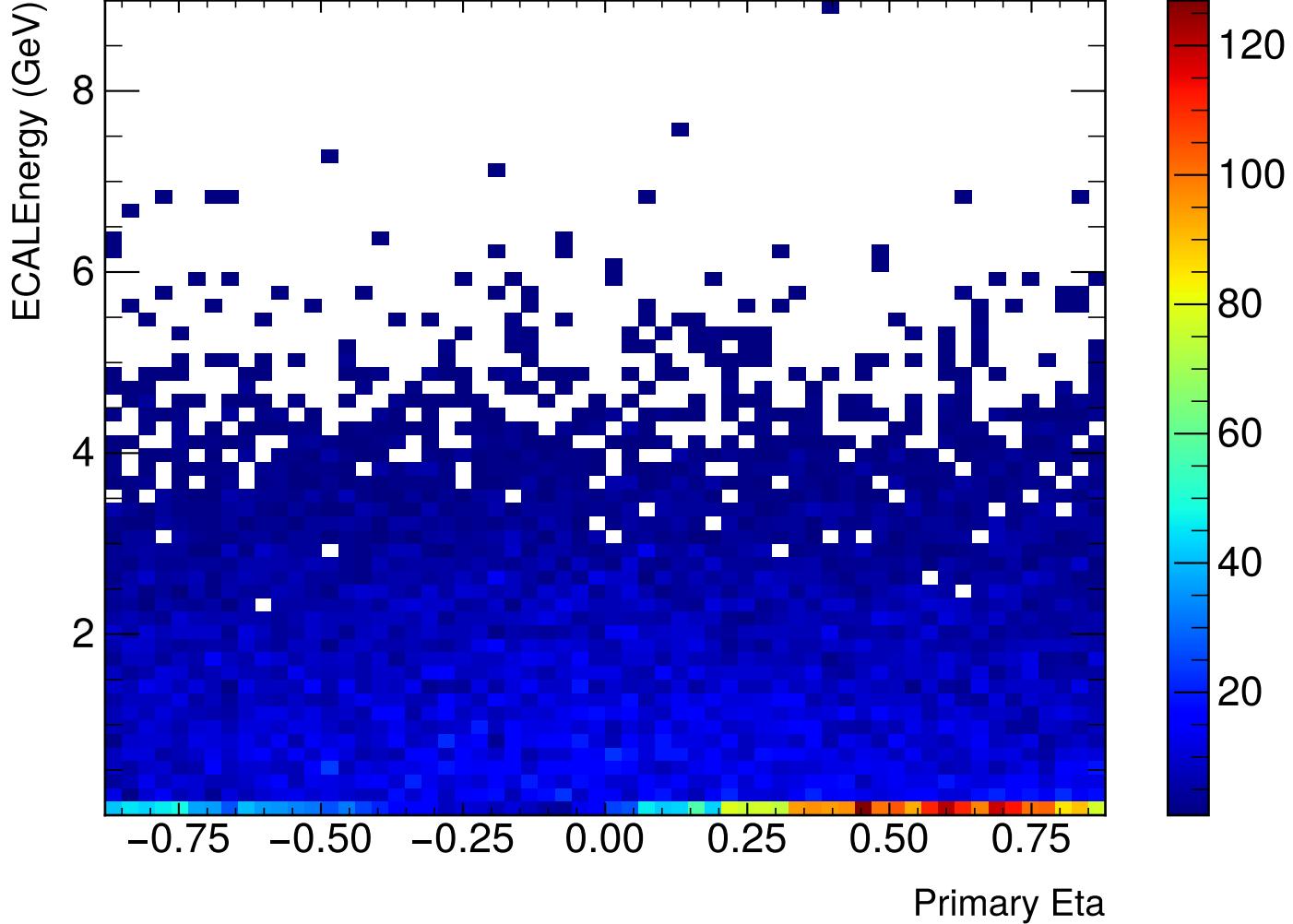
# ATHENA simulation [DD4hep] Pythia8+Geant4



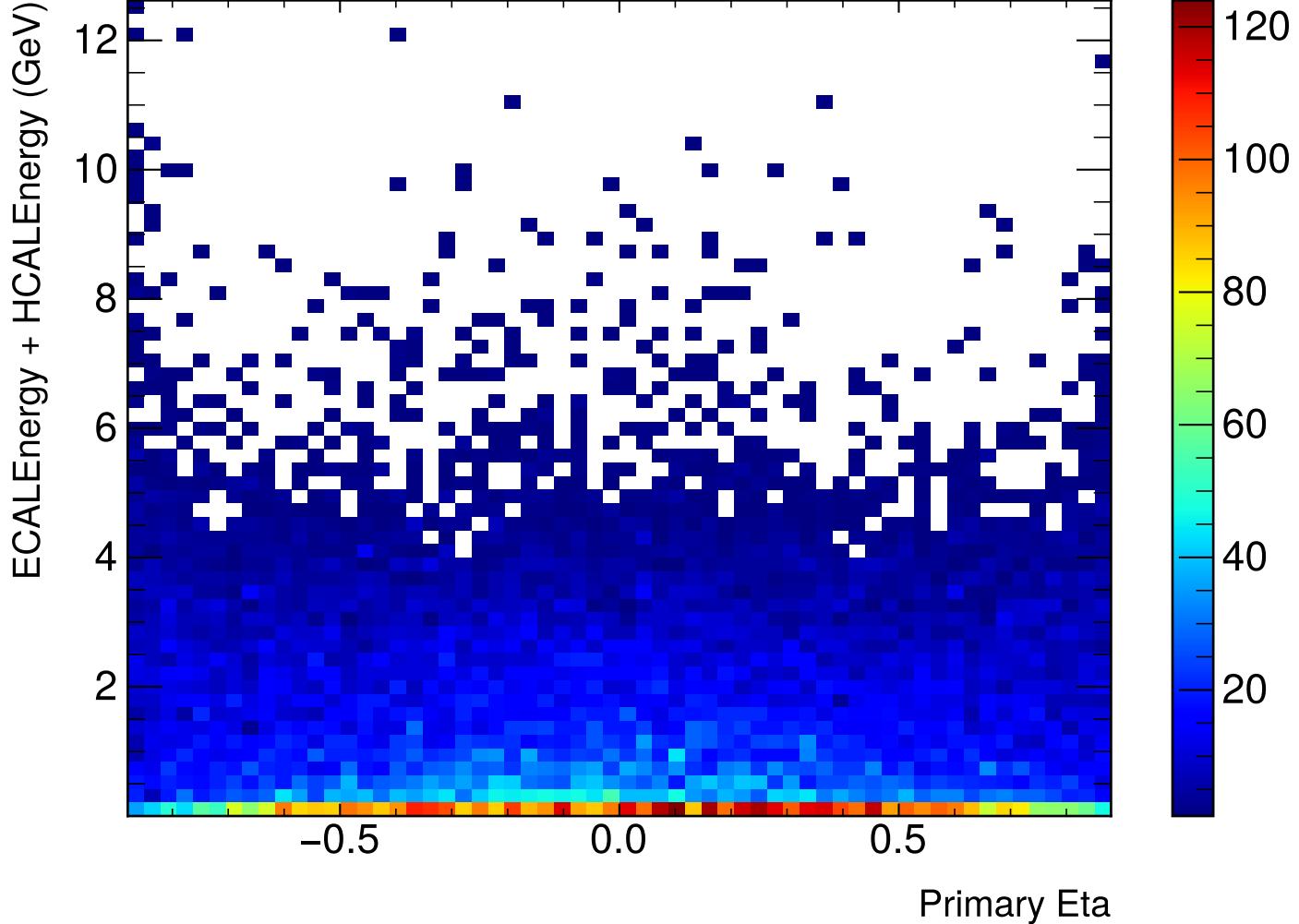
neutron@10GeV spanning  $-0.88 < \eta < 0.88$



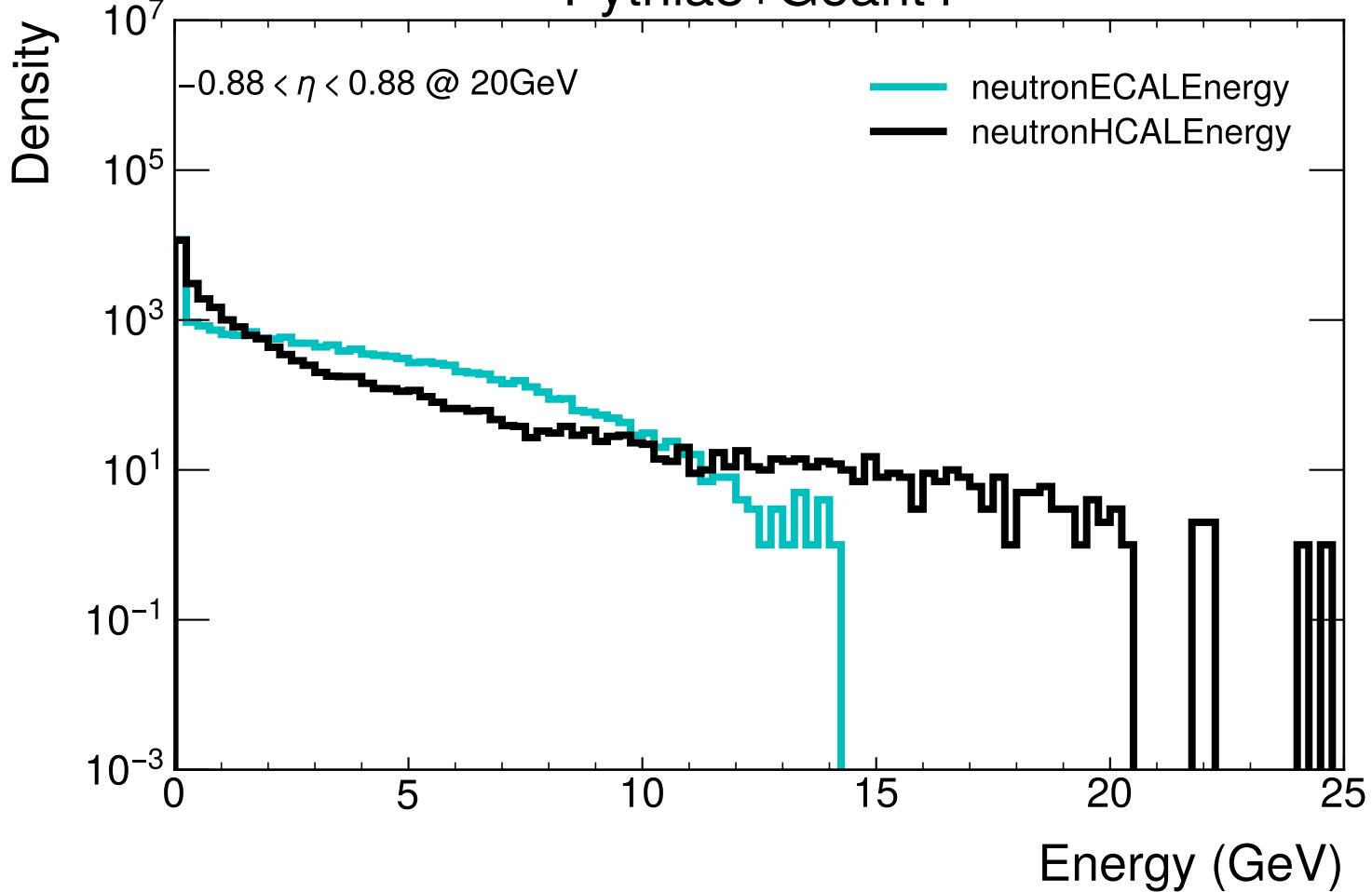
neutron@10GeV spanning  $-0.88 < \eta < 0.88$



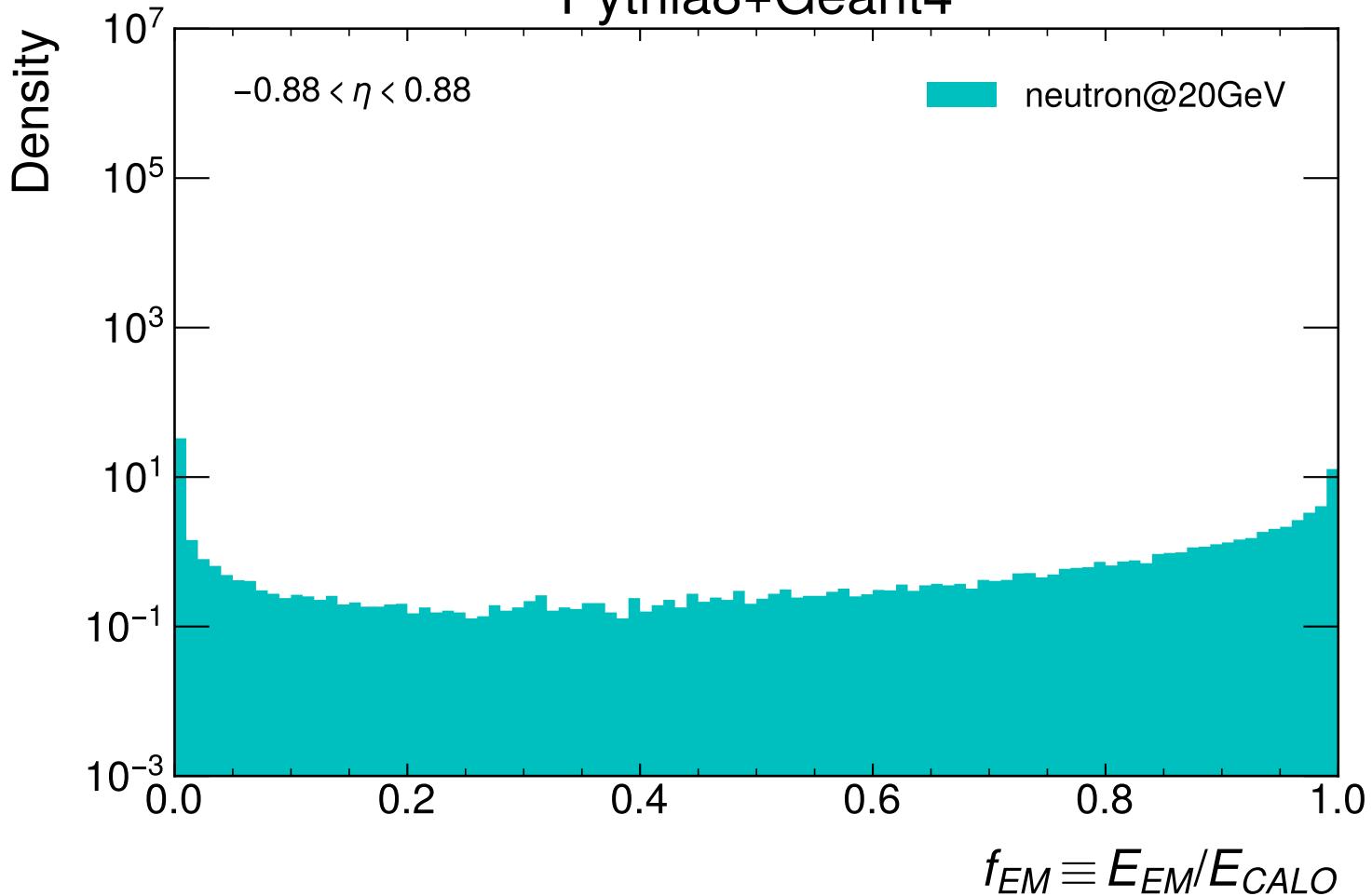
neutron@10GeV spanning  $-0.88 < \eta < 0.88$

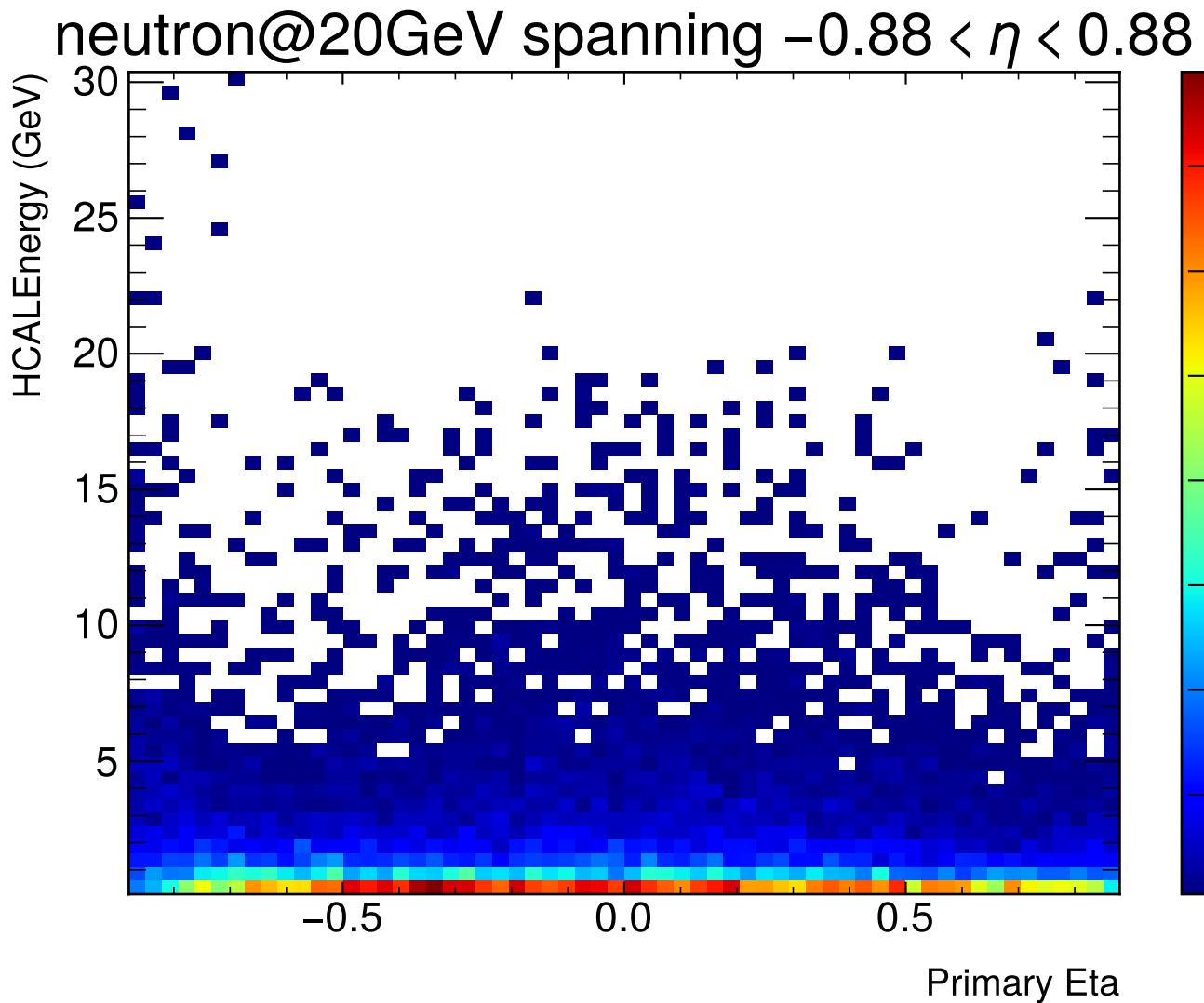


# ATHENA simulation [DD4hep] Pythia8+Geant4

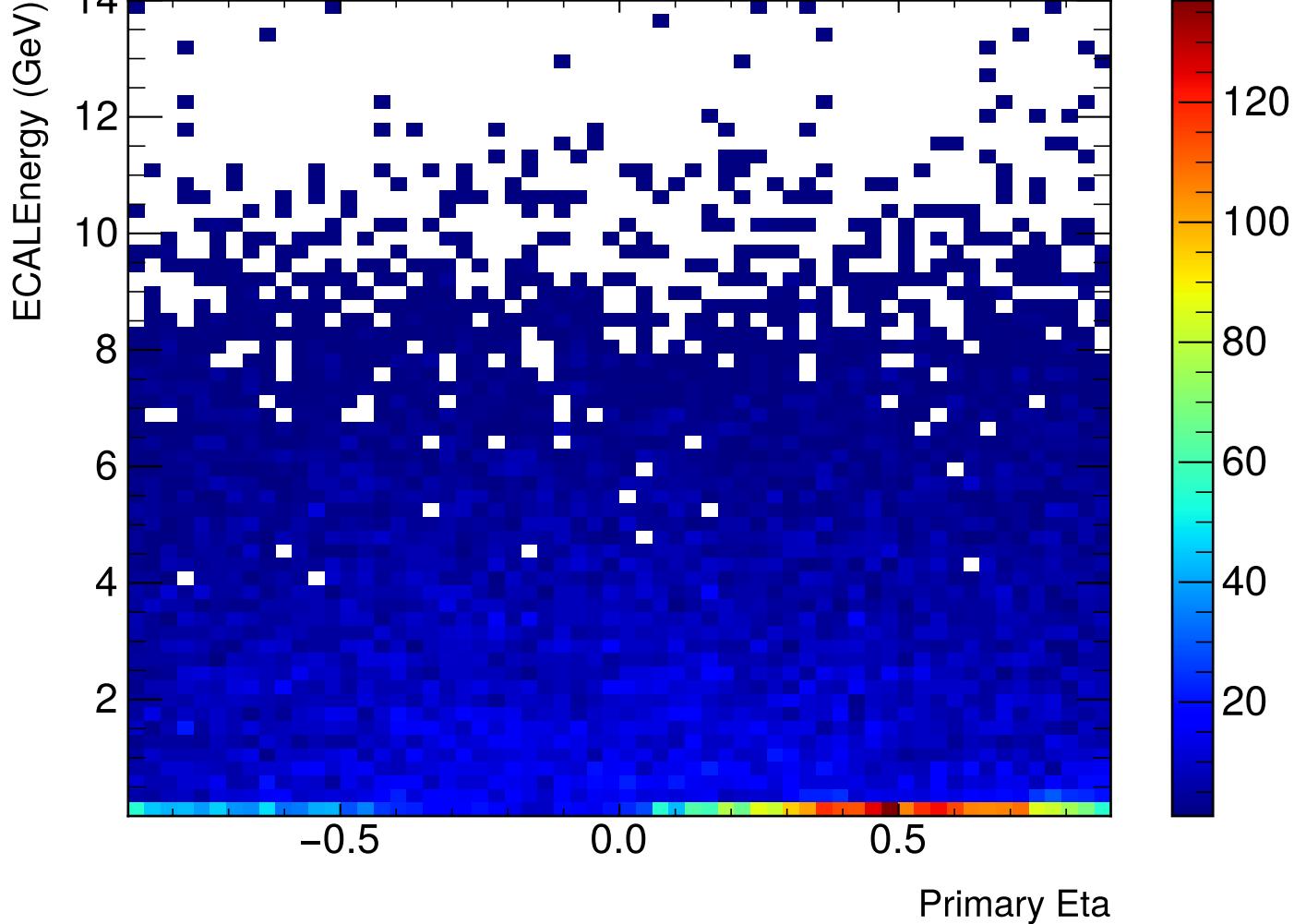


# ATHENA simulation [DD4hep] Pythia8+Geant4

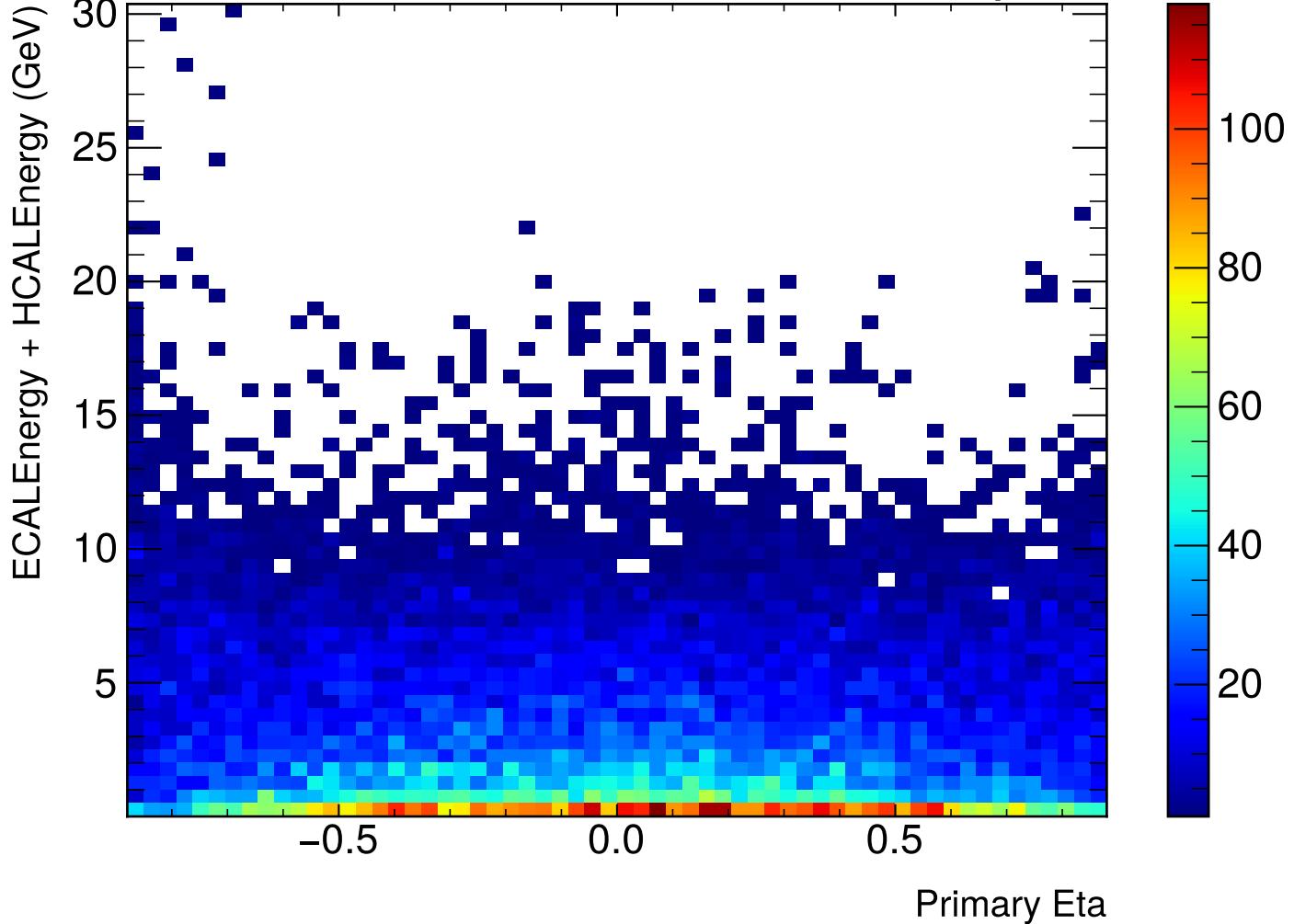




neutron@20GeV spanning  $-0.88 < \eta < 0.88$

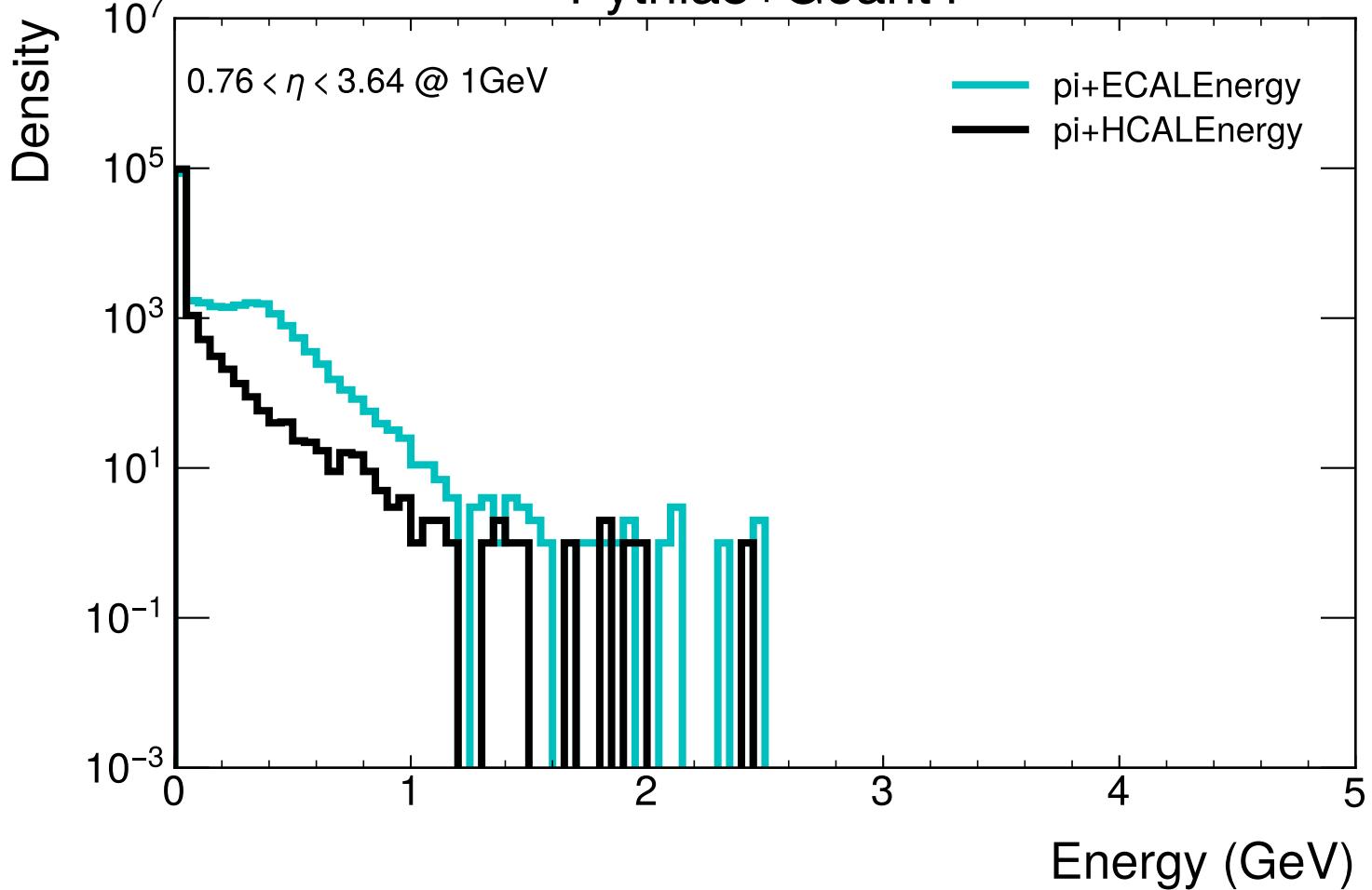


neutron@20GeV spanning  $-0.88 < \eta < 0.88$

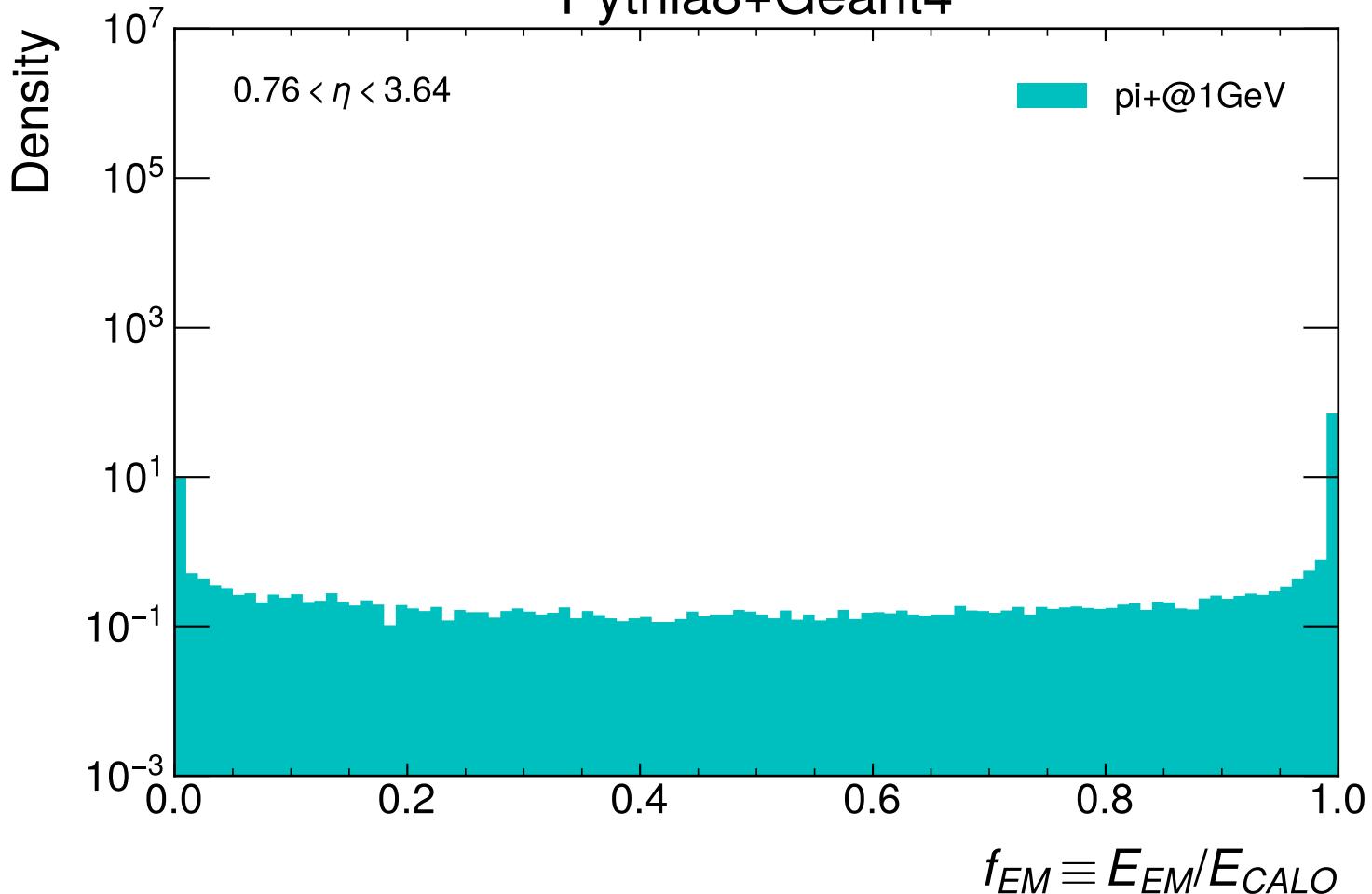


# ATHENA simulation [DD4hep]

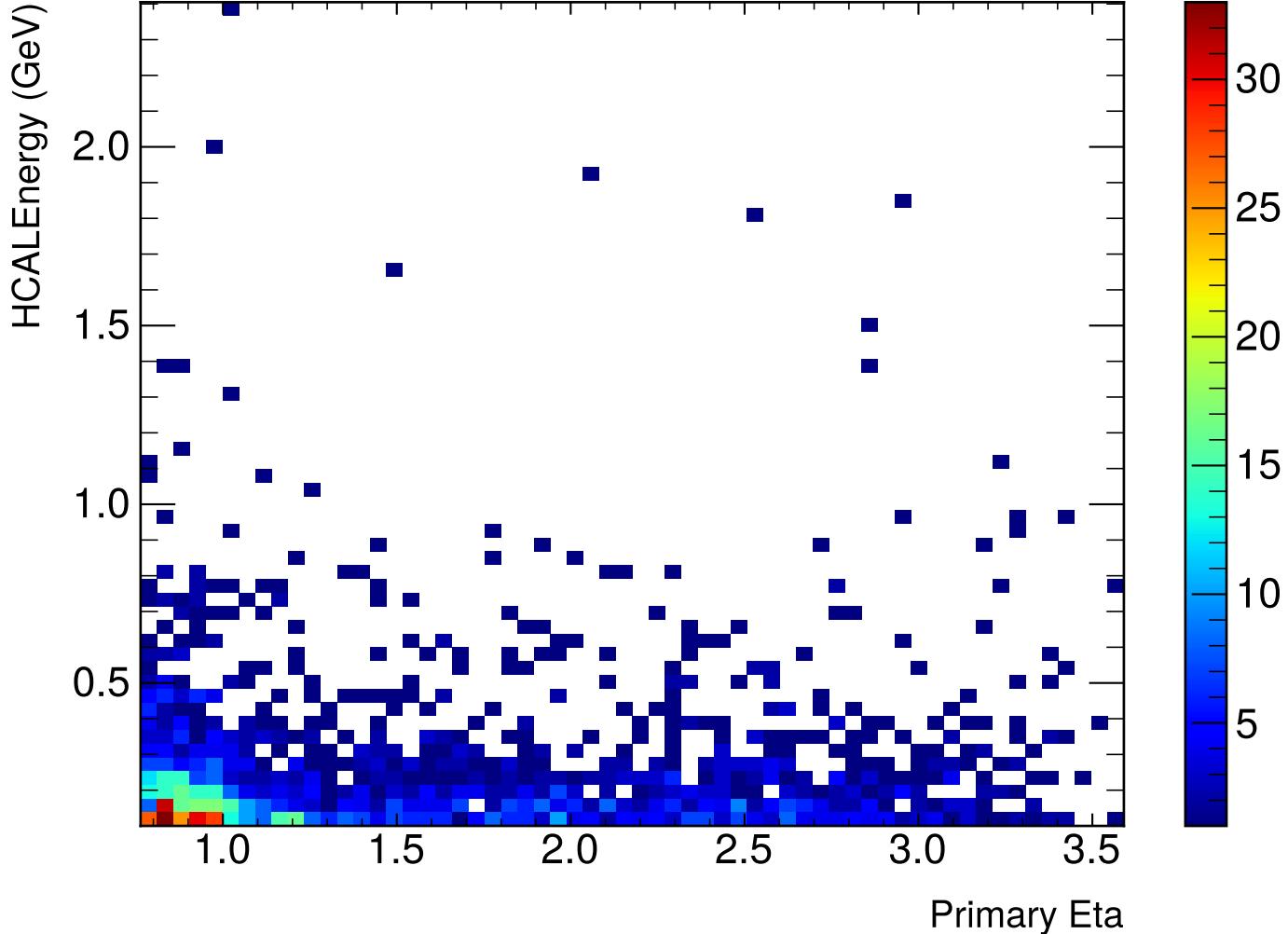
## Pythia8+Geant4



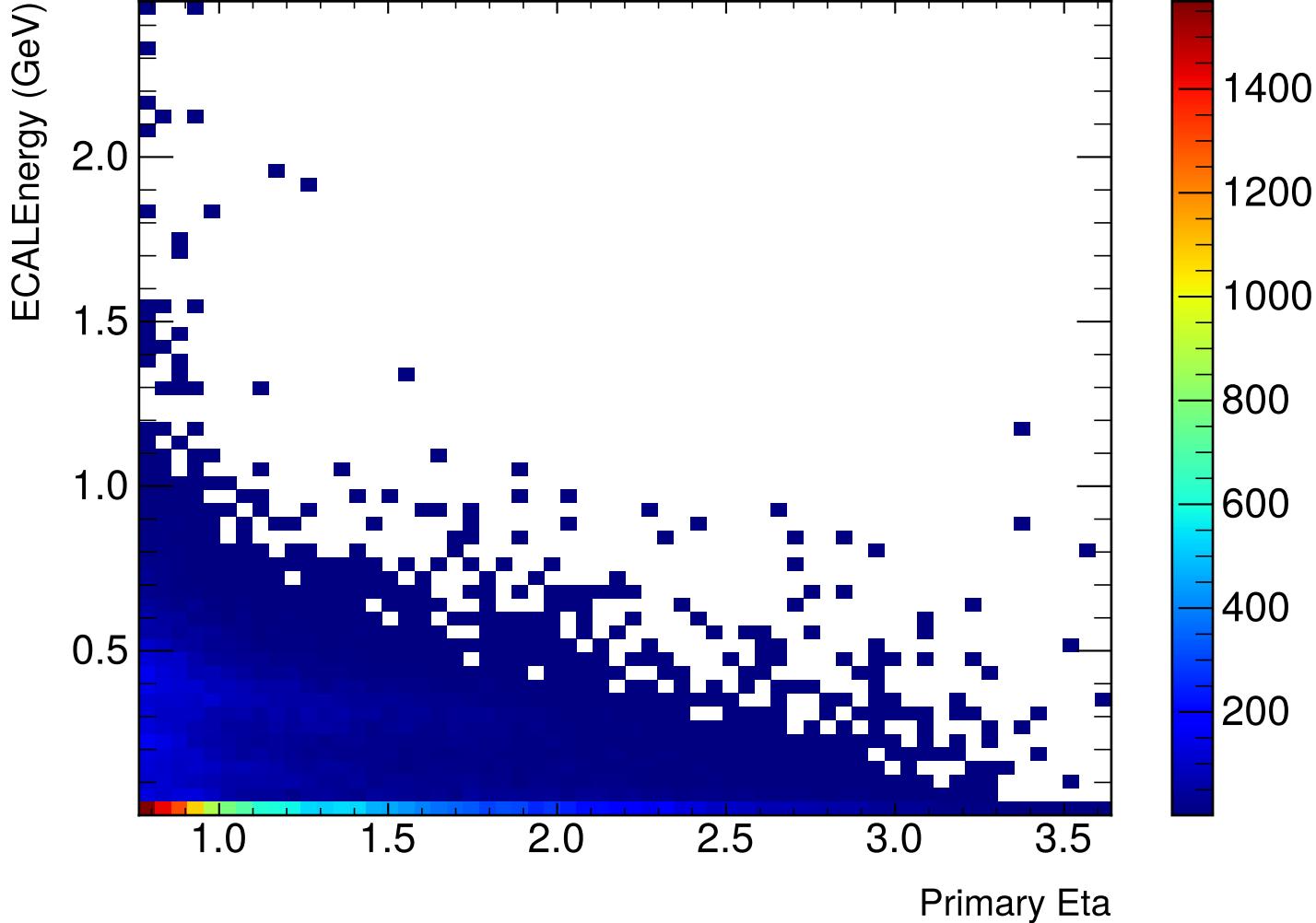
# ATHENA simulation [DD4hep] Pythia8+Geant4



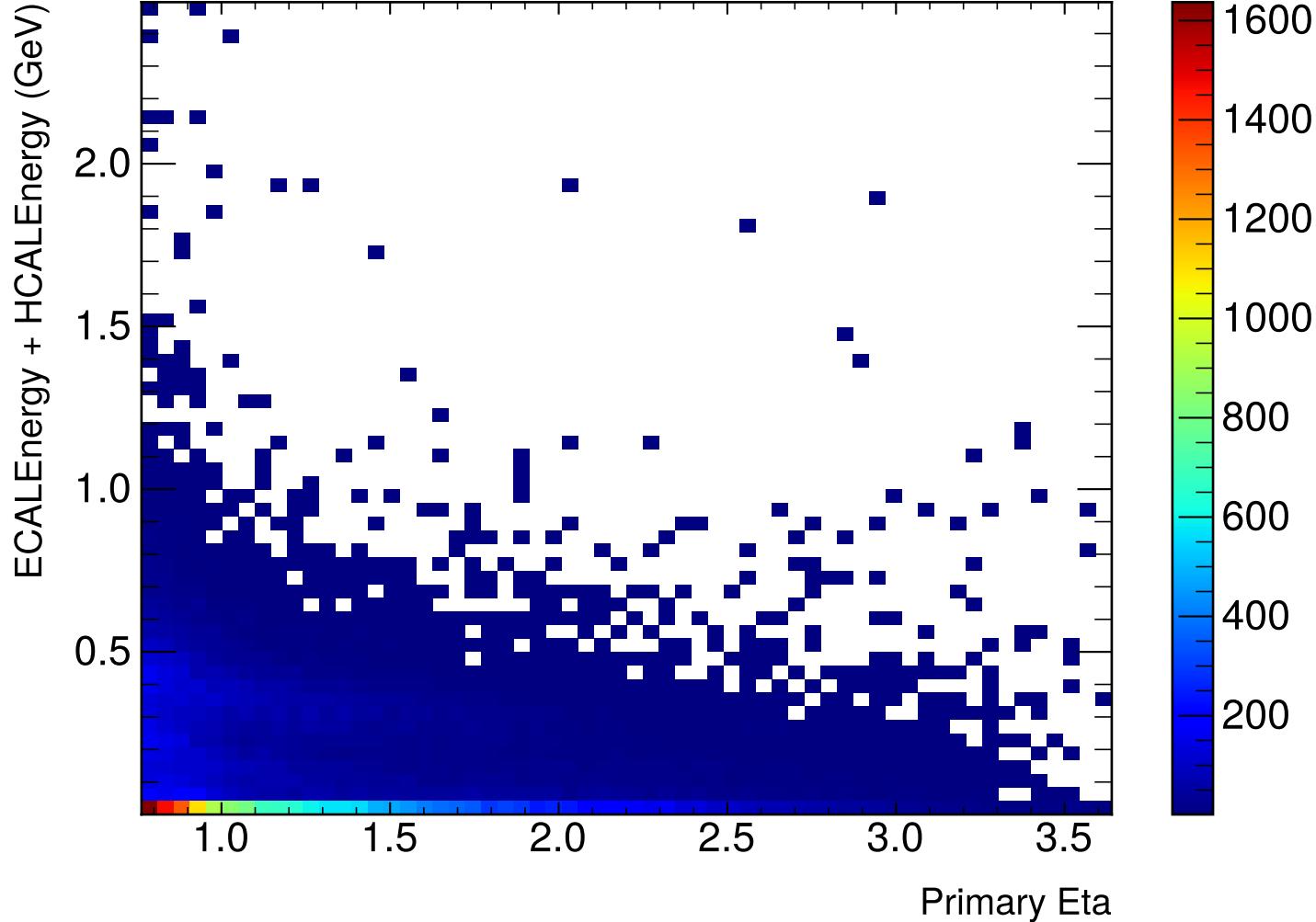
$\pi^+@1\text{GeV}$  spanning  $0.76 < \eta < 3.64$



$\pi^+@1\text{GeV}$  spanning  $0.76 < \eta < 3.64$

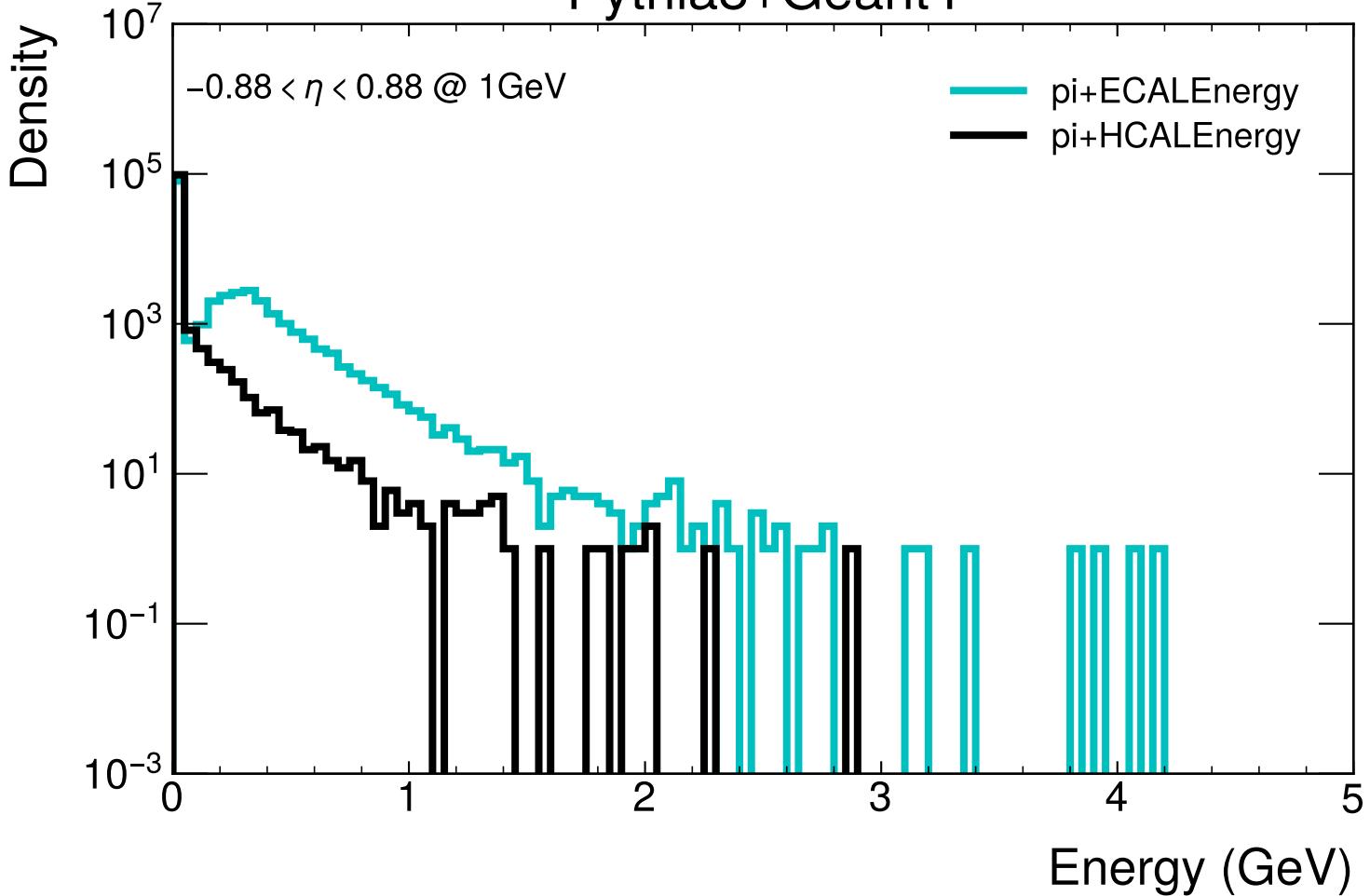


$\pi^+@1\text{GeV}$  spanning  $0.76 < \eta < 3.64$

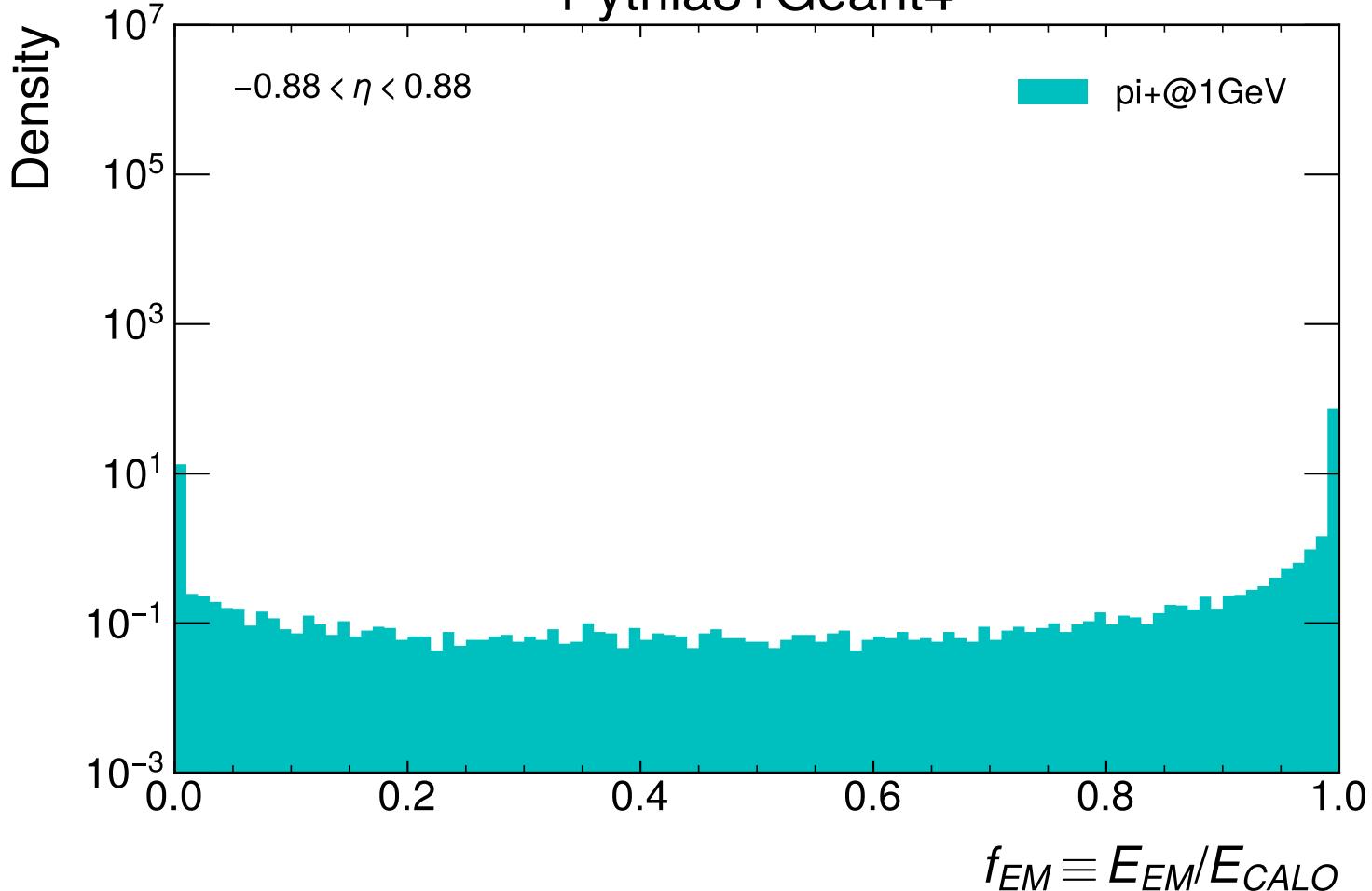


# ATHENA simulation [DD4hep]

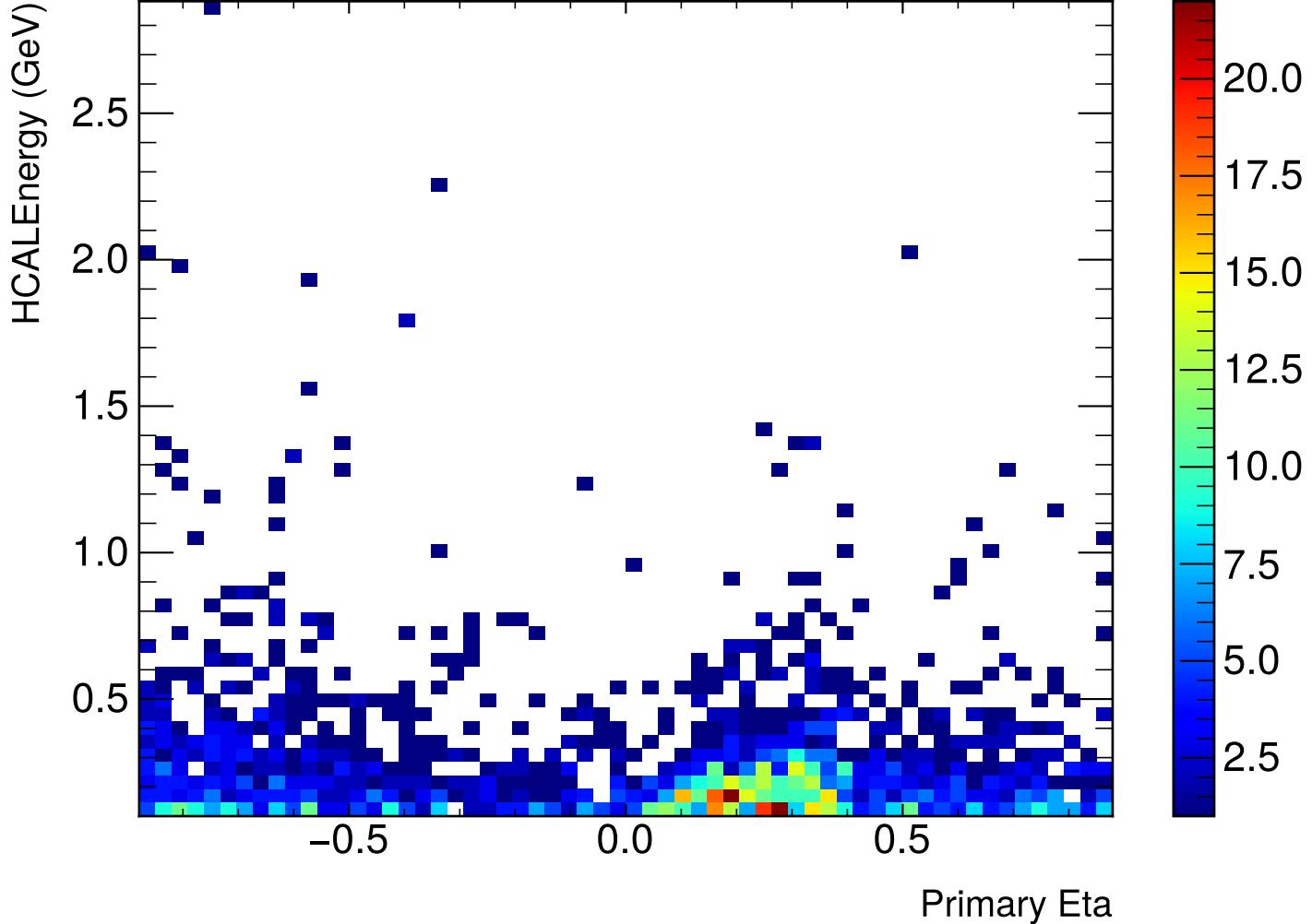
## Pythia8+Geant4



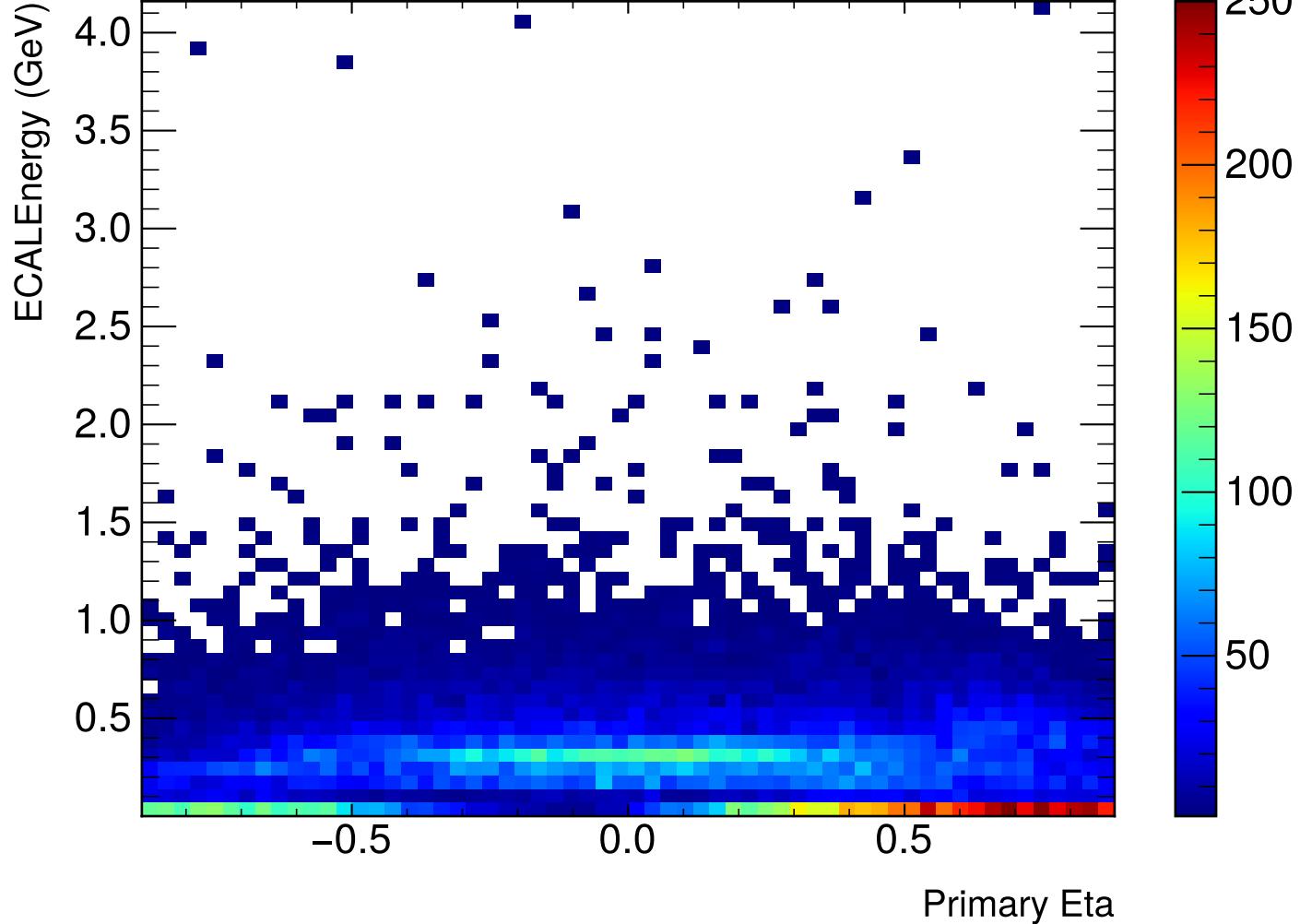
# ATHENA simulation [DD4hep] Pythia8+Geant4



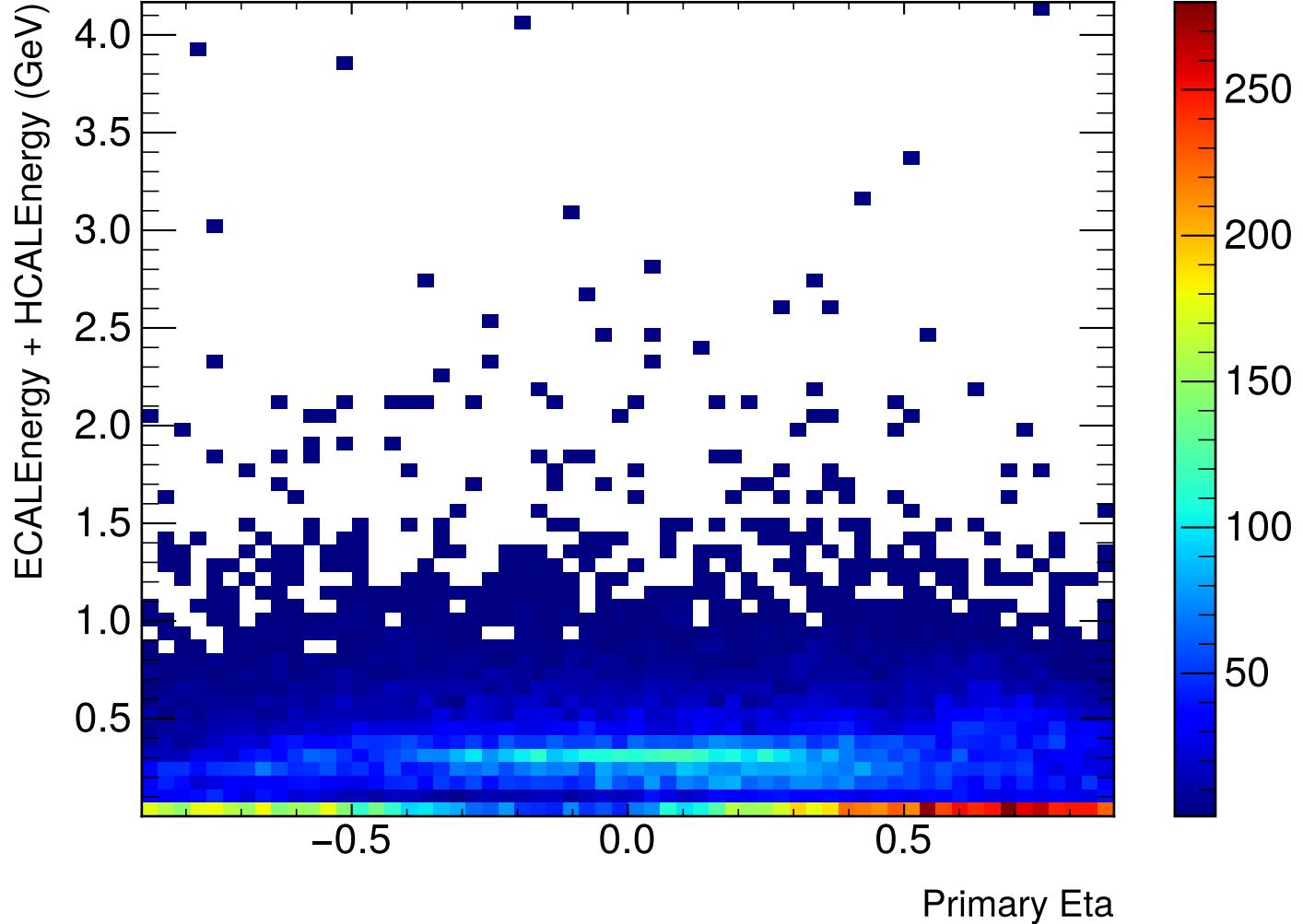
$\pi^+@1\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+@1\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

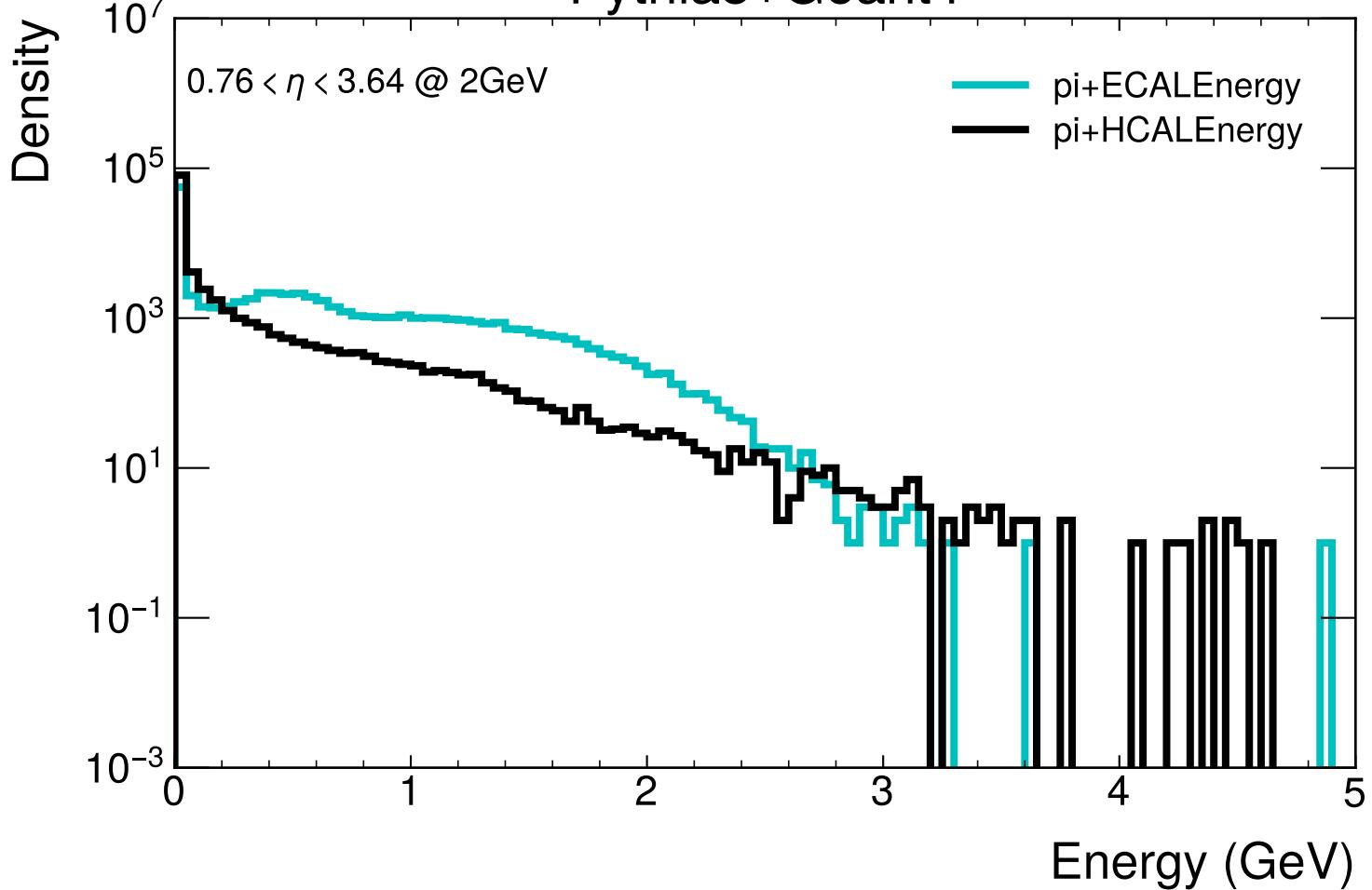


$\pi^+@1\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

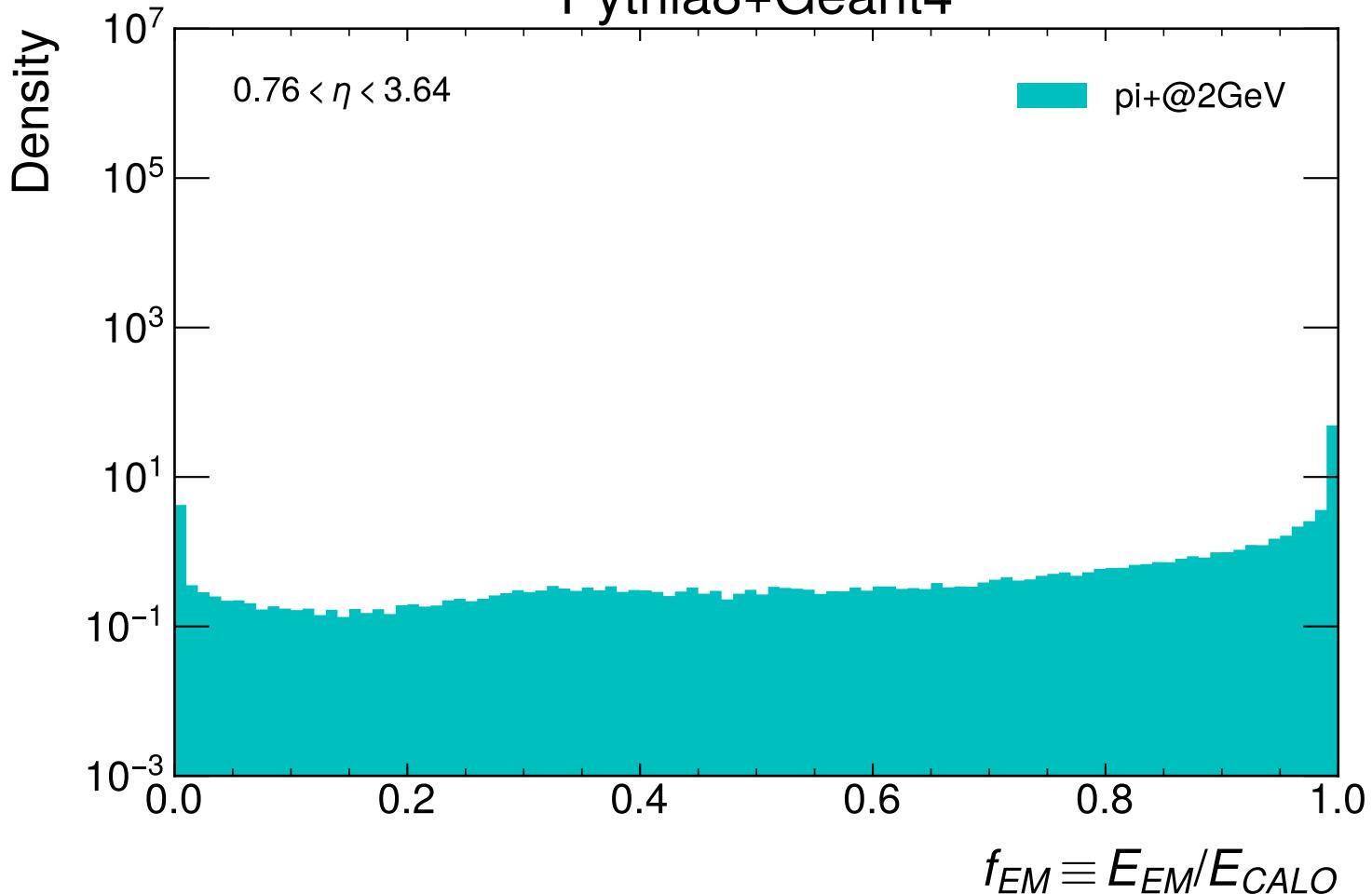


# ATHENA simulation [DD4hep]

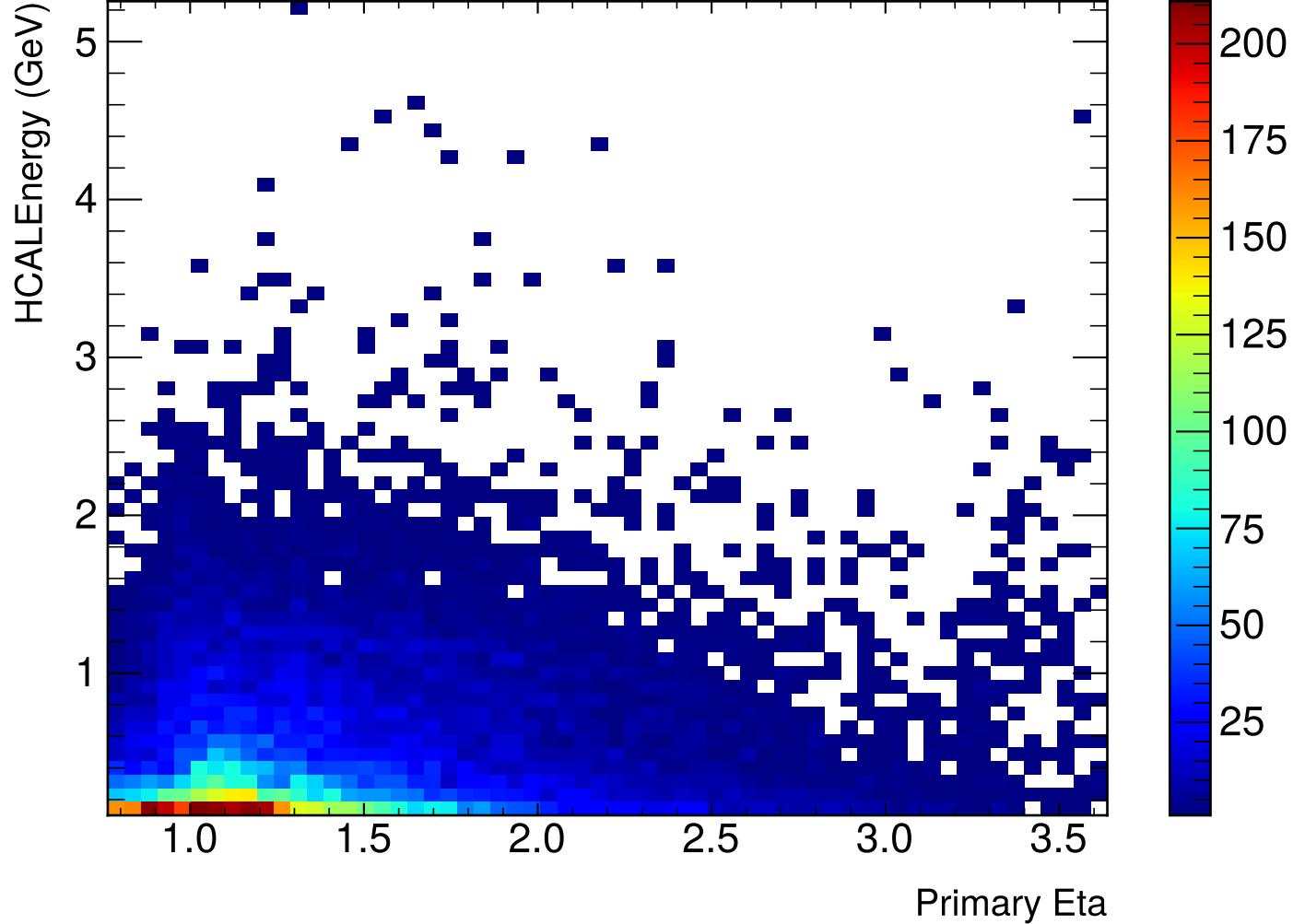
## Pythia8+Geant4



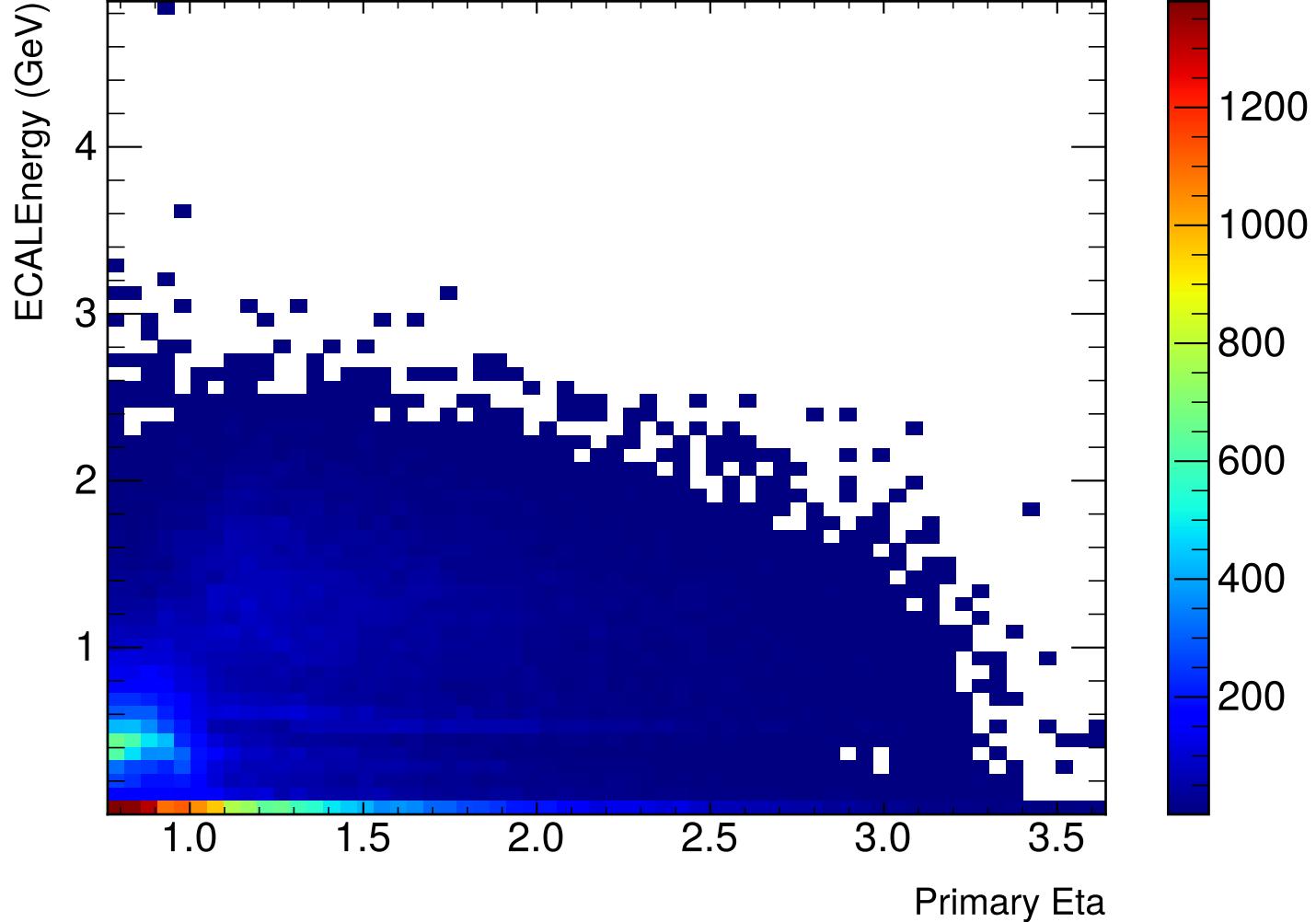
# ATHENA simulation [DD4hep] Pythia8+Geant4



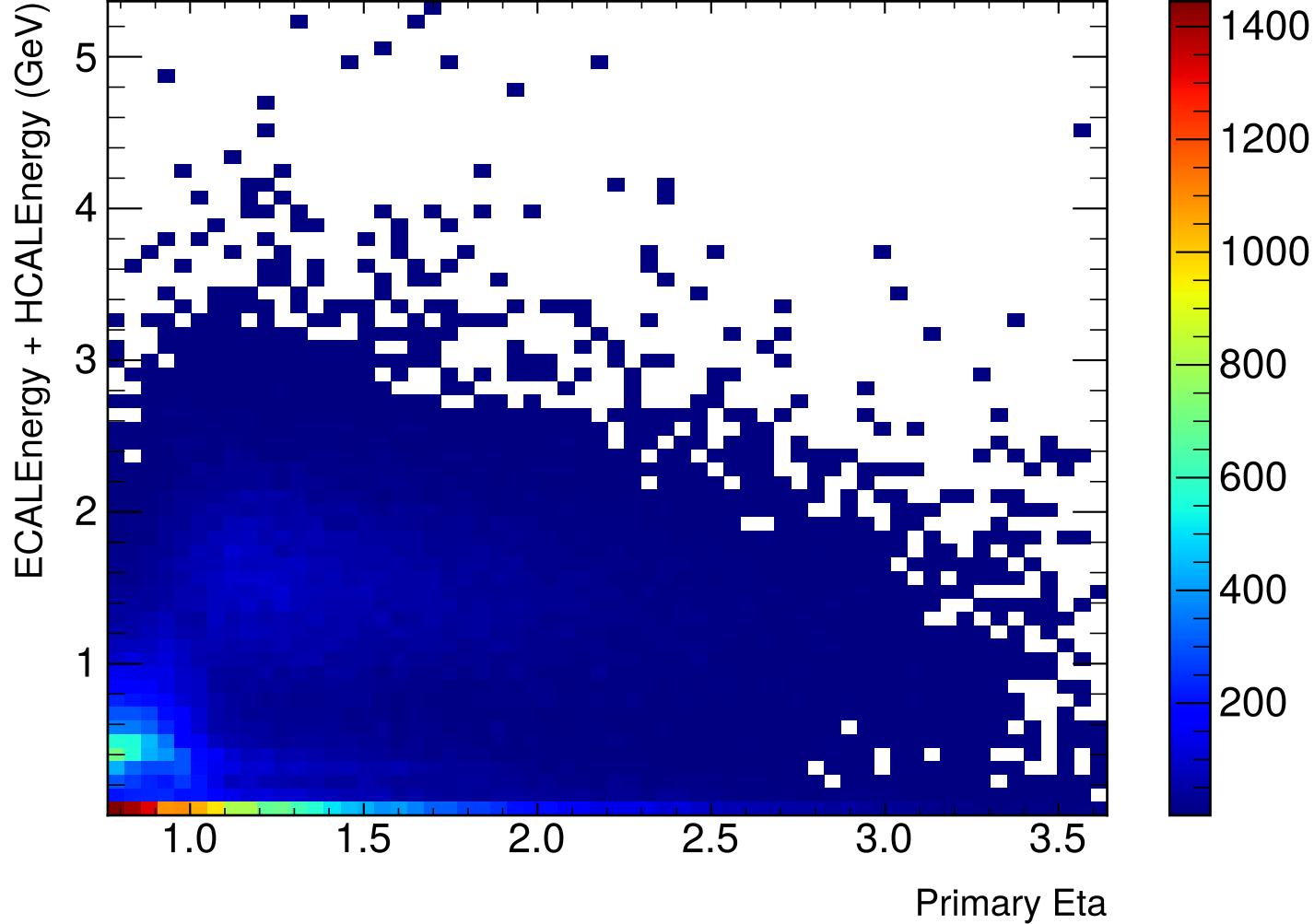
$\pi^+ @ 2\text{GeV}$  spanning  $0.76 < \eta < 3.64$



$\pi^+ @ 2\text{GeV}$  spanning  $0.76 < \eta < 3.64$

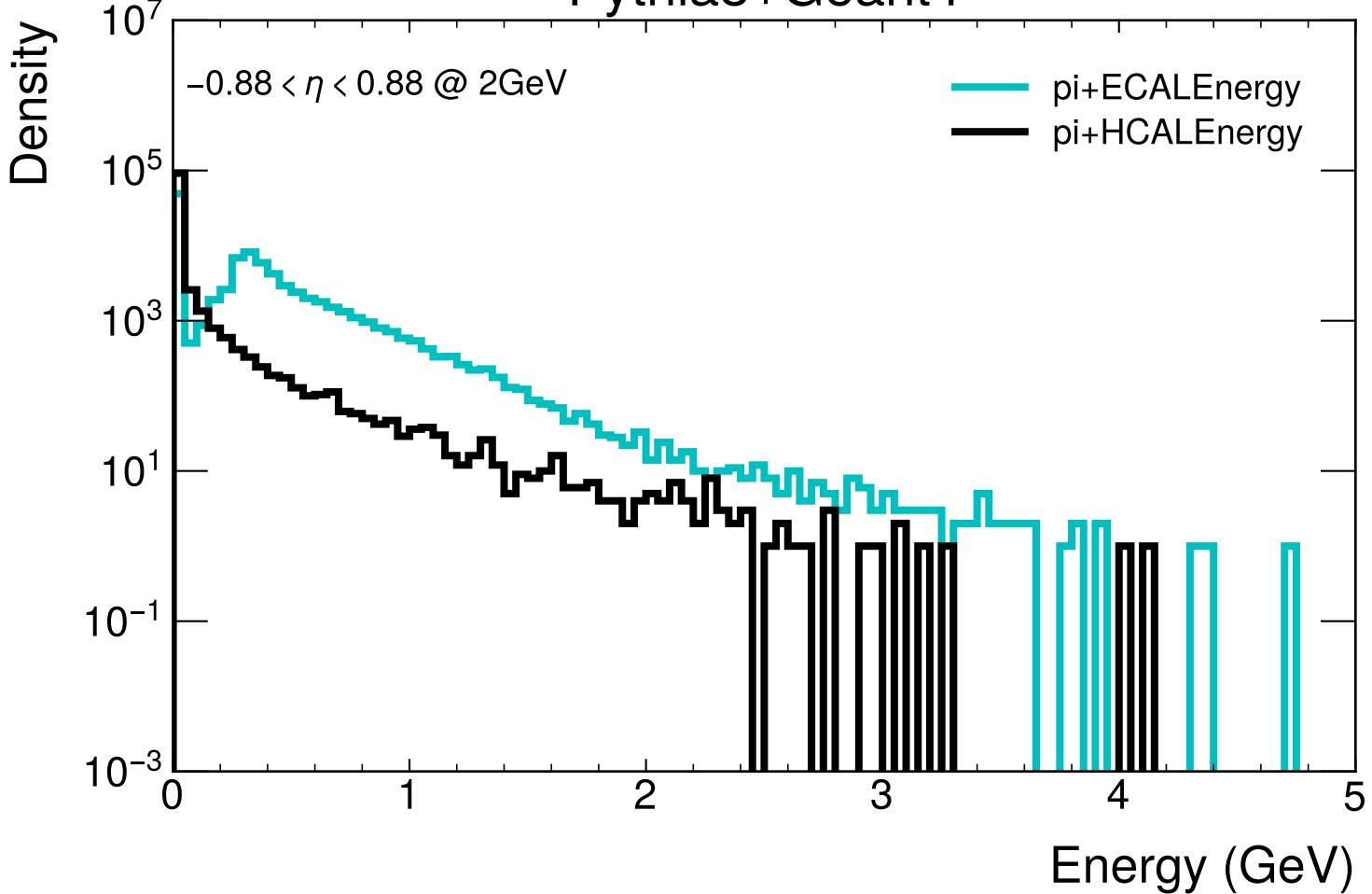


$\pi^+ @ 2\text{GeV}$  spanning  $0.76 < \eta < 3.64$

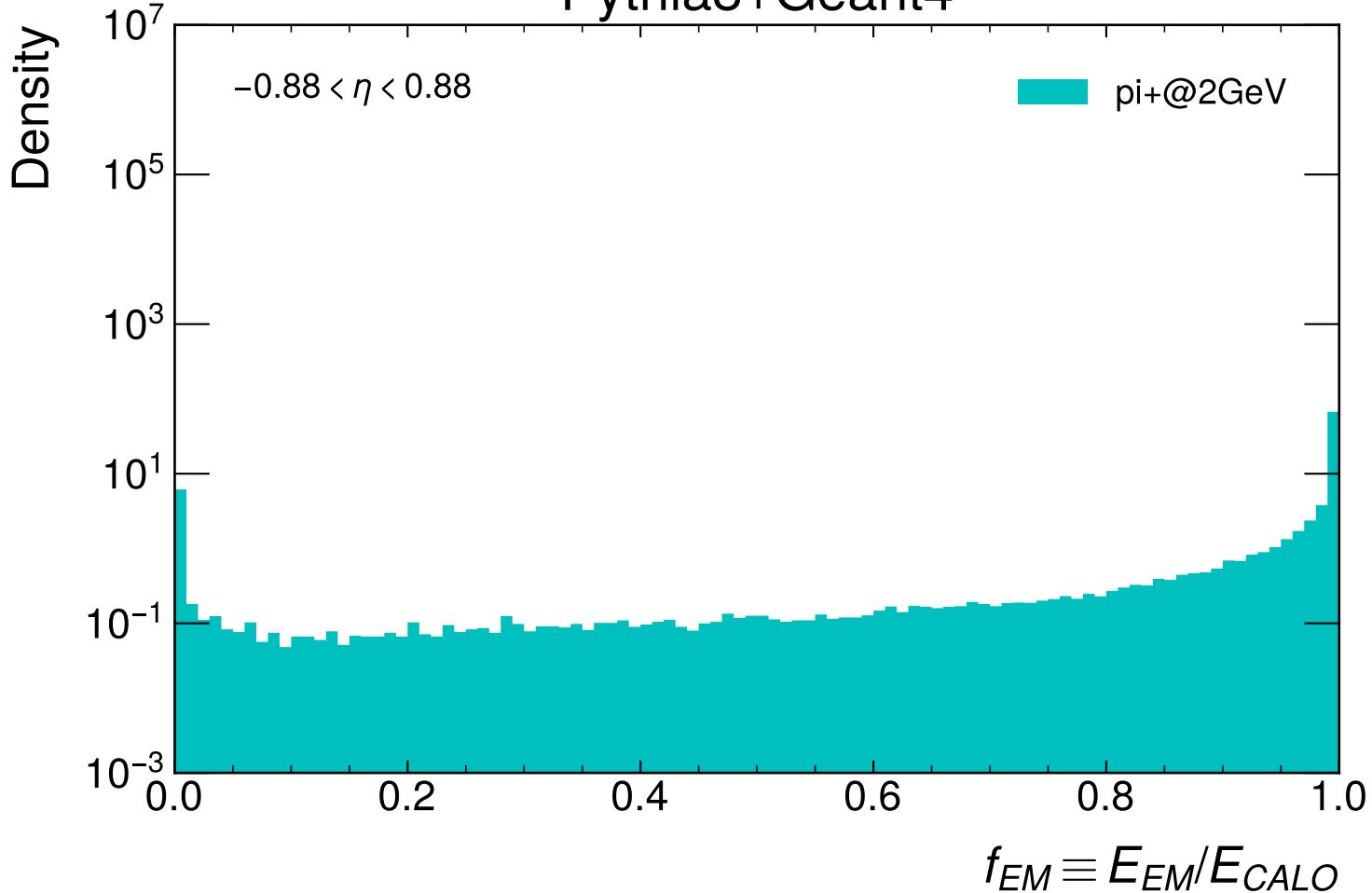


# ATHENA simulation [DD4hep]

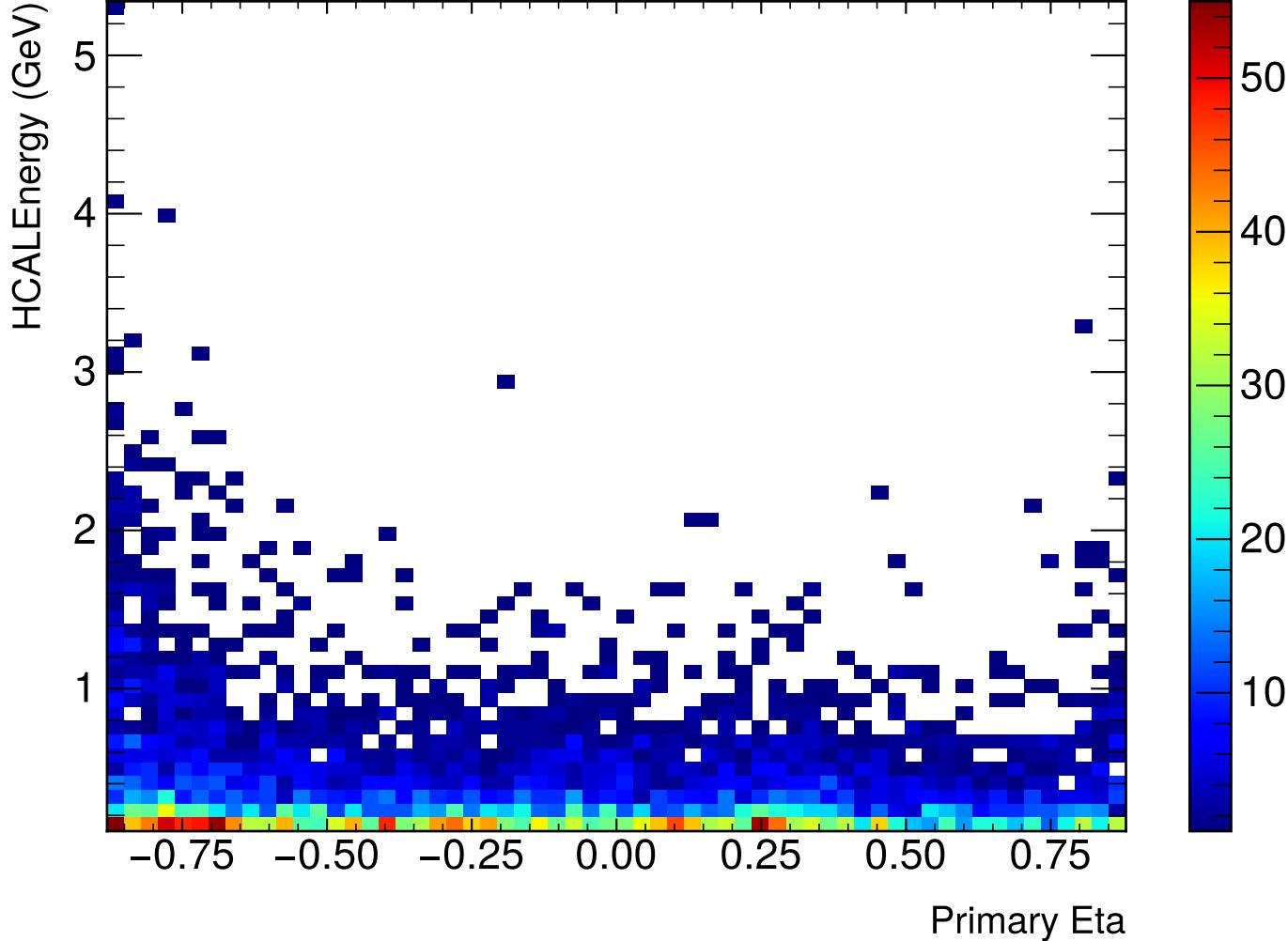
## Pythia8+Geant4



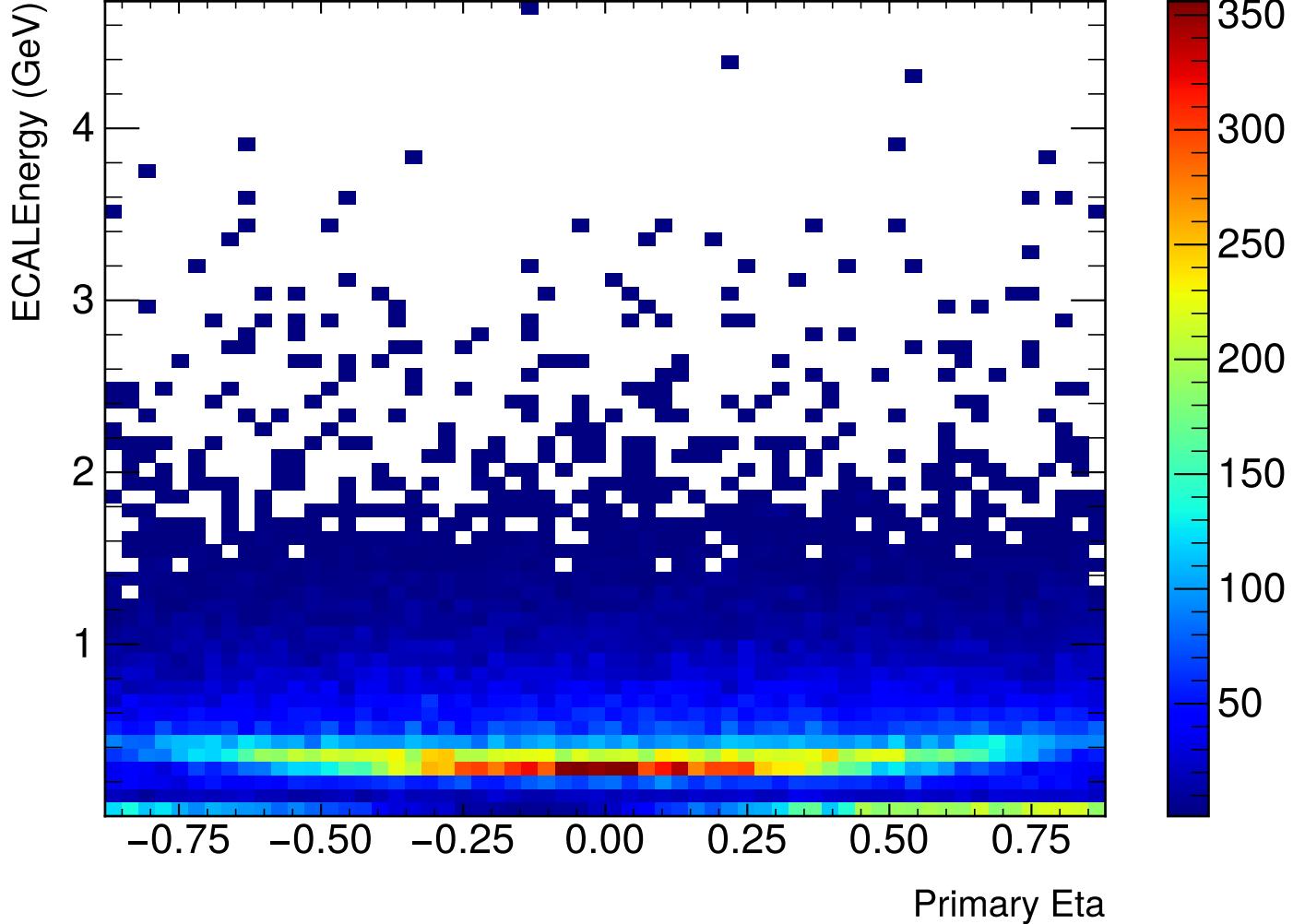
# ATHENA simulation [DD4hep] Pythia8+Geant4



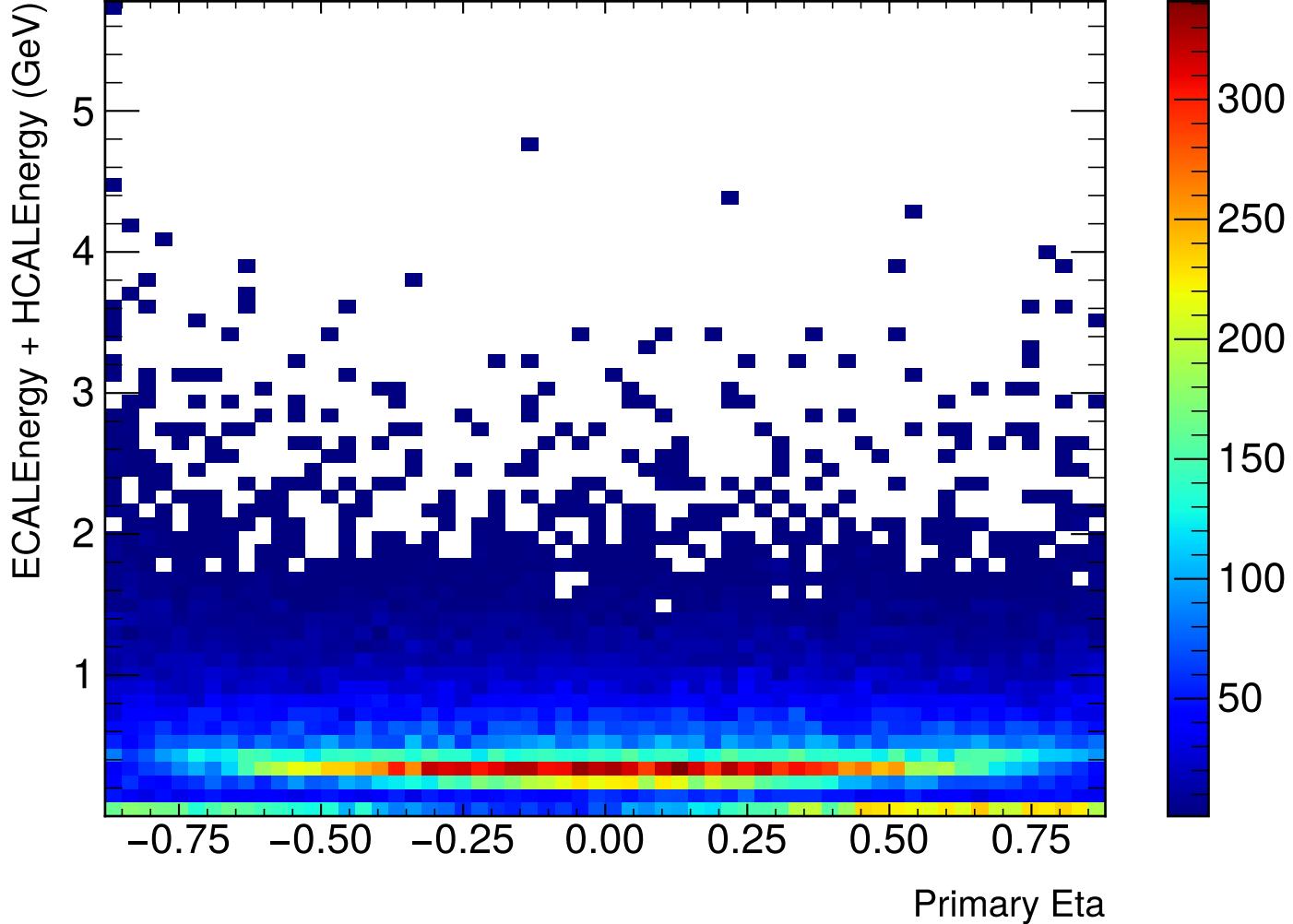
$\pi^+ @ 2\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+@2\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

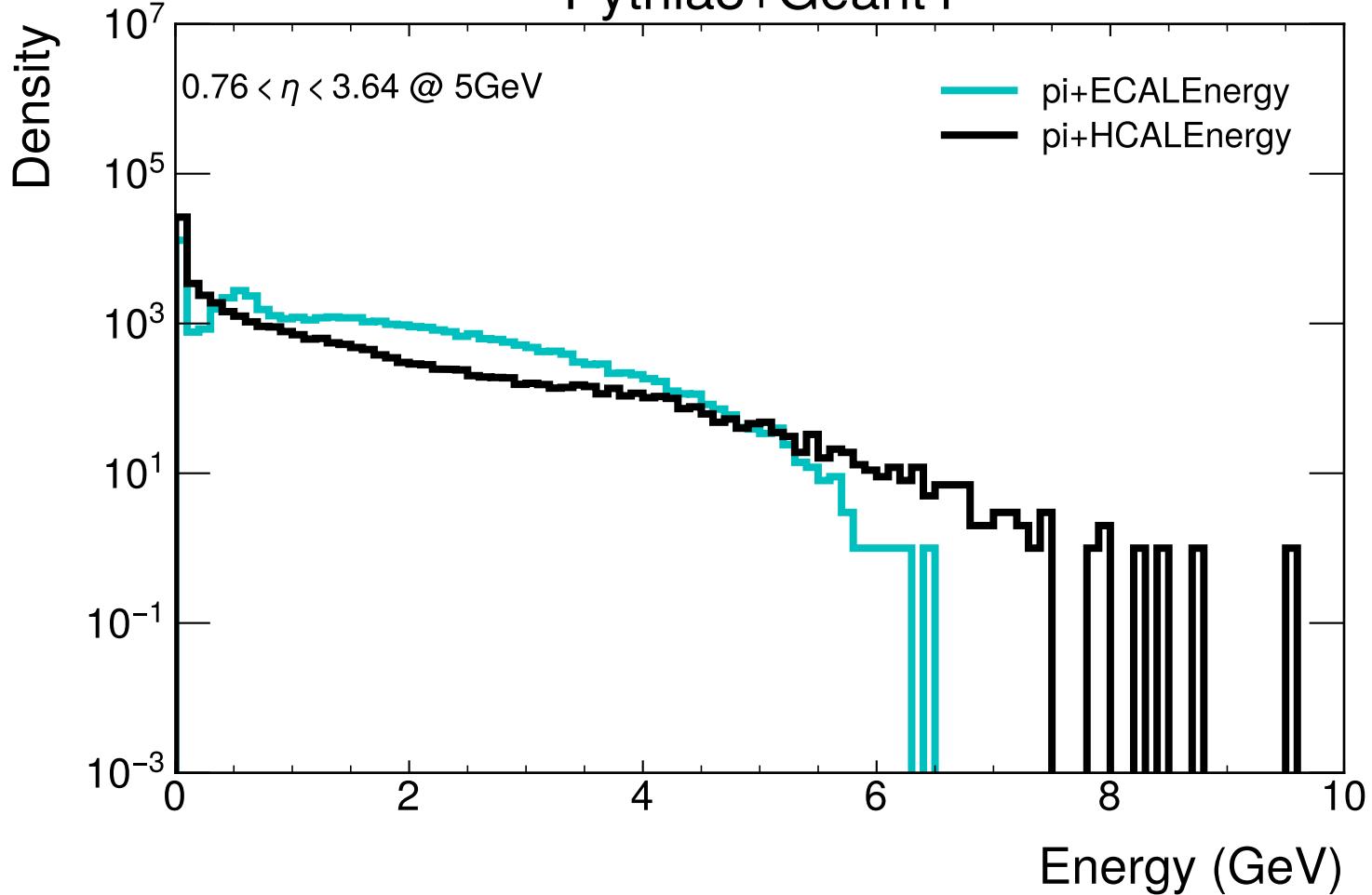


$\pi^+ @ 2\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

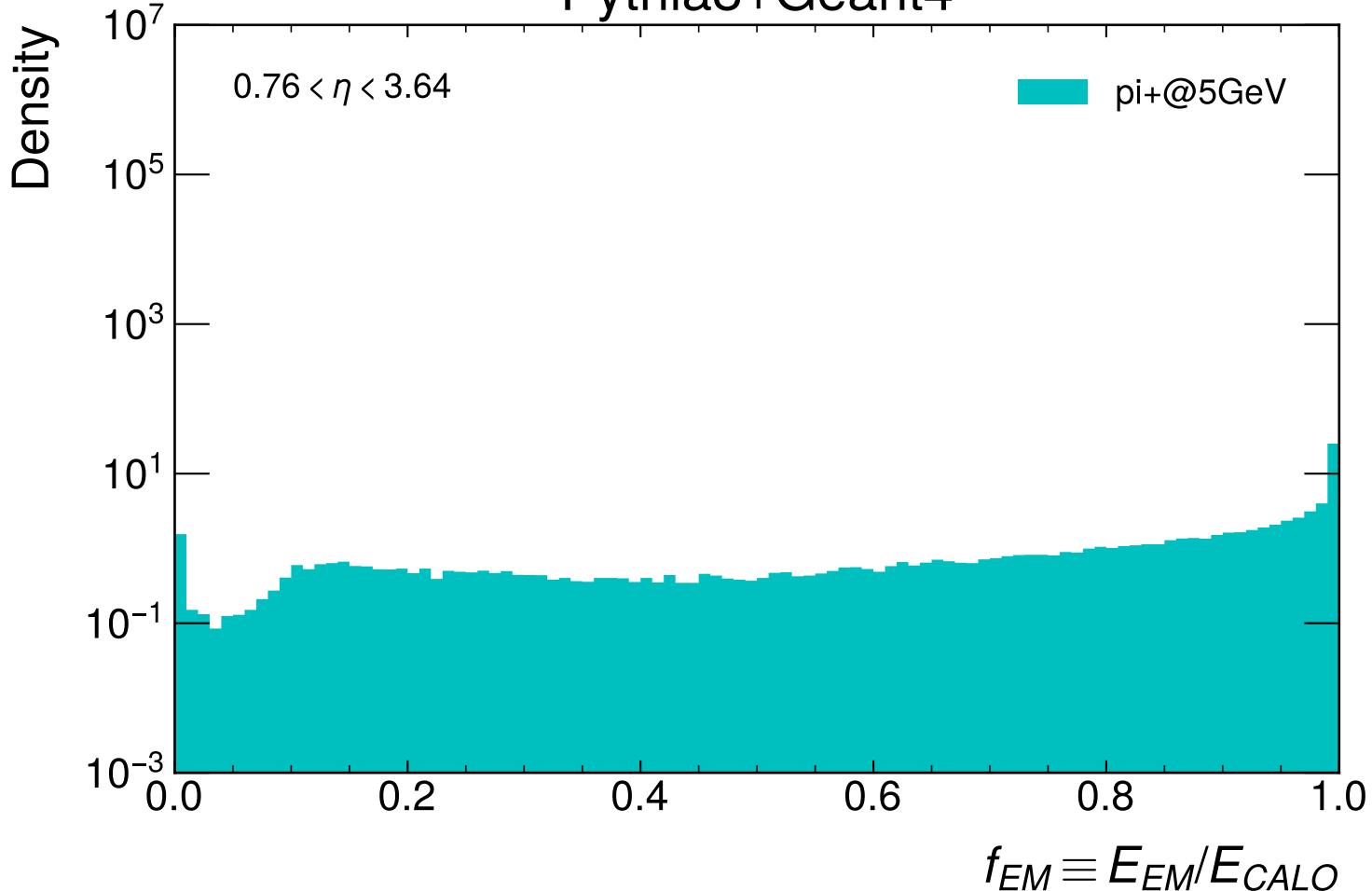


# ATHENA simulation [DD4hep]

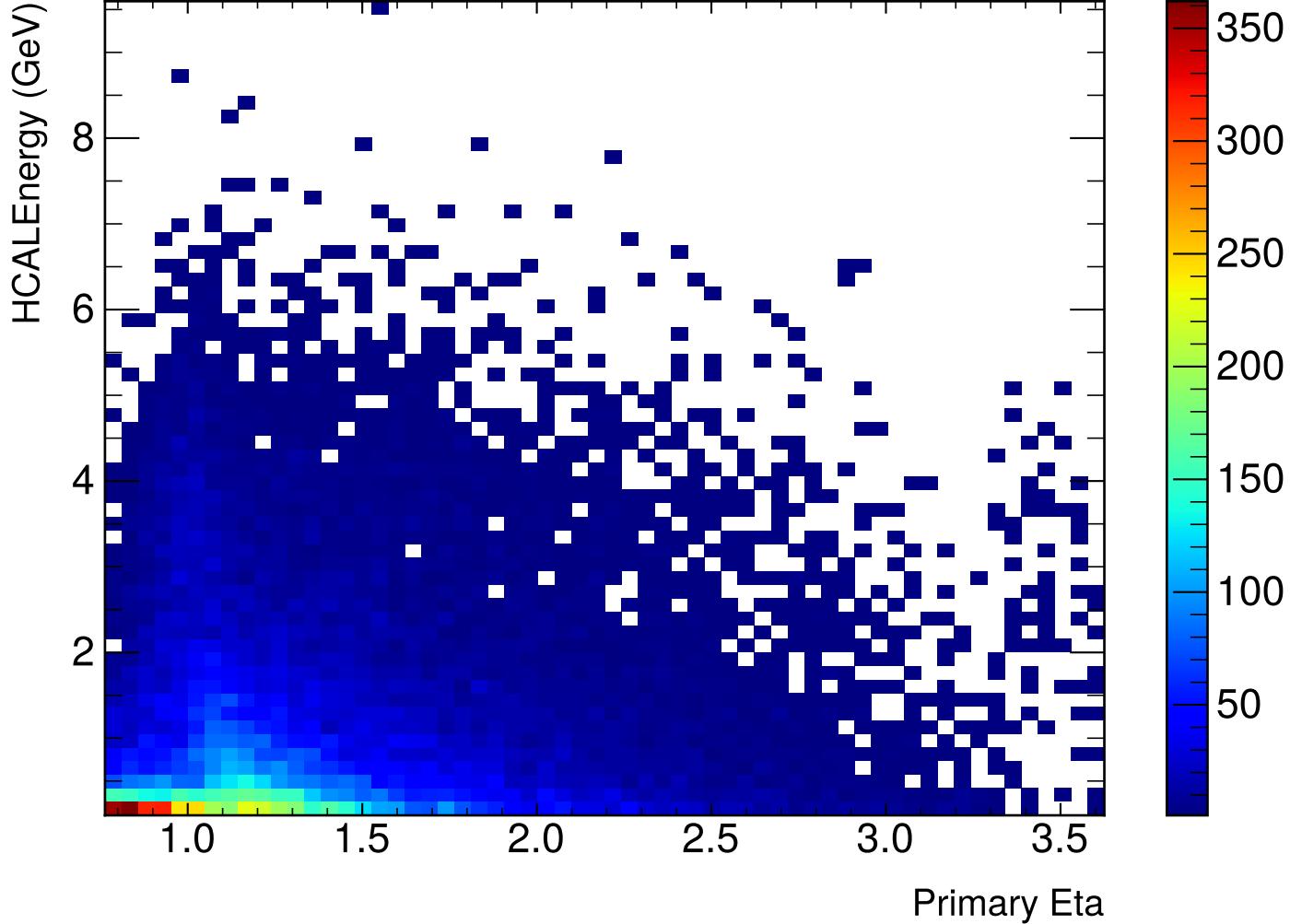
## Pythia8+Geant4



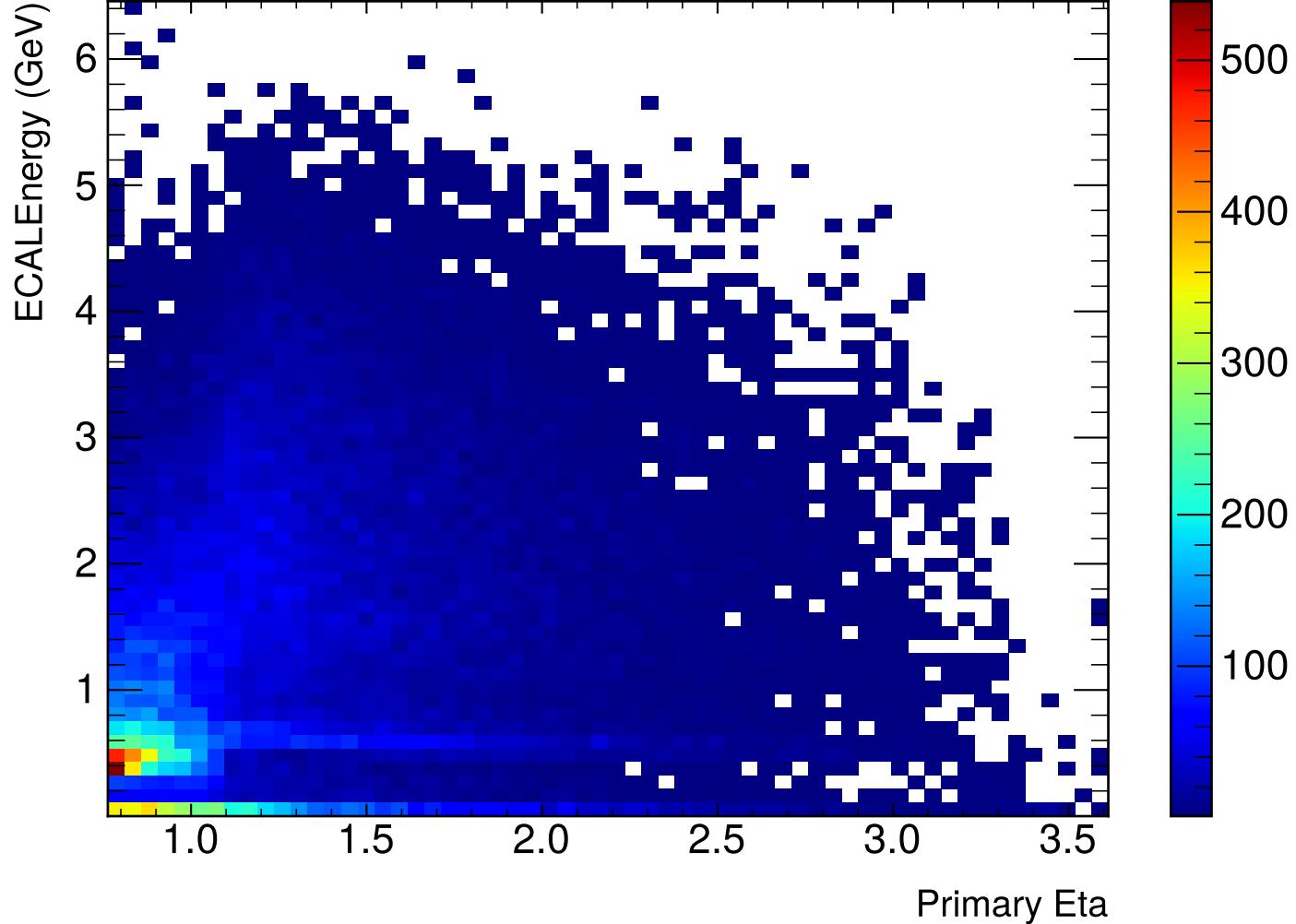
# ATHENA simulation [DD4hep] Pythia8+Geant4



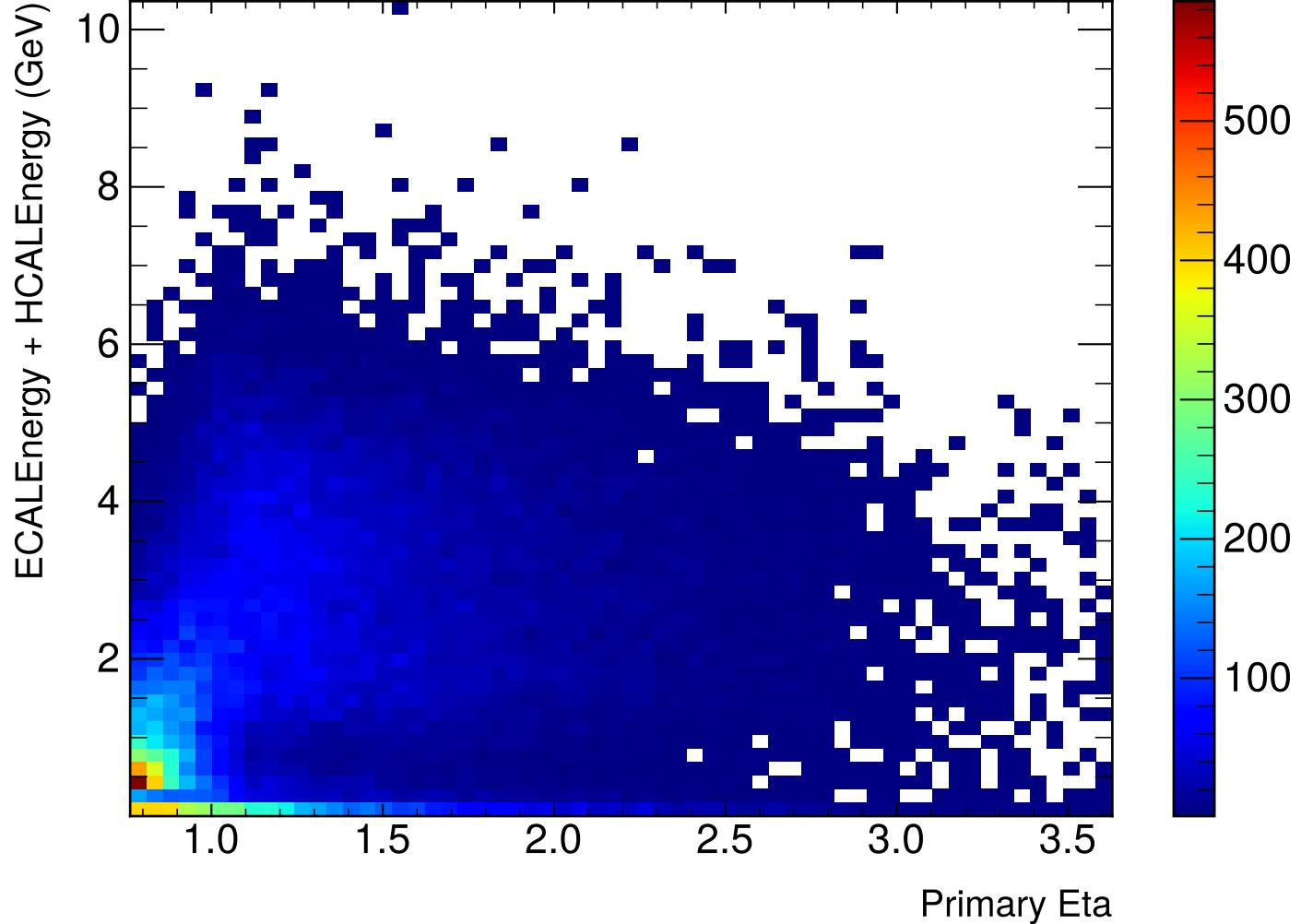
$\pi^+ @ 5\text{GeV}$  spanning  $0.76 < \eta < 3.64$



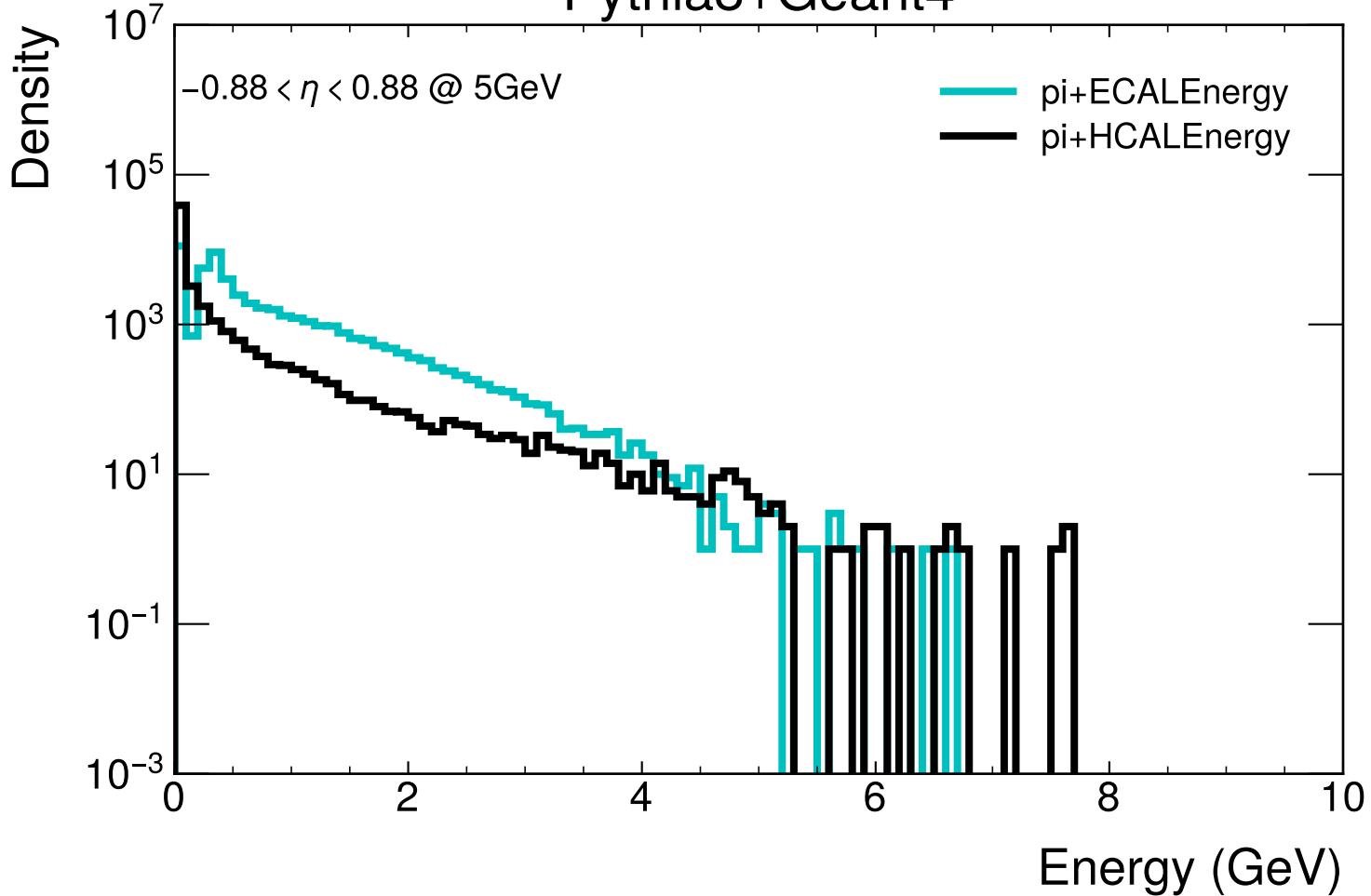
$\pi^+ @ 5\text{GeV}$  spanning  $0.76 < \eta < 3.64$



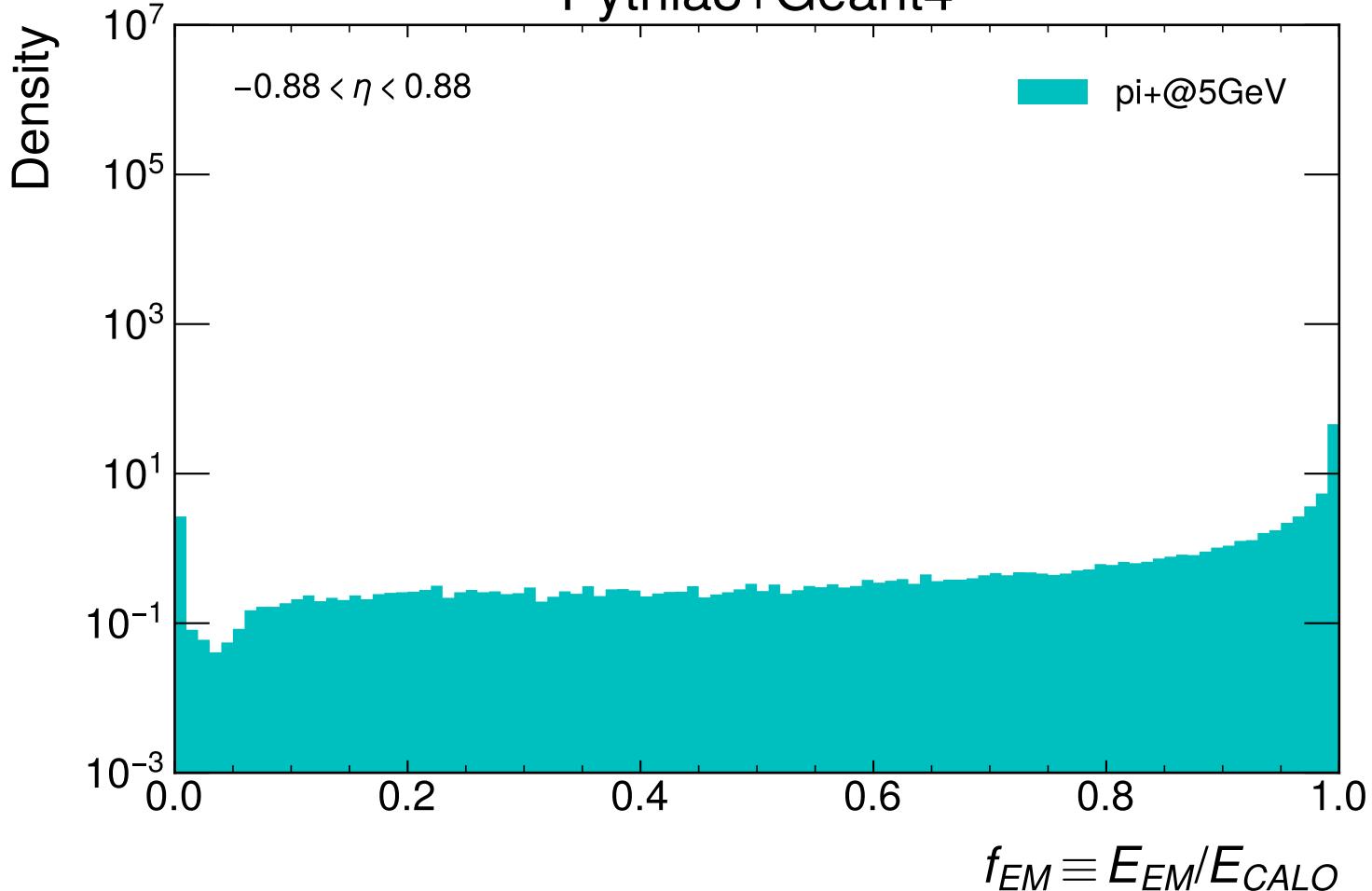
$\pi^+@5\text{GeV}$  spanning  $0.76 < \eta < 3.64$



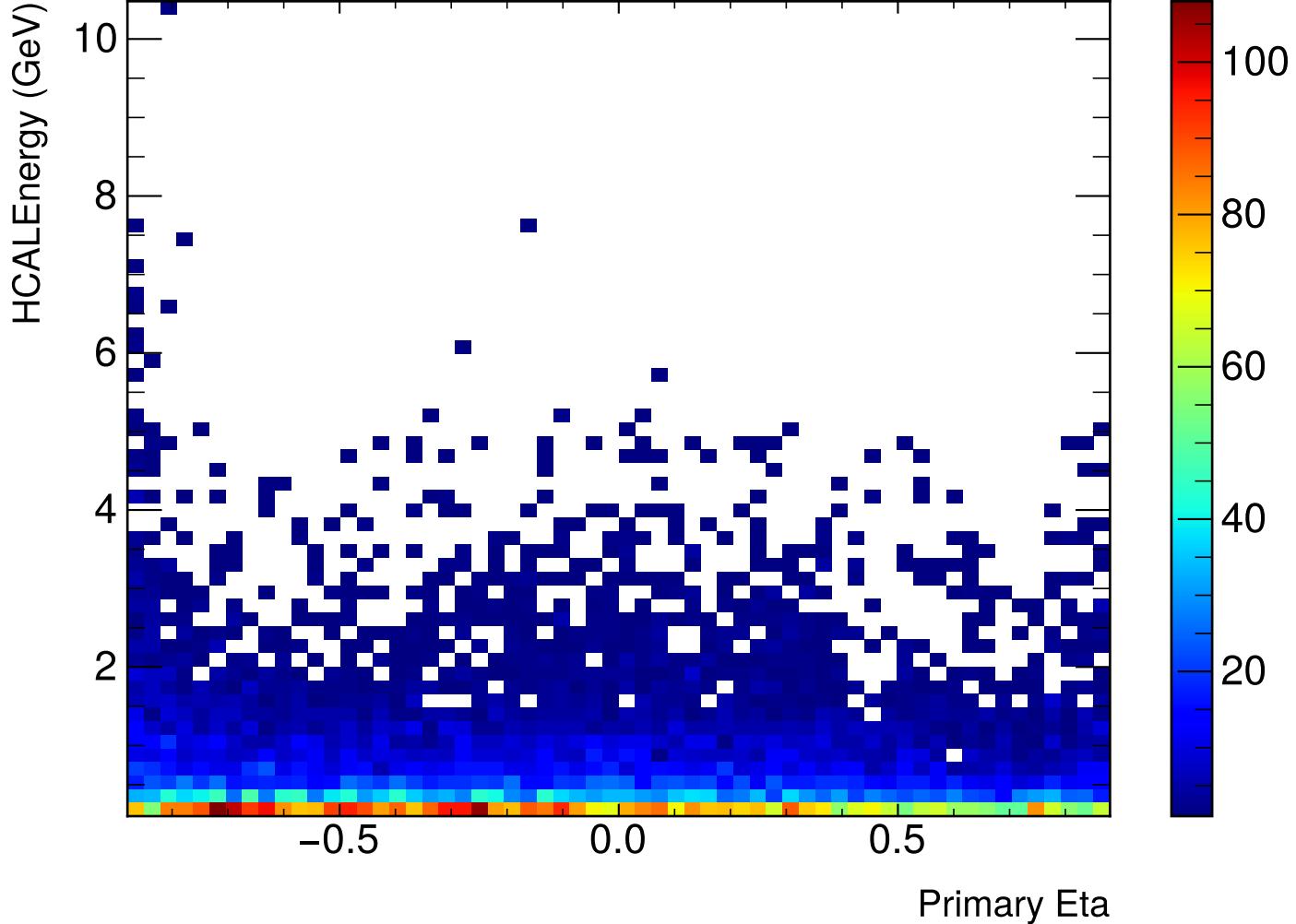
# ATHENA simulation [DD4hep] Pythia8+Geant4



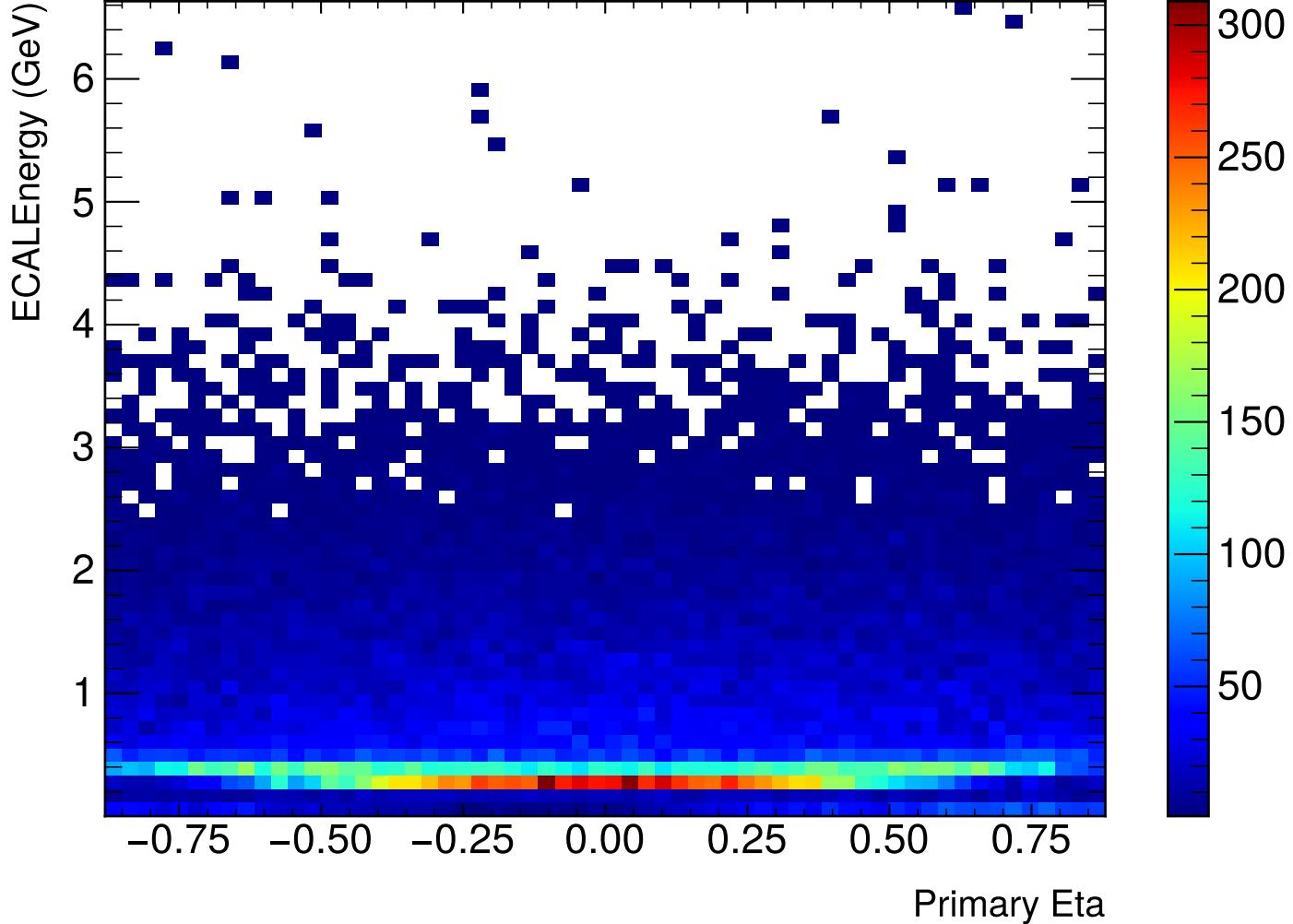
# ATHENA simulation [DD4hep] Pythia8+Geant4



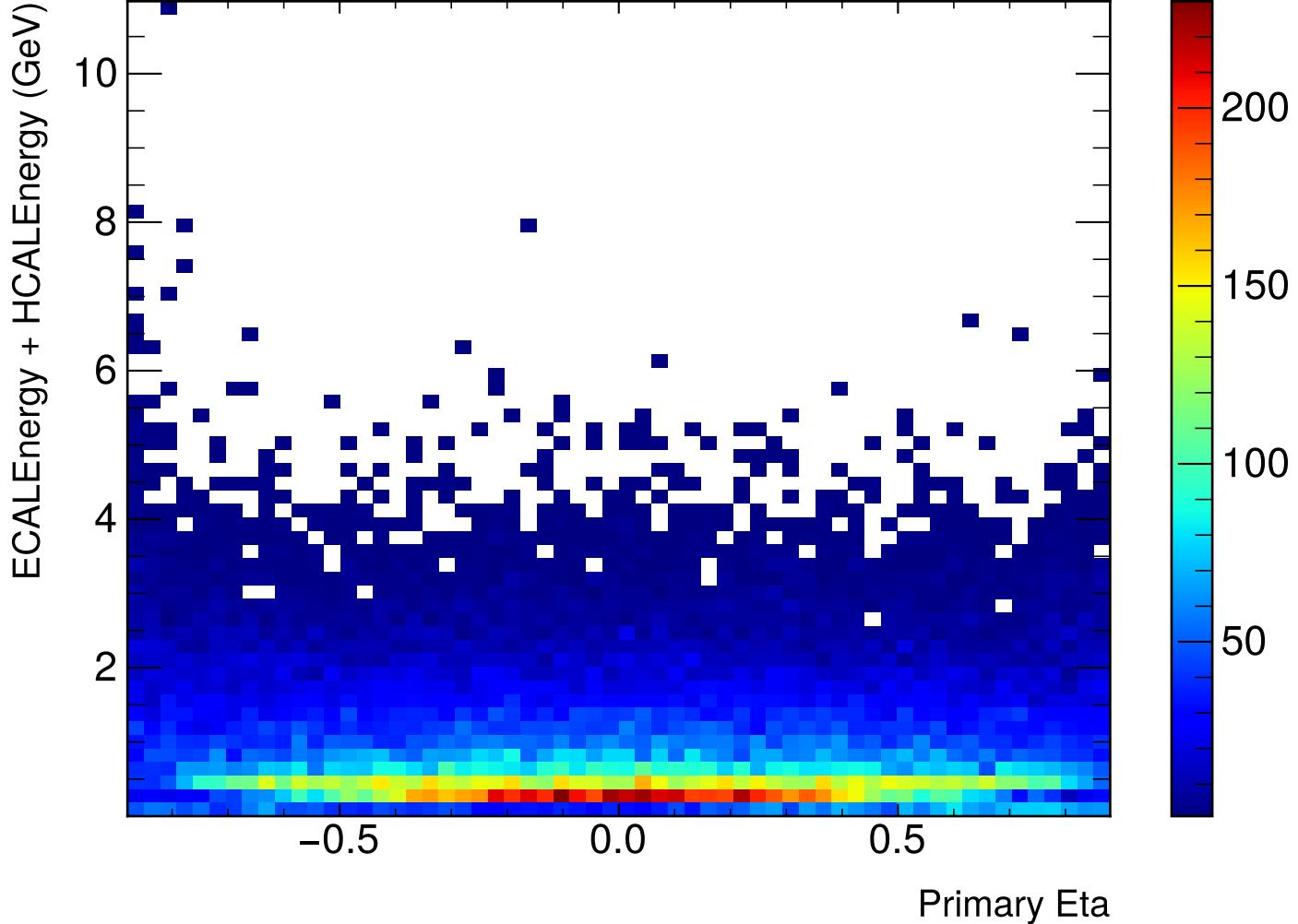
$\pi^+ @ 5\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+@5\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

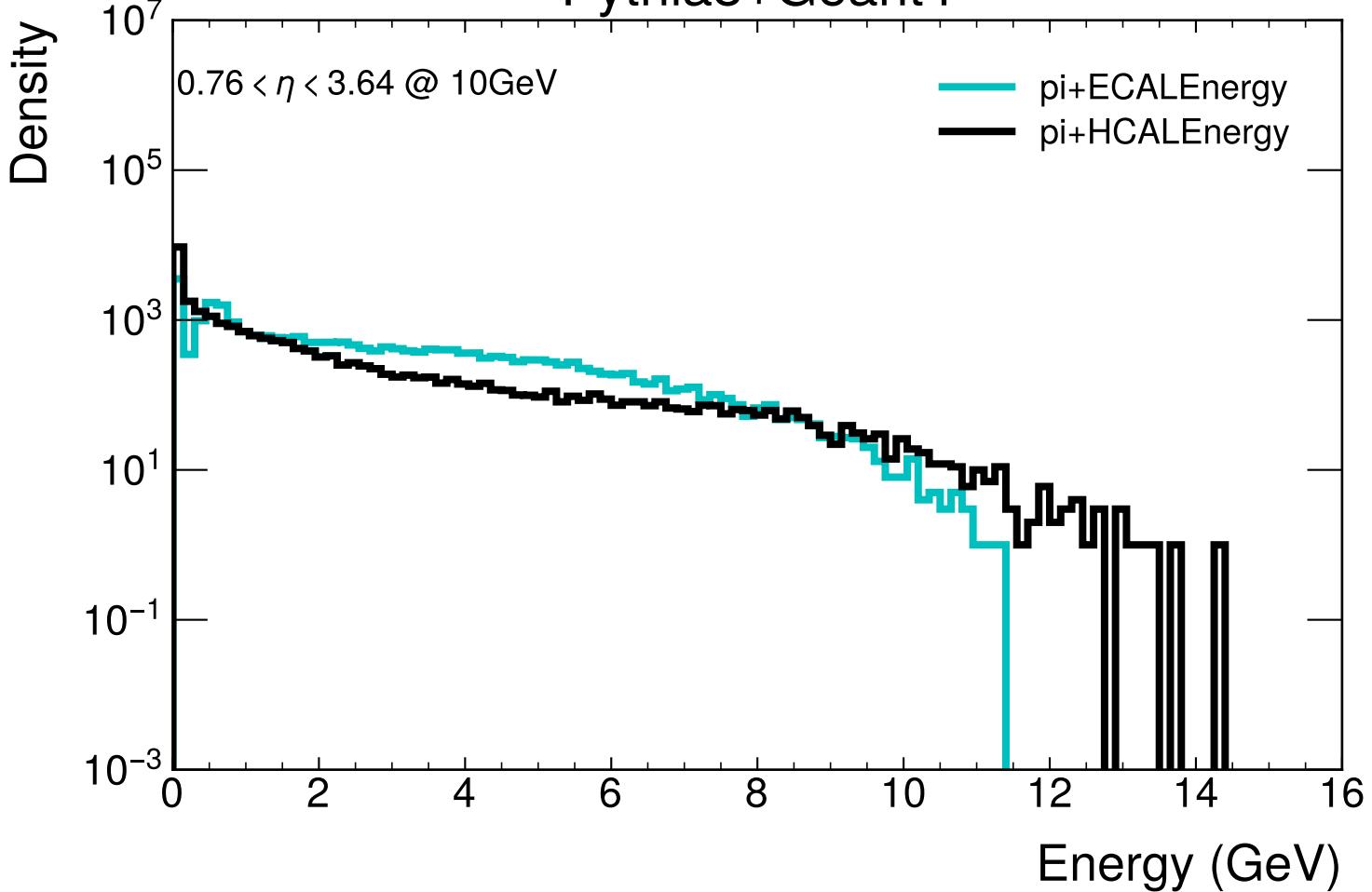


$\pi^+ @ 5\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

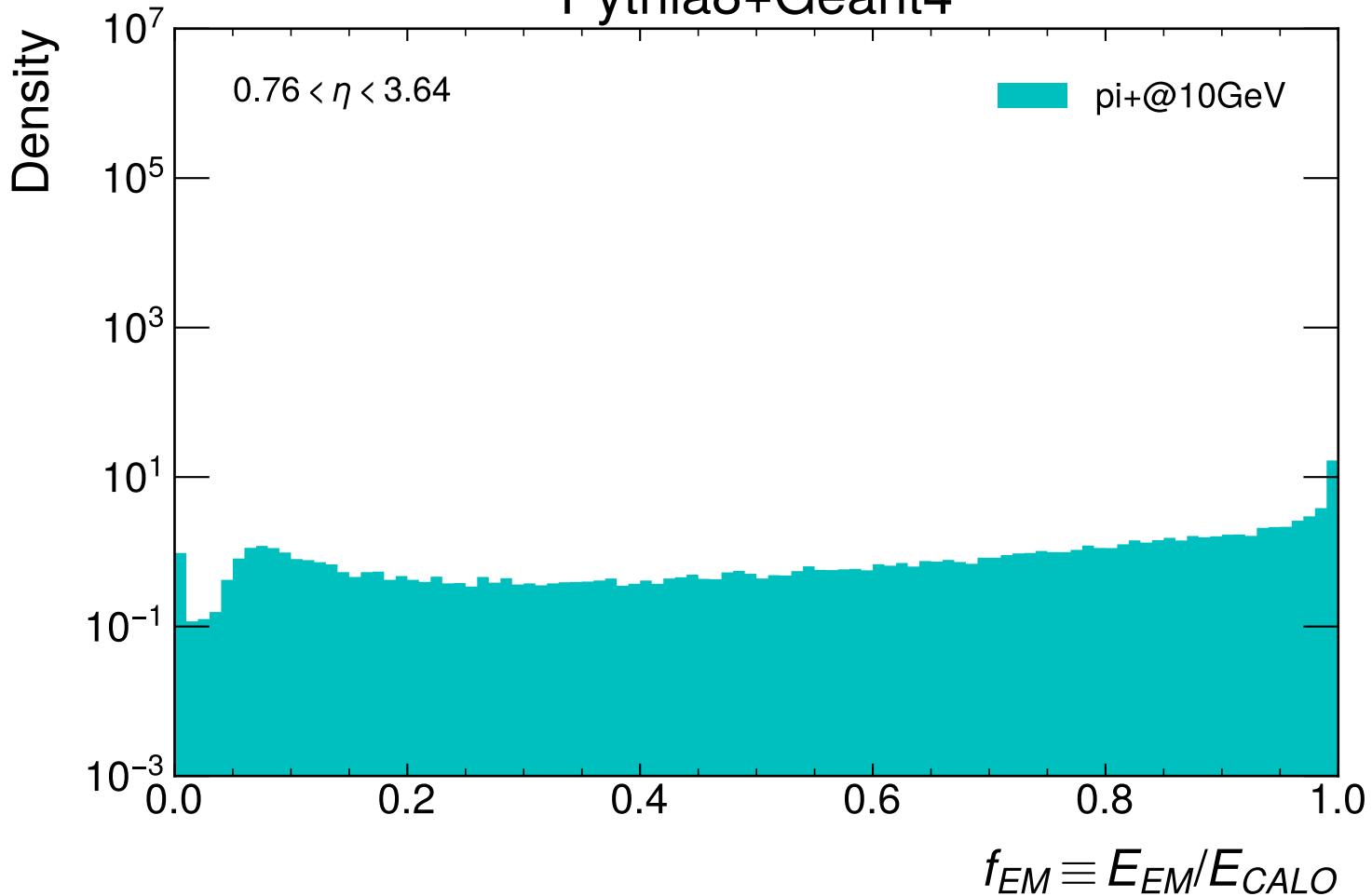


# ATHENA simulation [DD4hep]

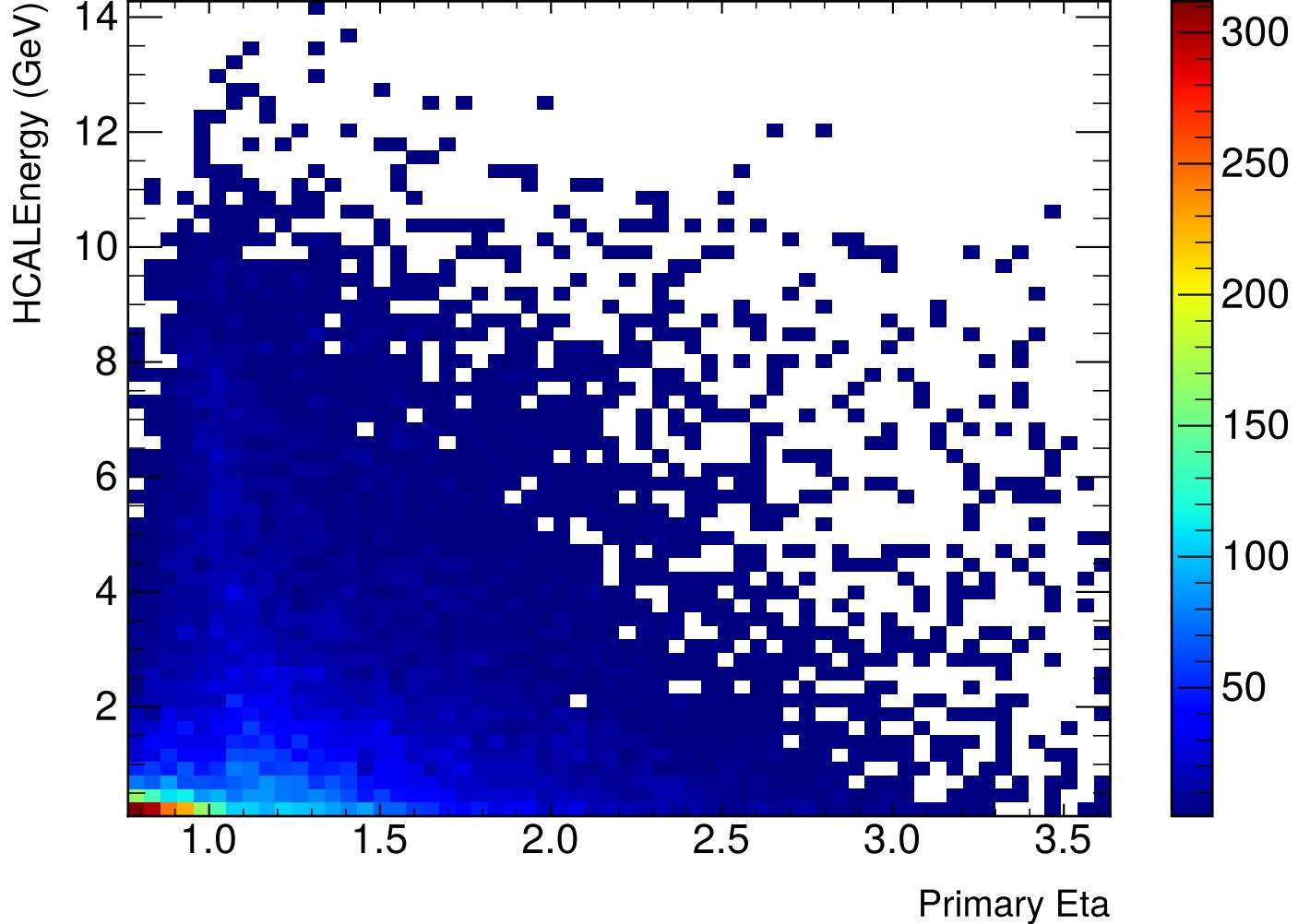
## Pythia8+Geant4



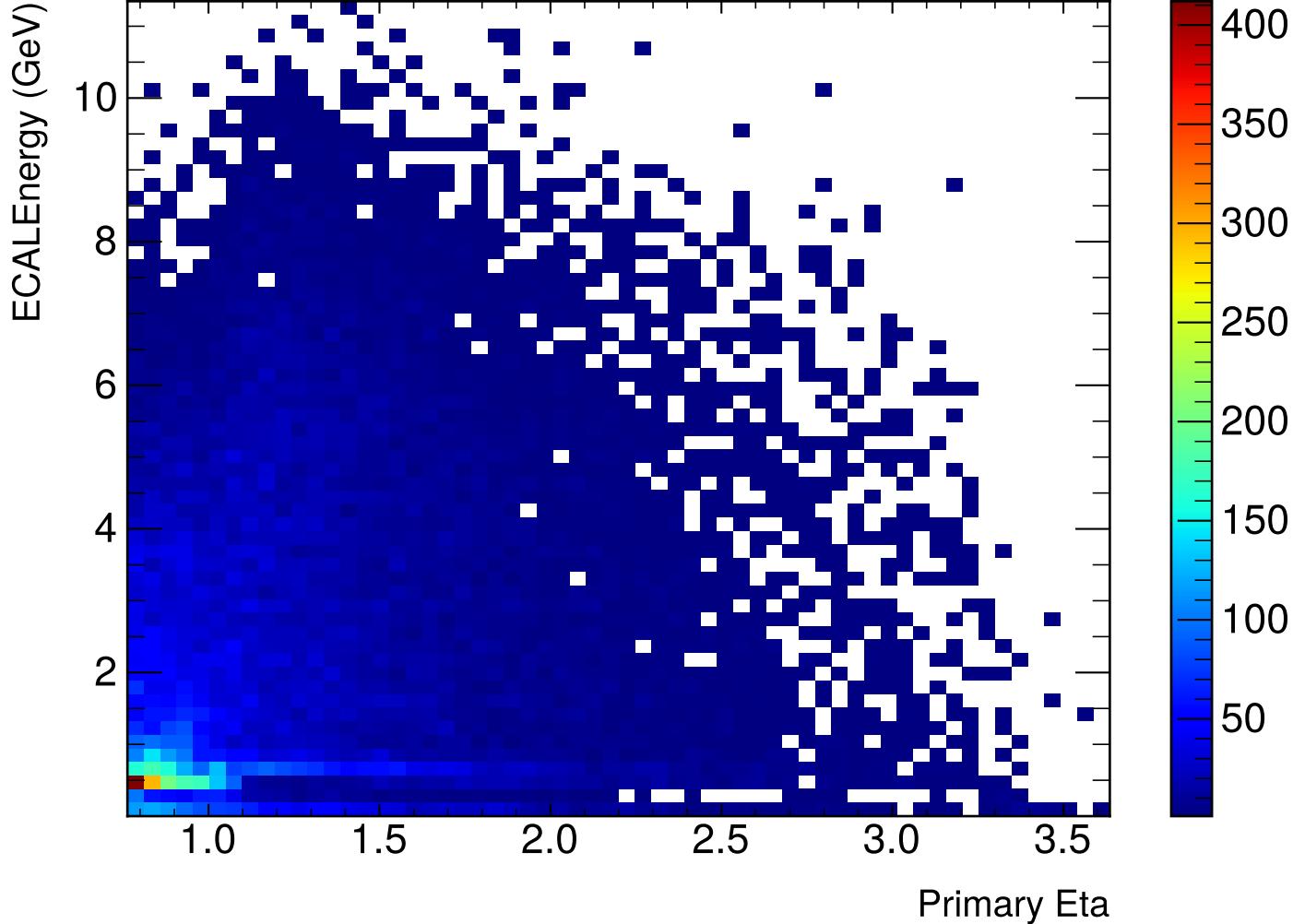
# ATHENA simulation [DD4hep] Pythia8+Geant4



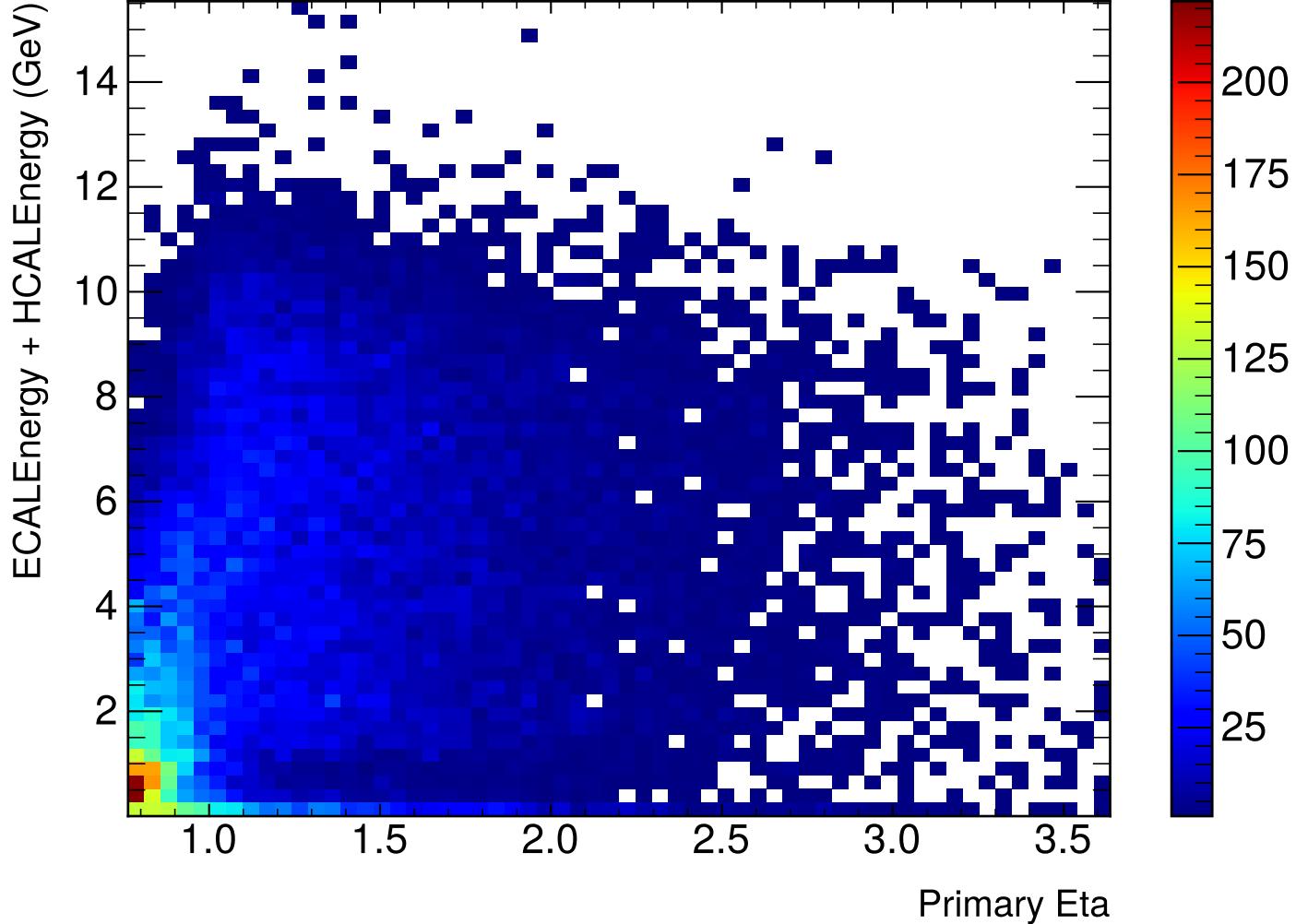
$\pi^+ @ 10\text{GeV}$  spanning  $0.76 < \eta < 3.64$



$\pi^+ @ 10\text{GeV}$  spanning  $0.76 < \eta < 3.64$

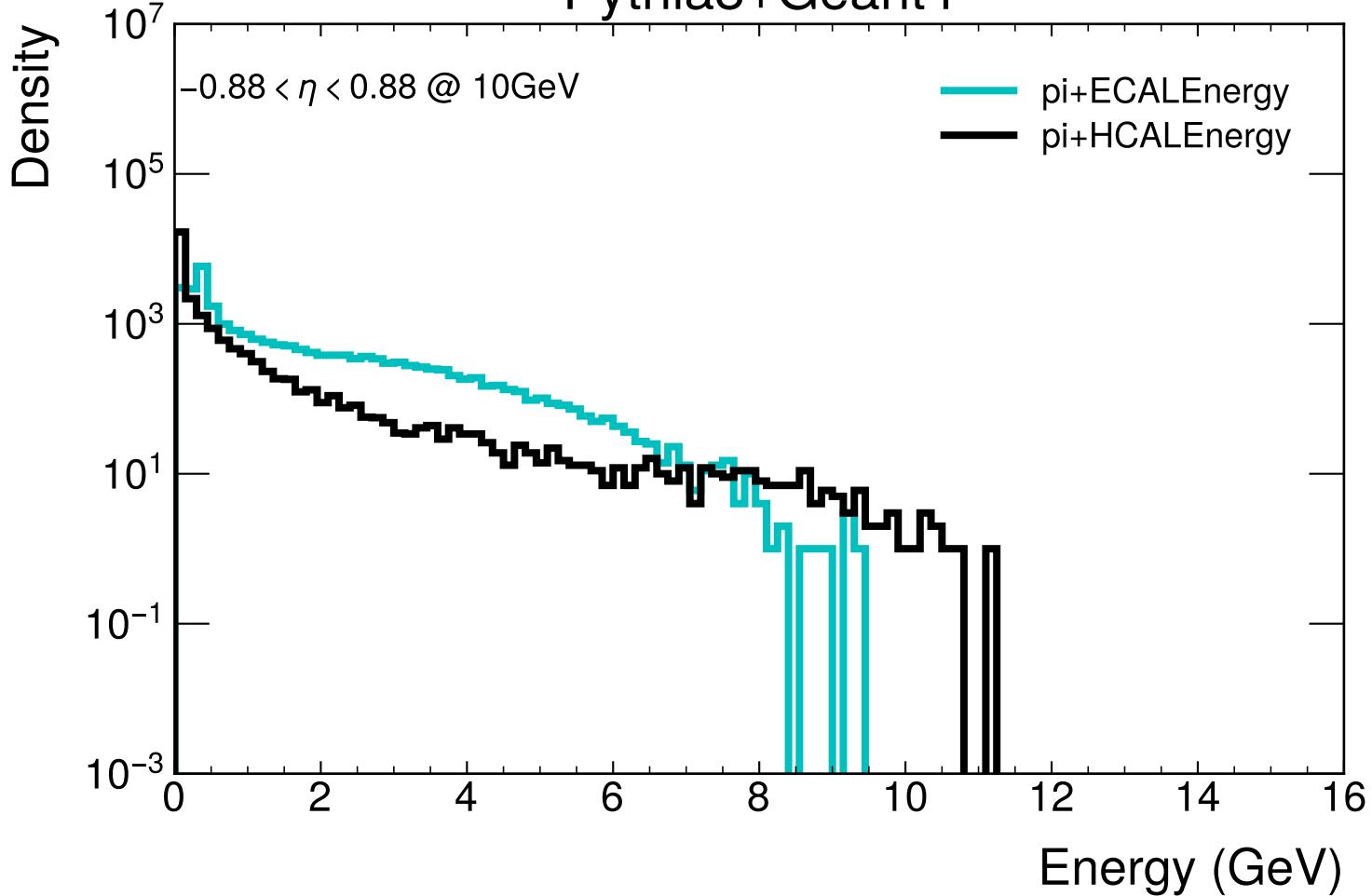


$\pi^+ @ 10\text{GeV}$  spanning  $0.76 < \eta < 3.64$

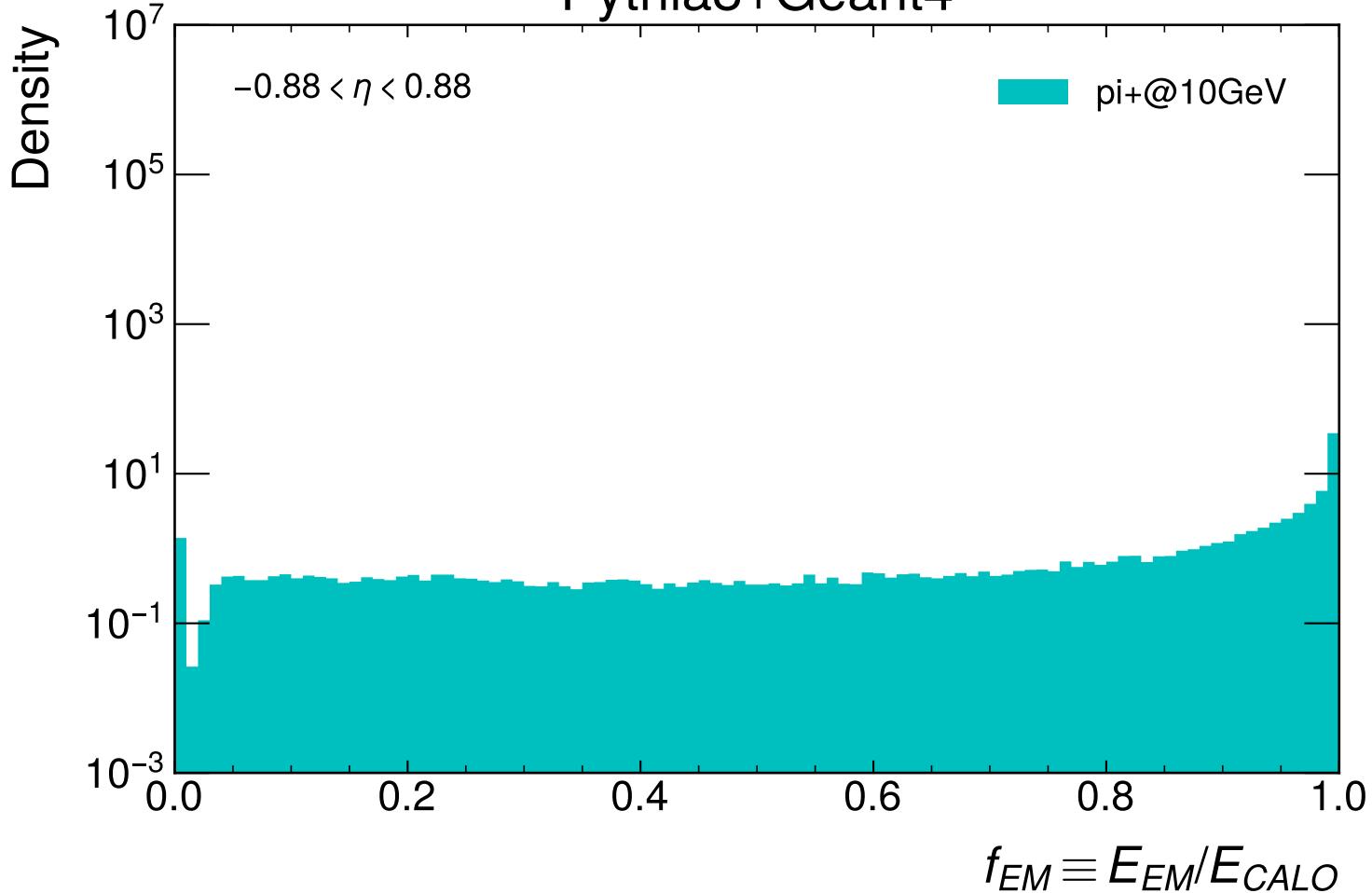


# ATHENA simulation [DD4hep]

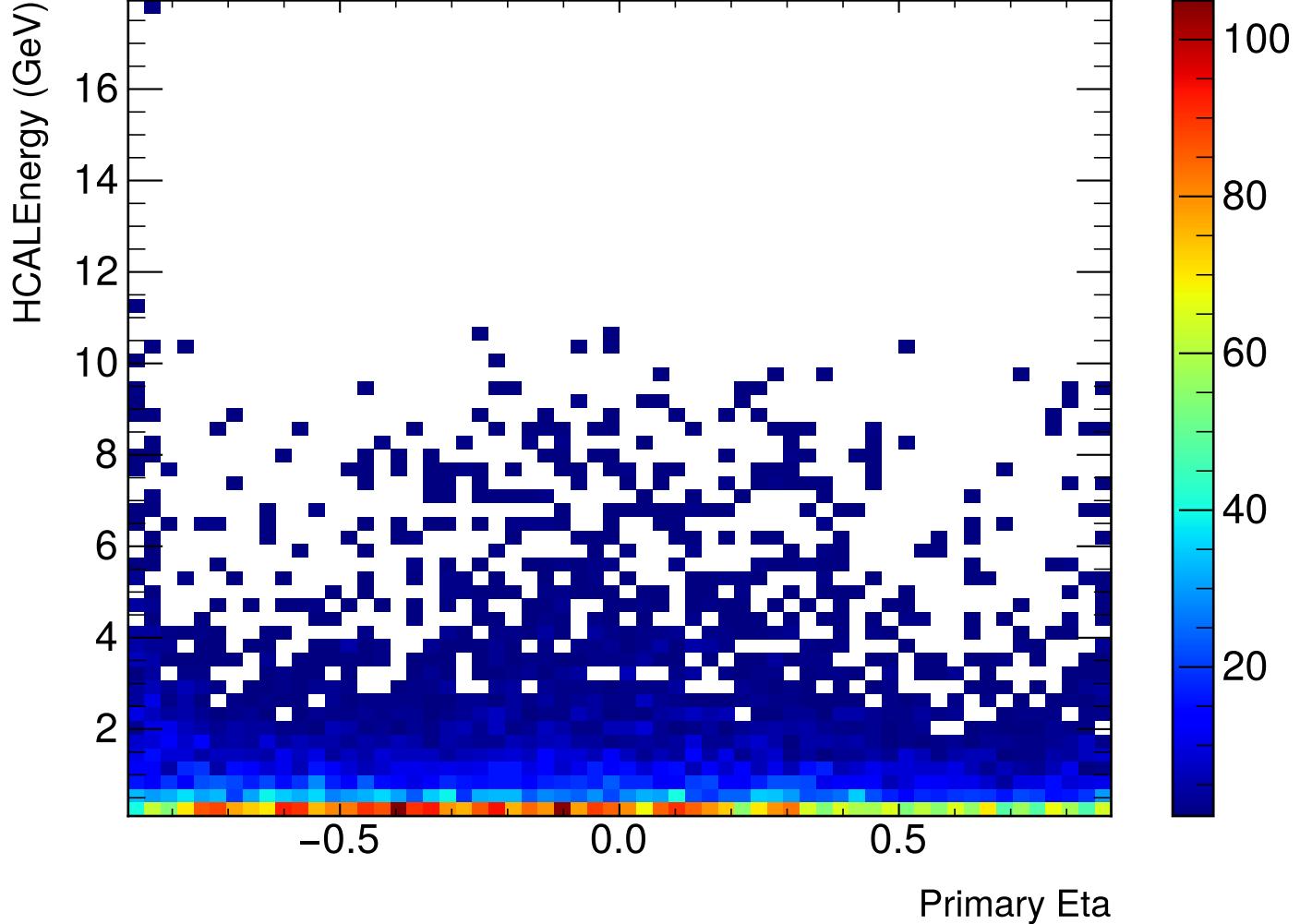
## Pythia8+Geant4



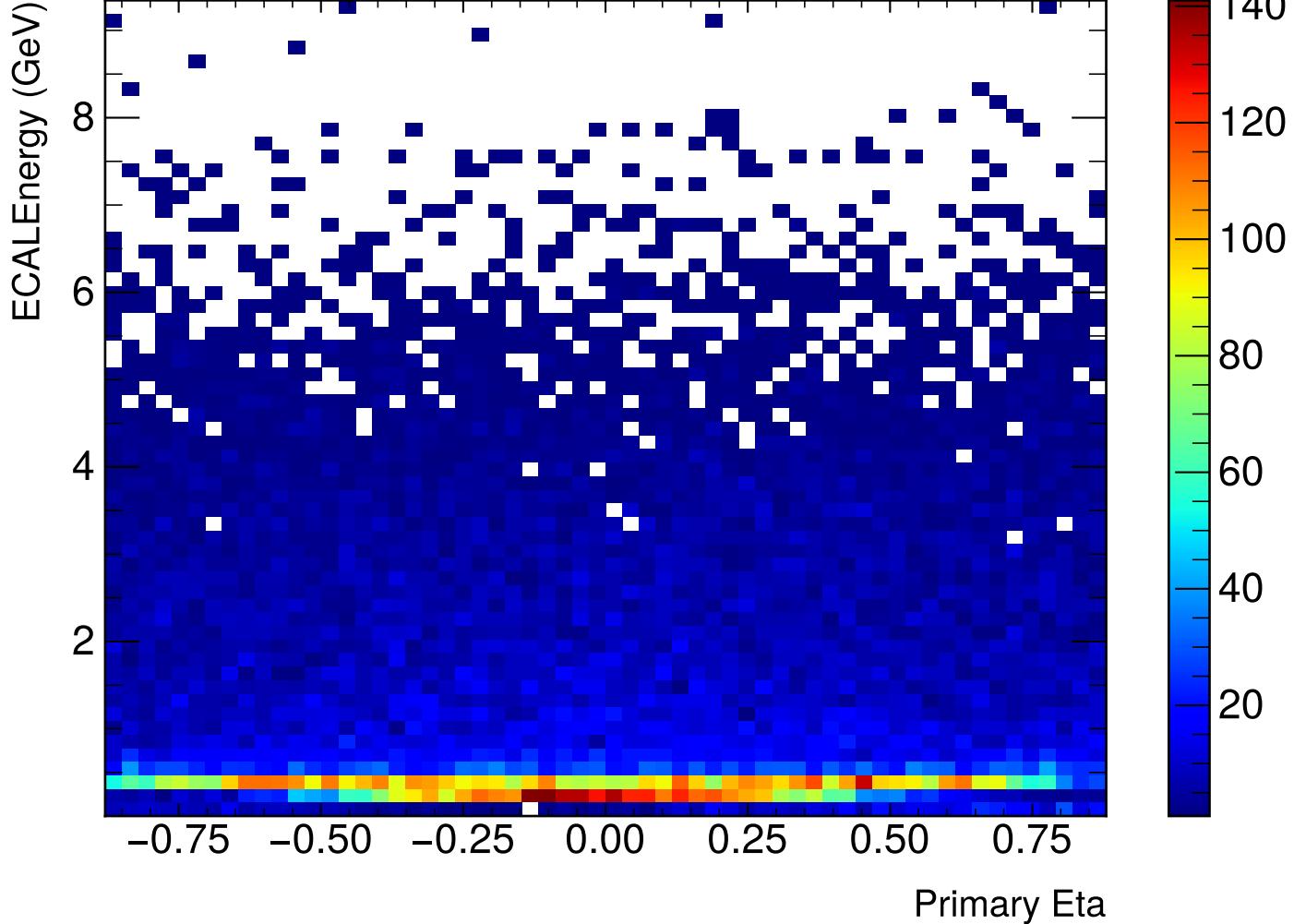
# ATHENA simulation [DD4hep] Pythia8+Geant4



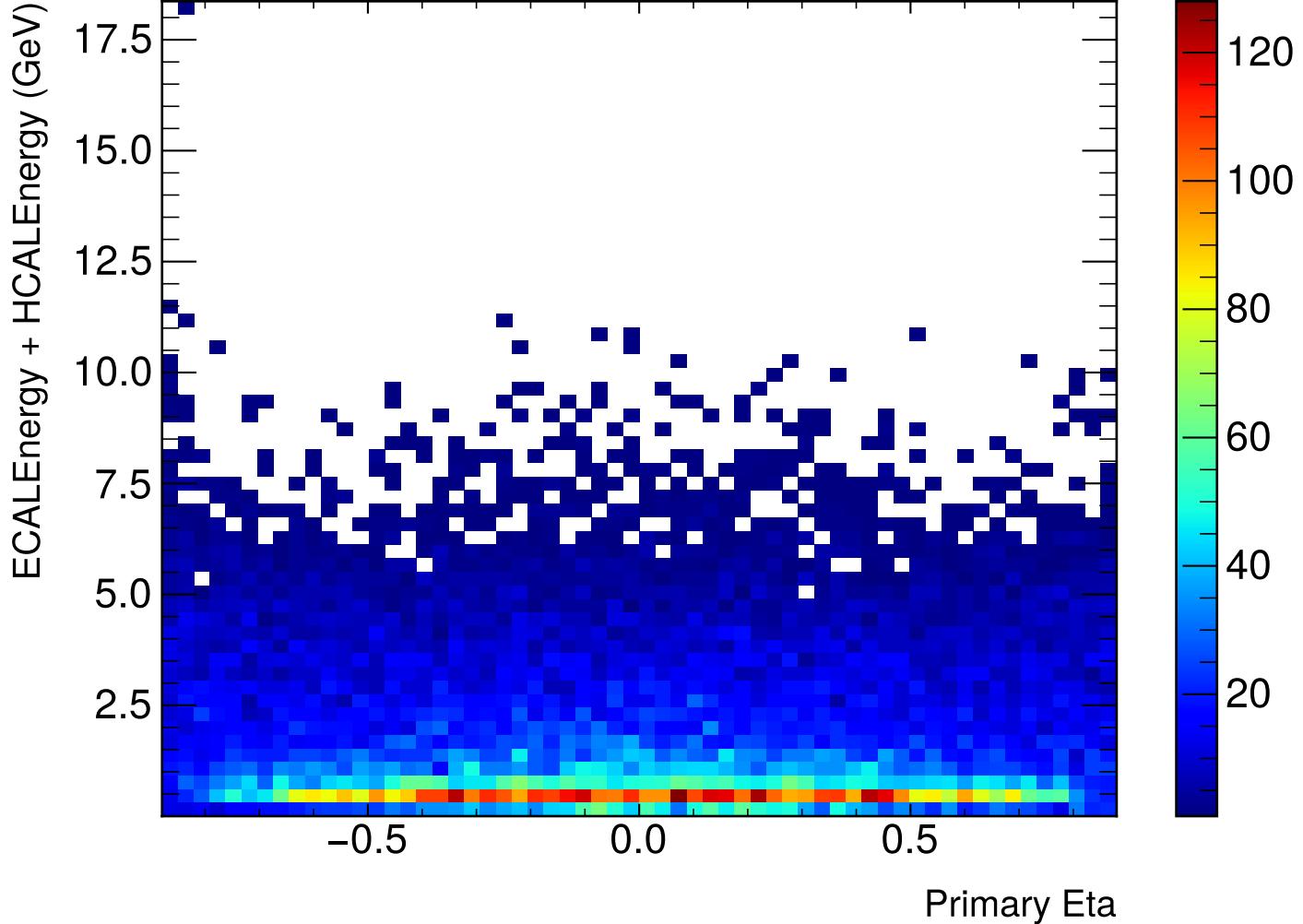
$\pi^+@10\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+ @ 10\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

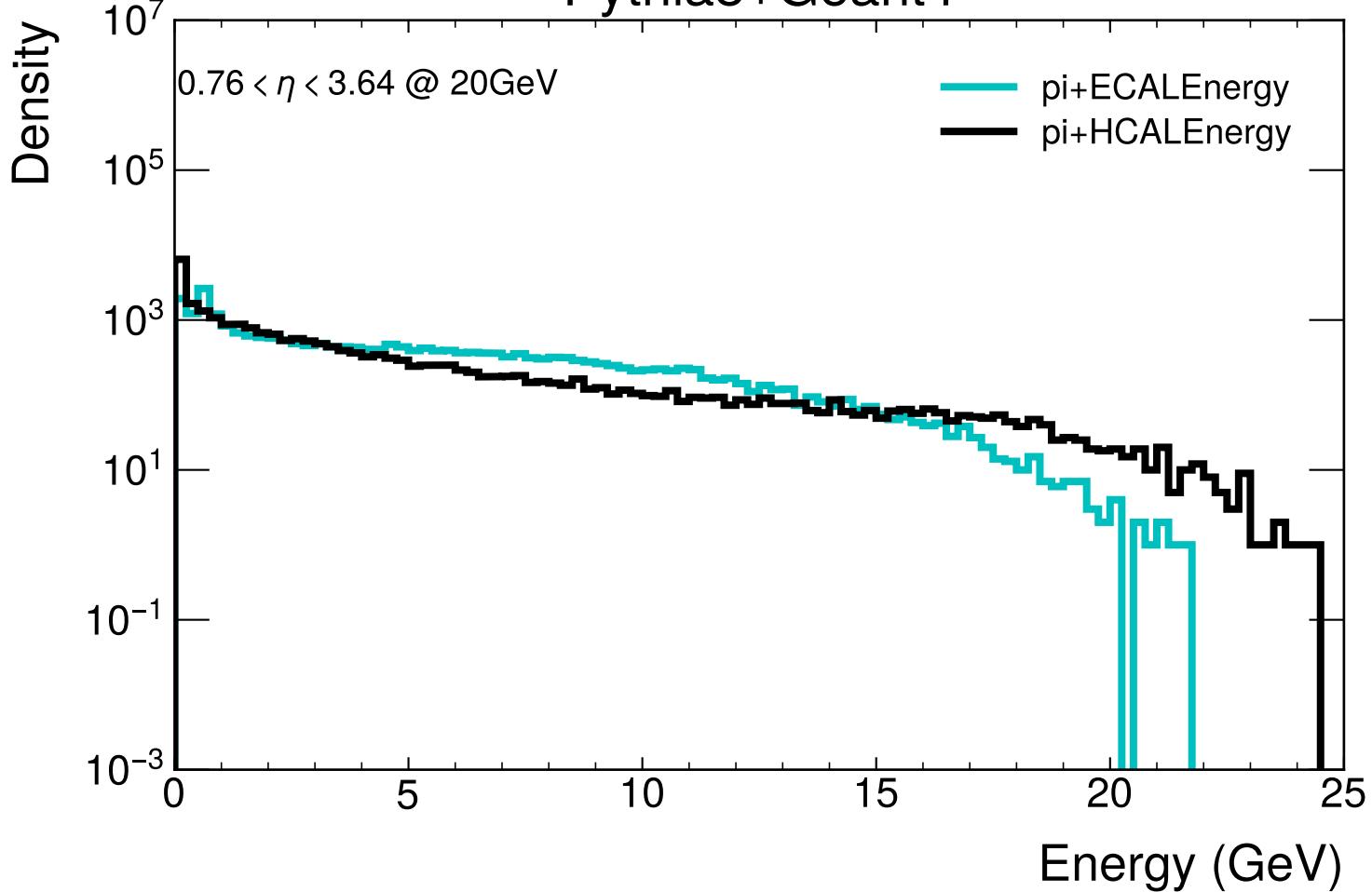


$\pi^+@10\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

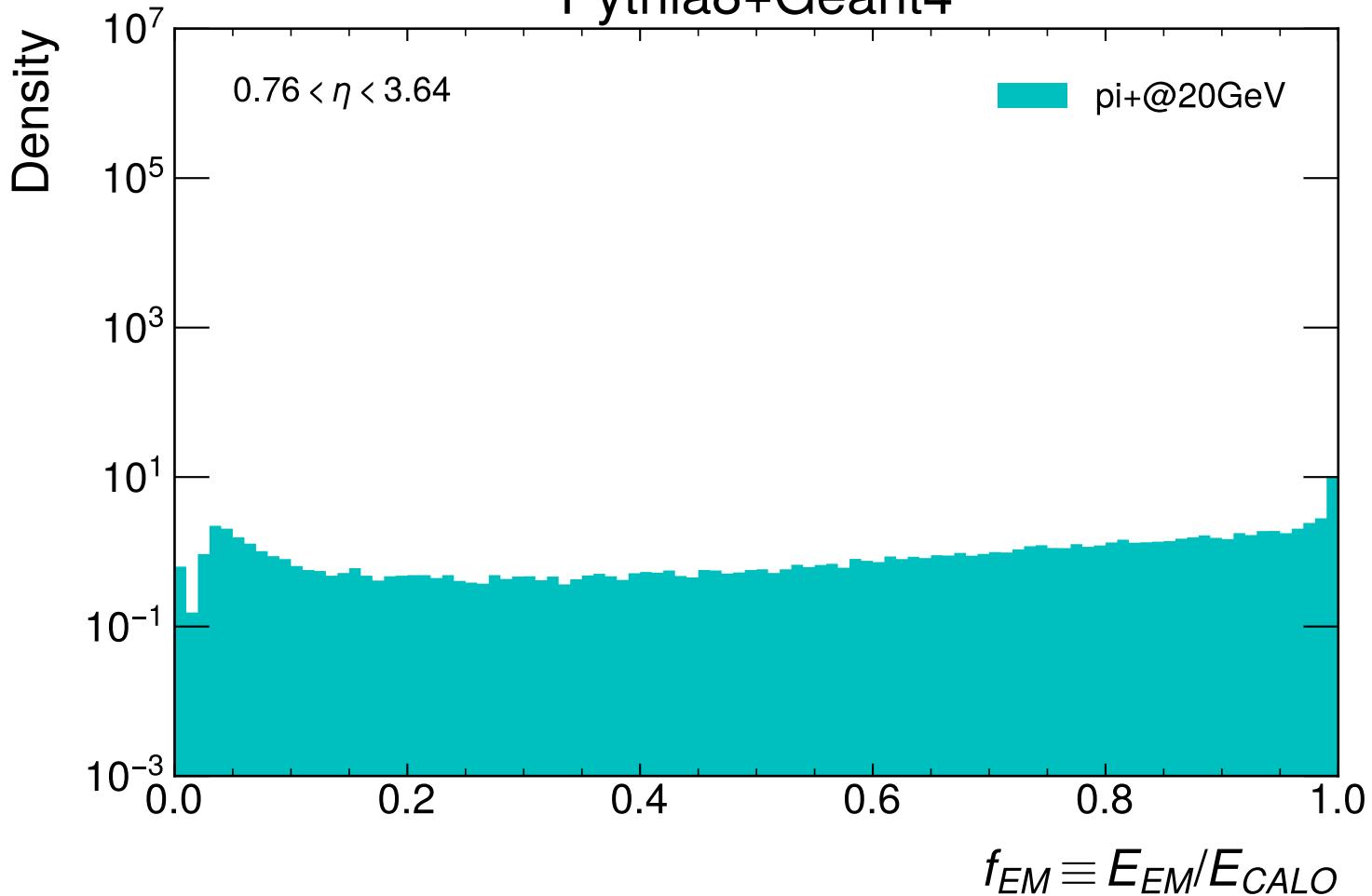


# ATHENA simulation [DD4hep]

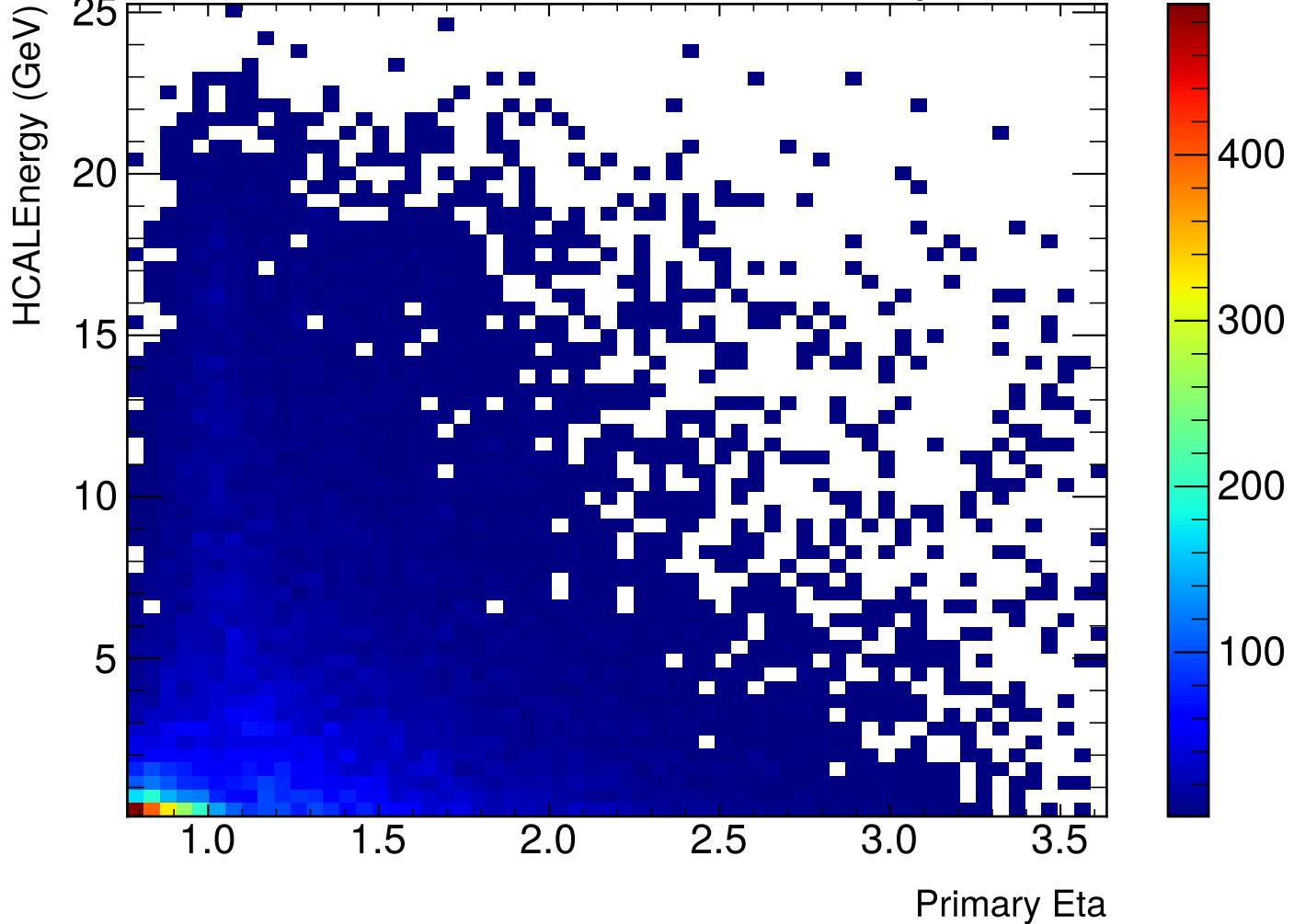
## Pythia8+Geant4



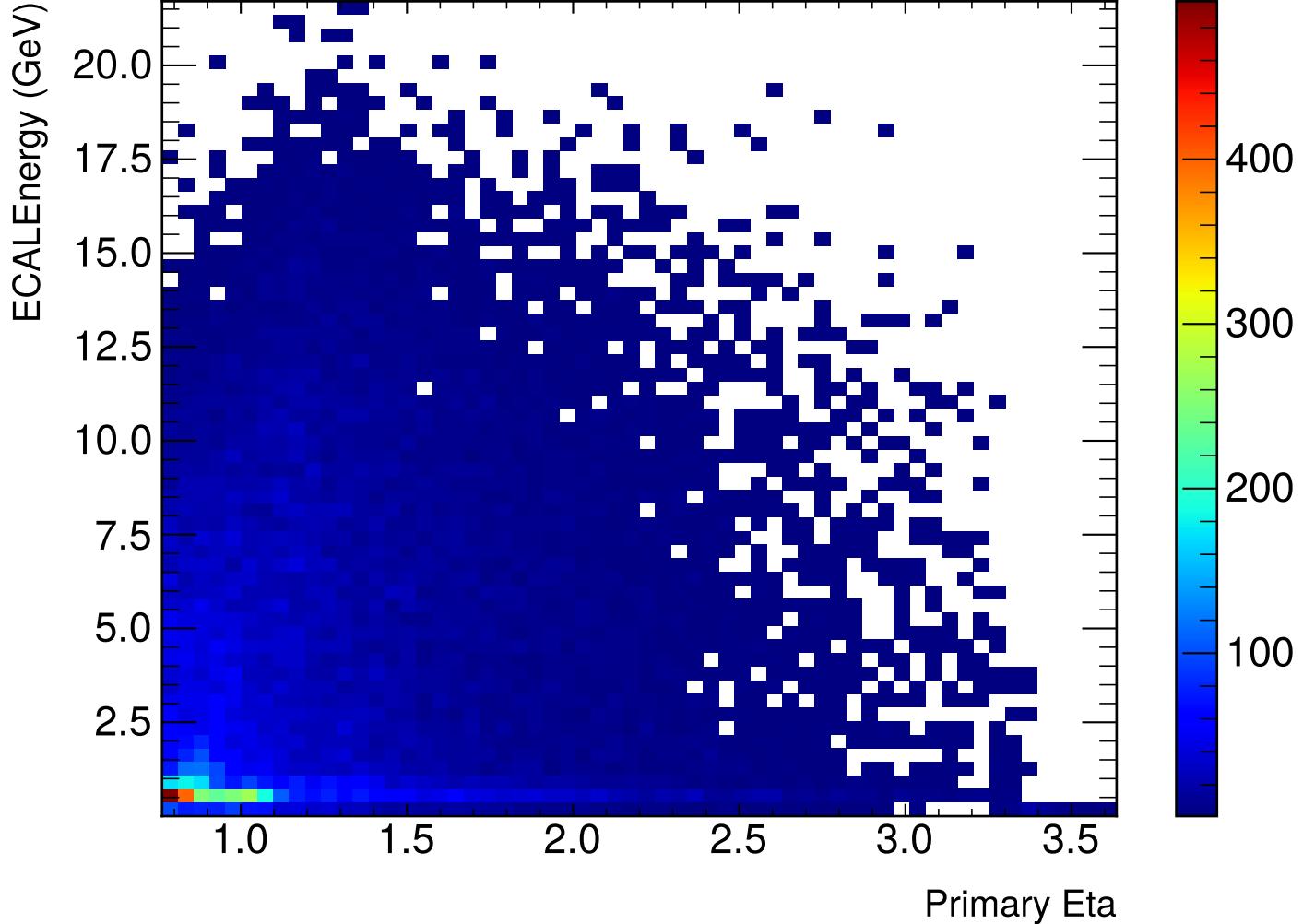
# ATHENA simulation [DD4hep] Pythia8+Geant4



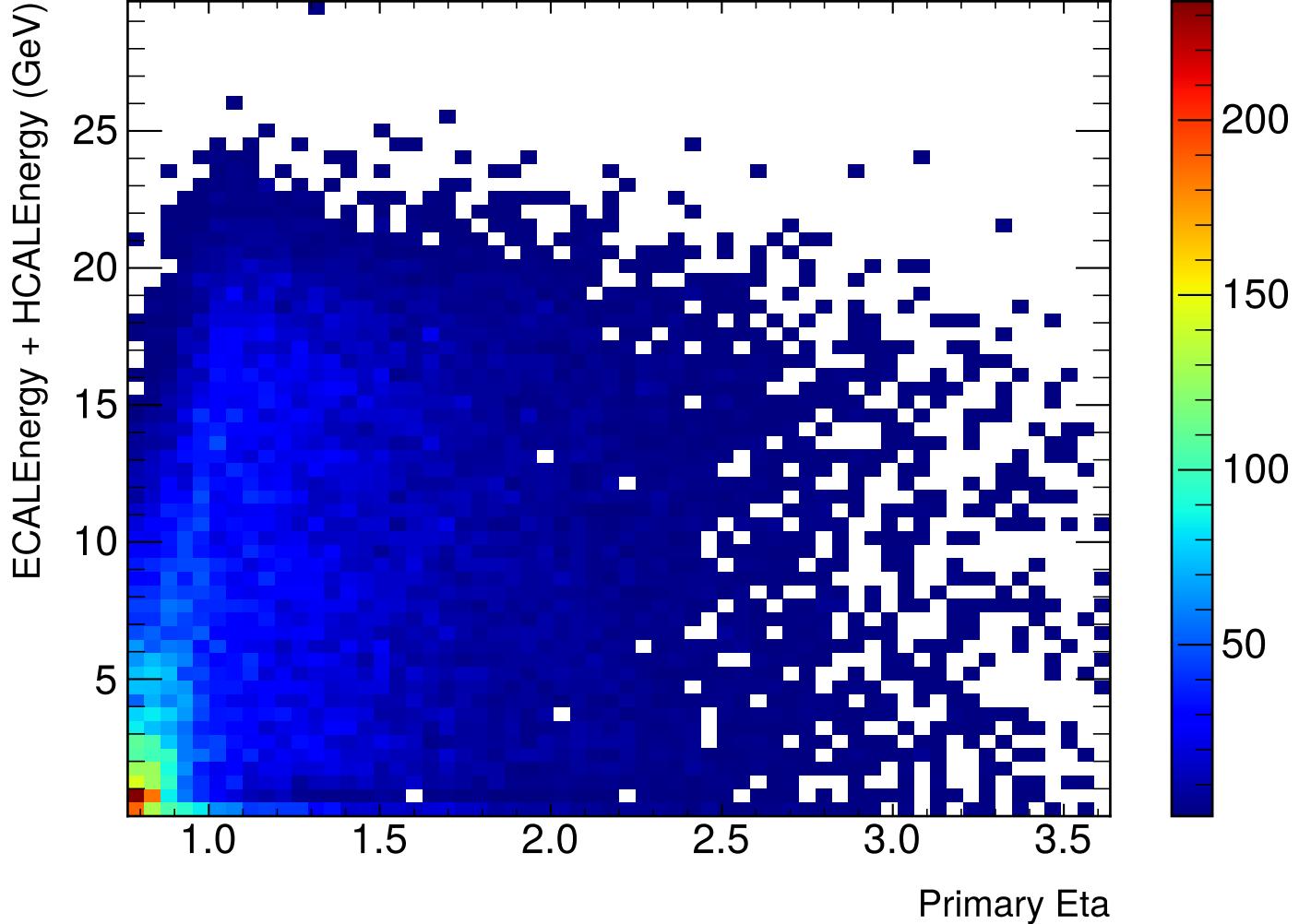
$\pi^+ @ 20\text{GeV}$  spanning  $0.76 < \eta < 3.64$



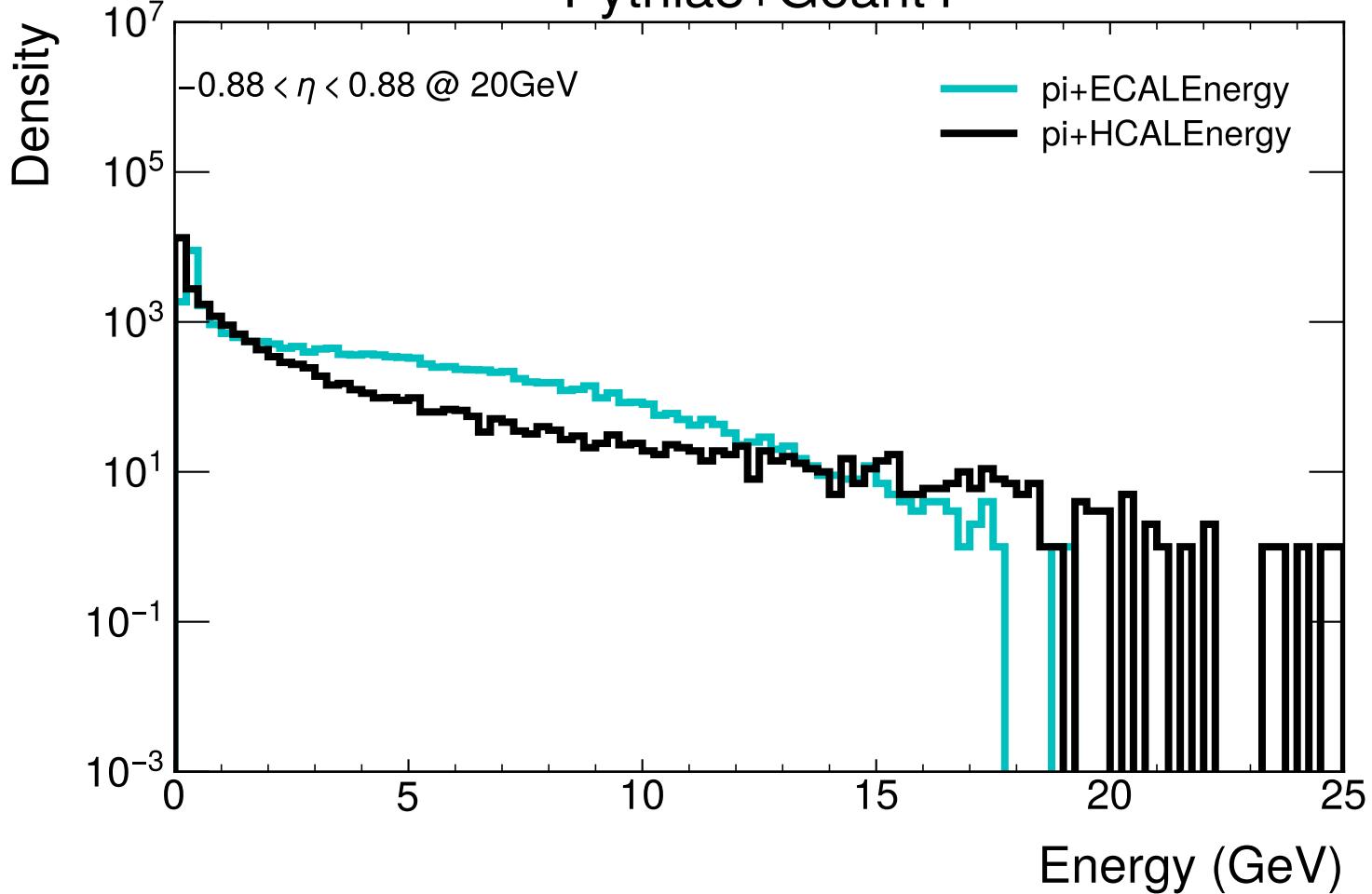
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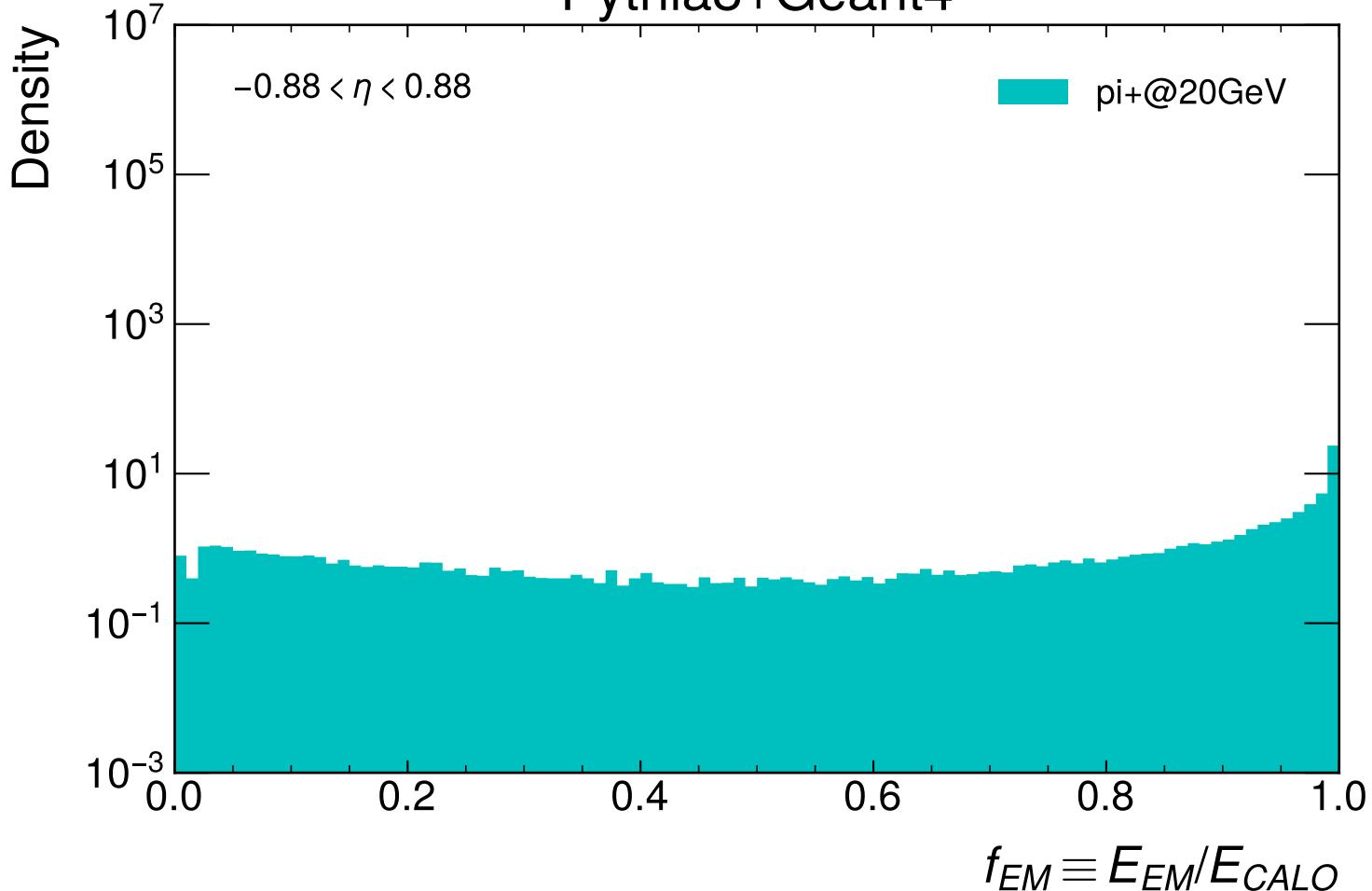
$\pi^+ @ 20\text{GeV}$  spanning  $0.76 < \eta < 3.64$



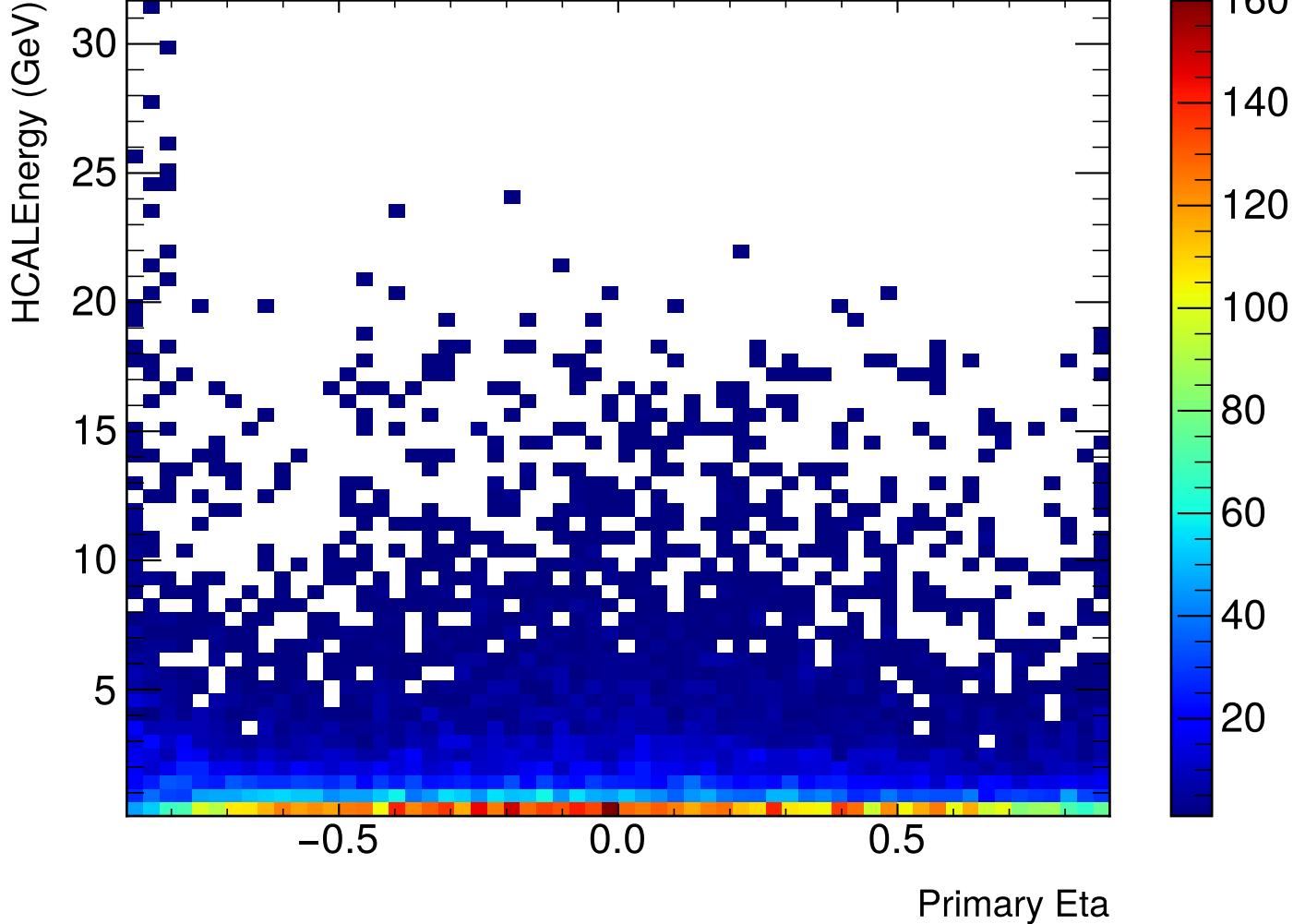
# ATHENA simulation [DD4hep] Pythia8+Geant4



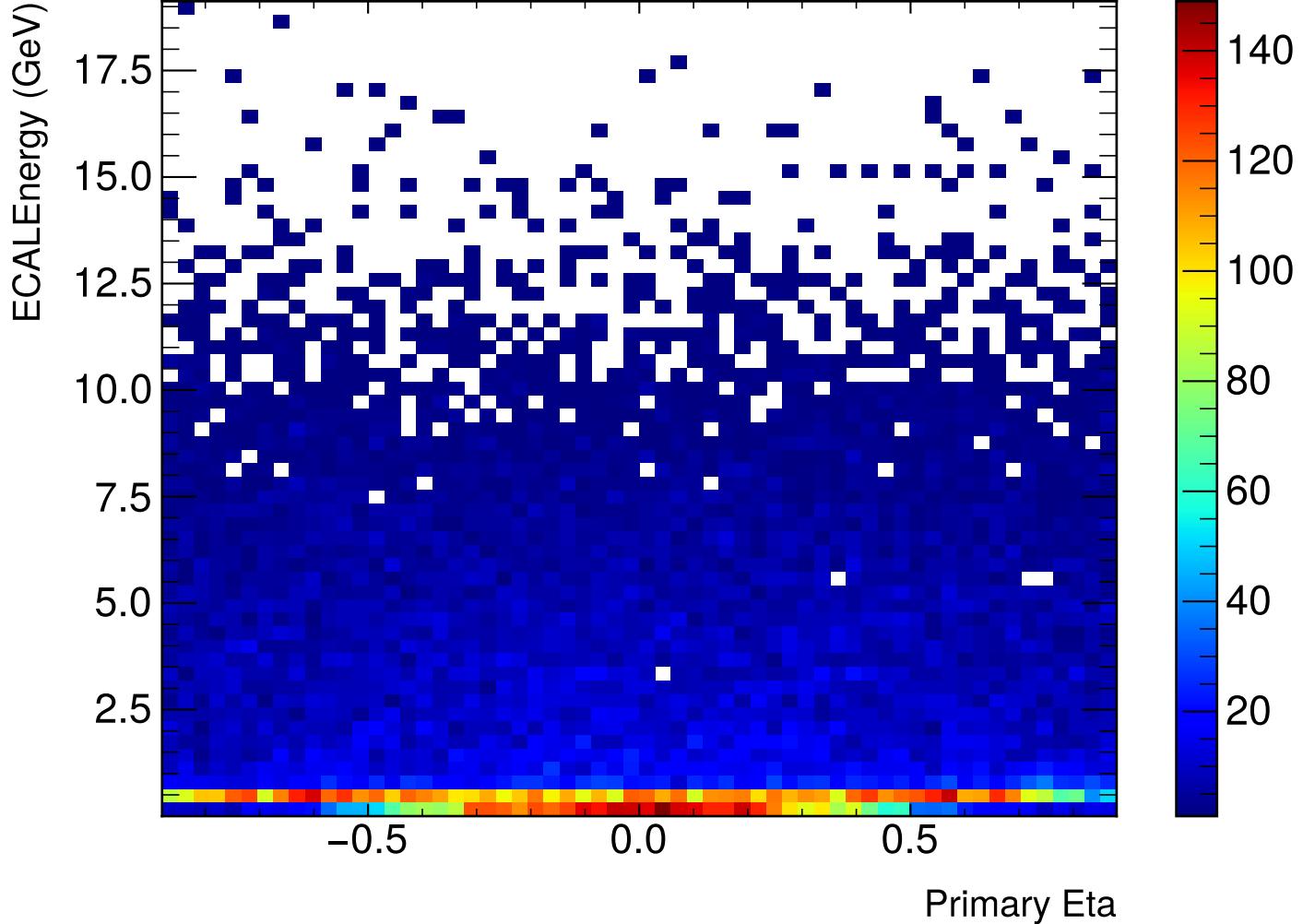
# ATHENA simulation [DD4hep] Pythia8+Geant4



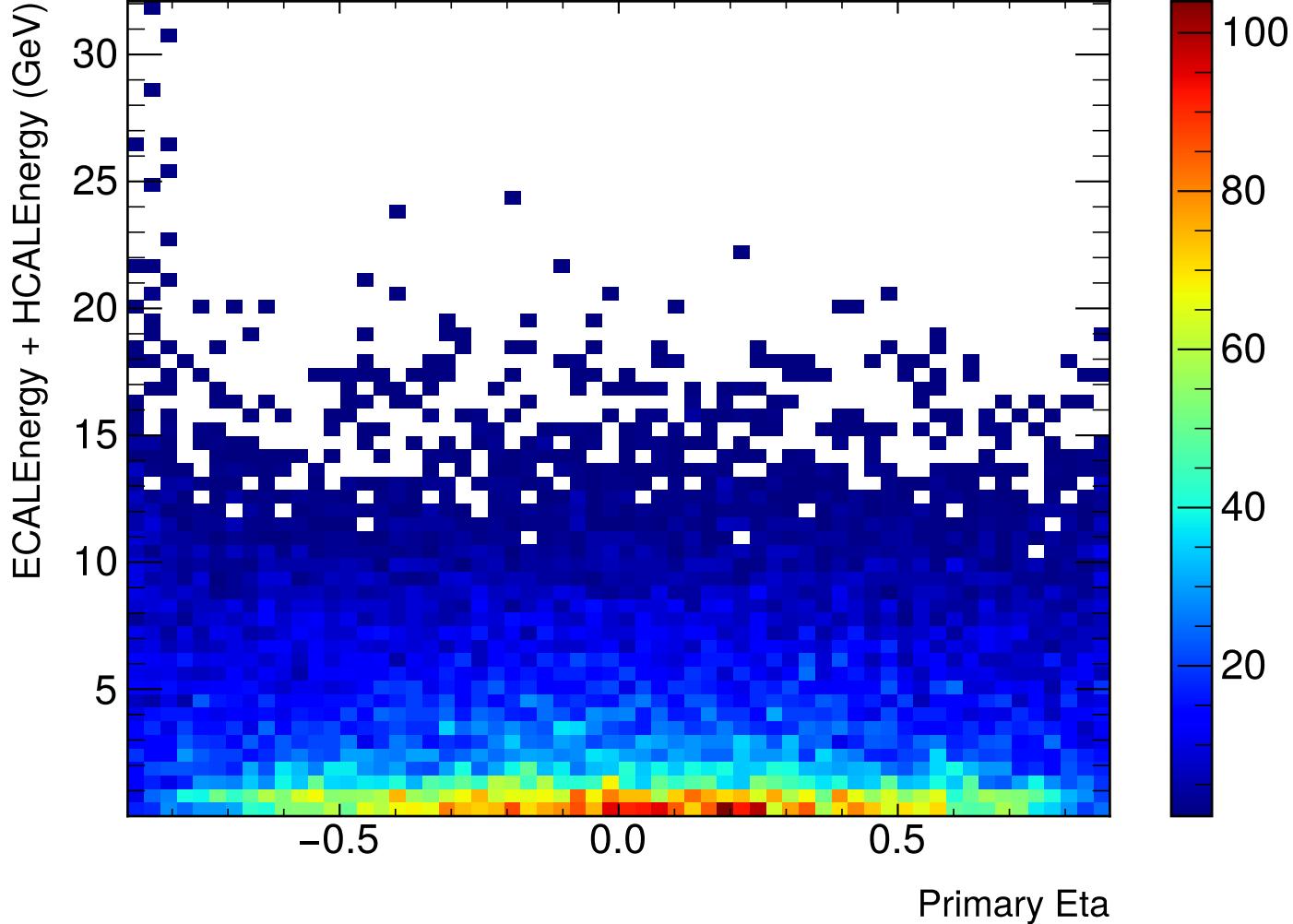
$\pi^+ @ 20\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



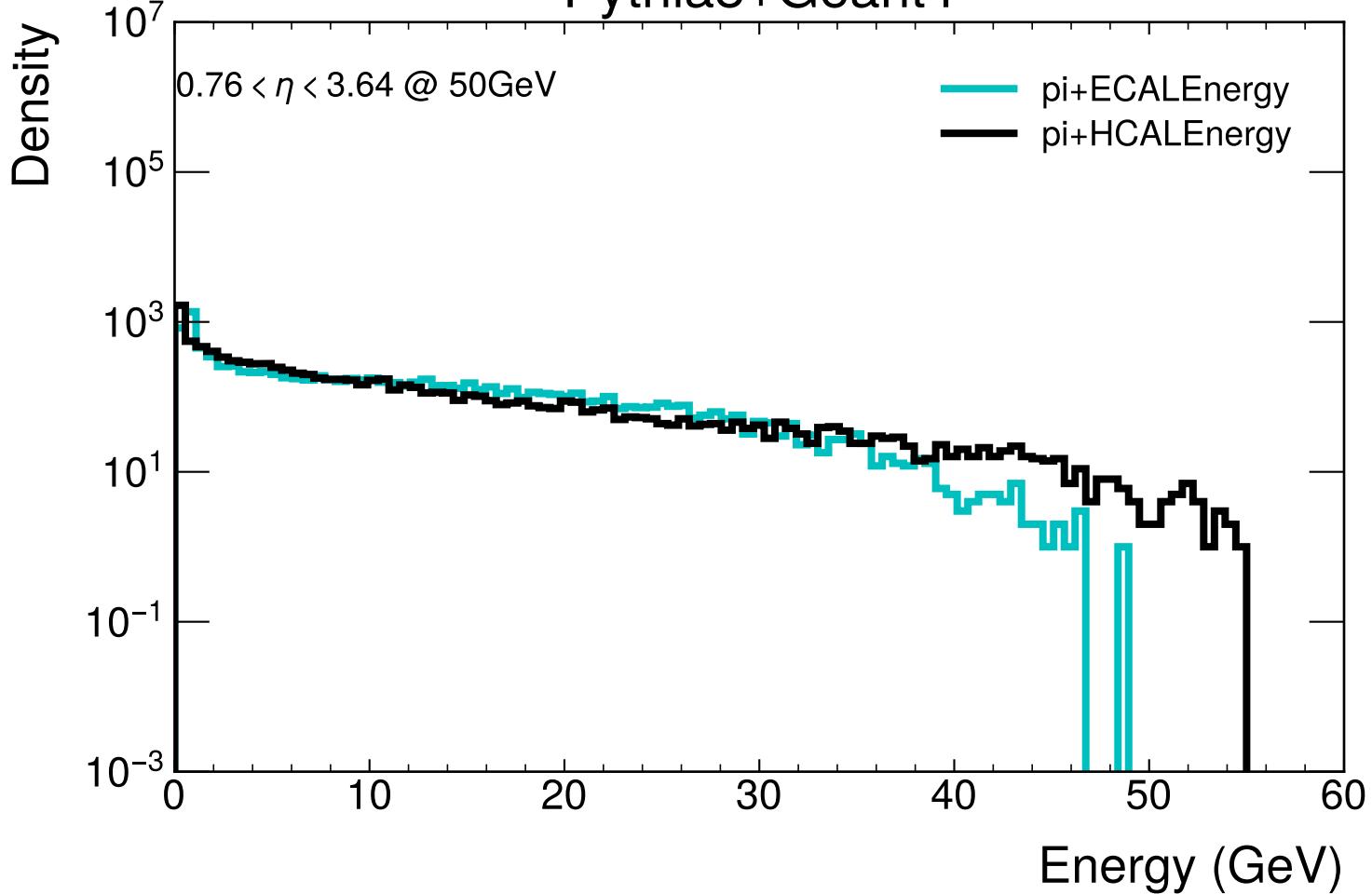
$\pi^+ @ 20\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+ @ 20\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

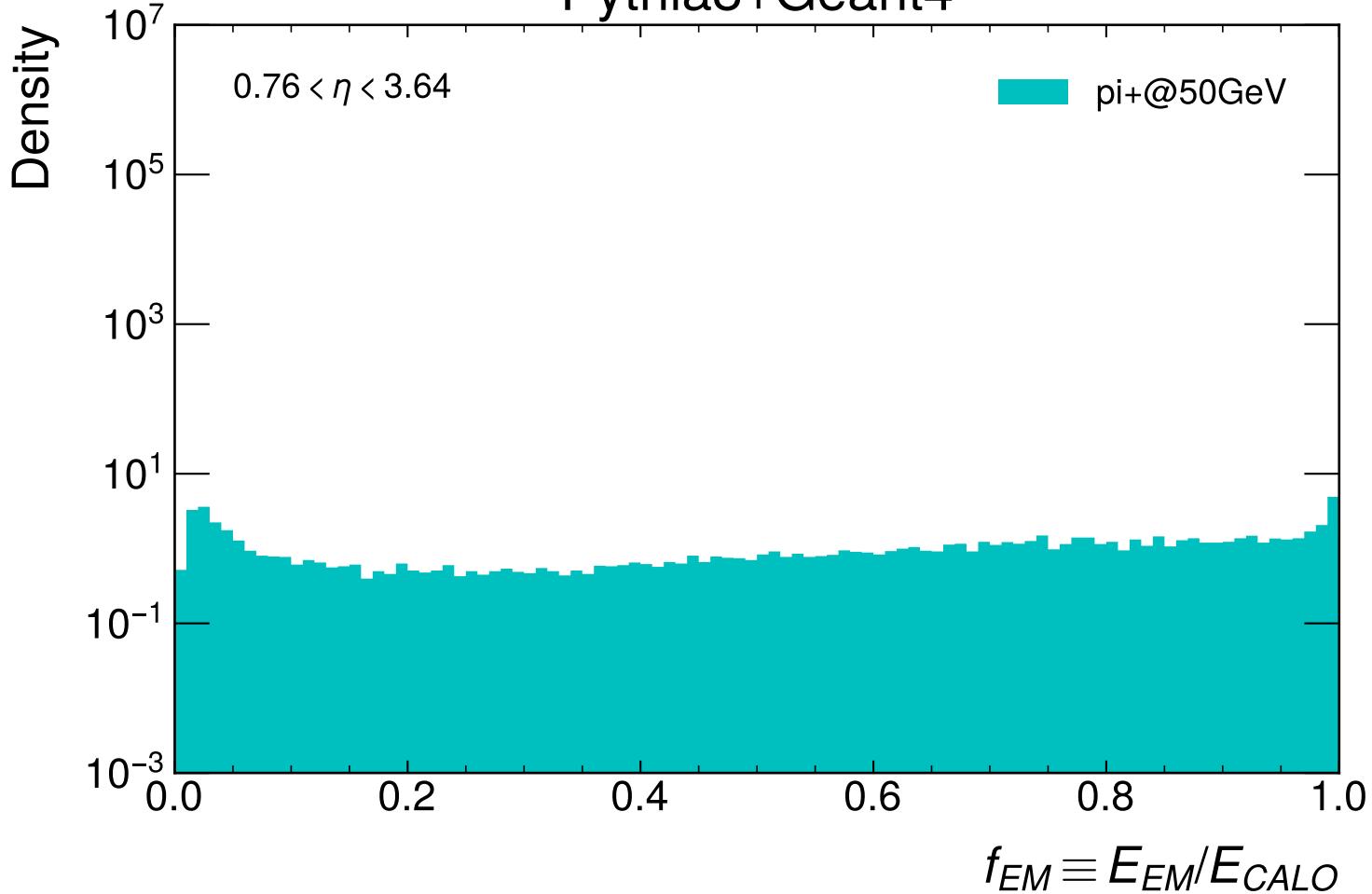


# ATHENA simulation [DD4hep] Pythia8+Geant4

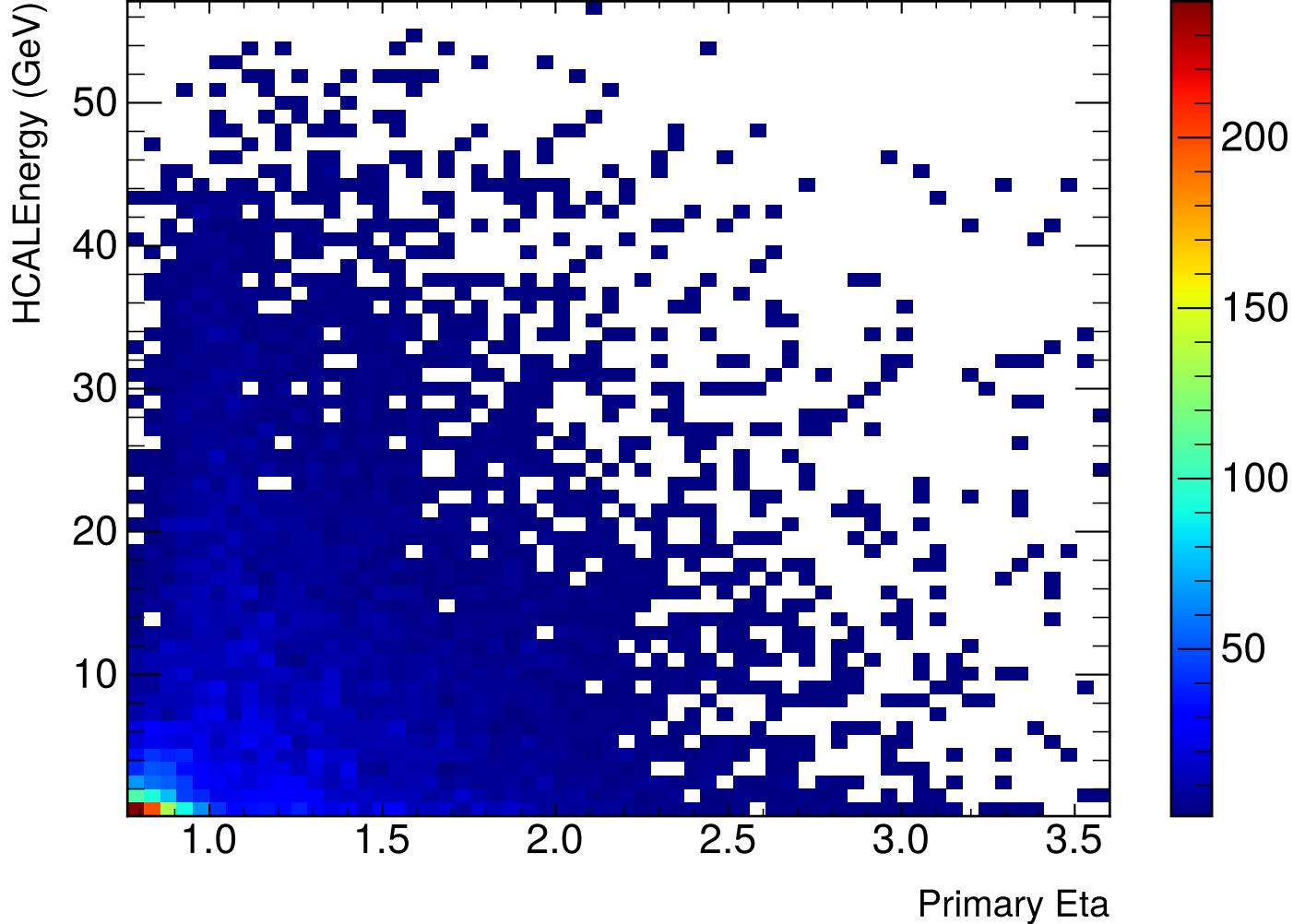


# ATHENA simulation [DD4hep]

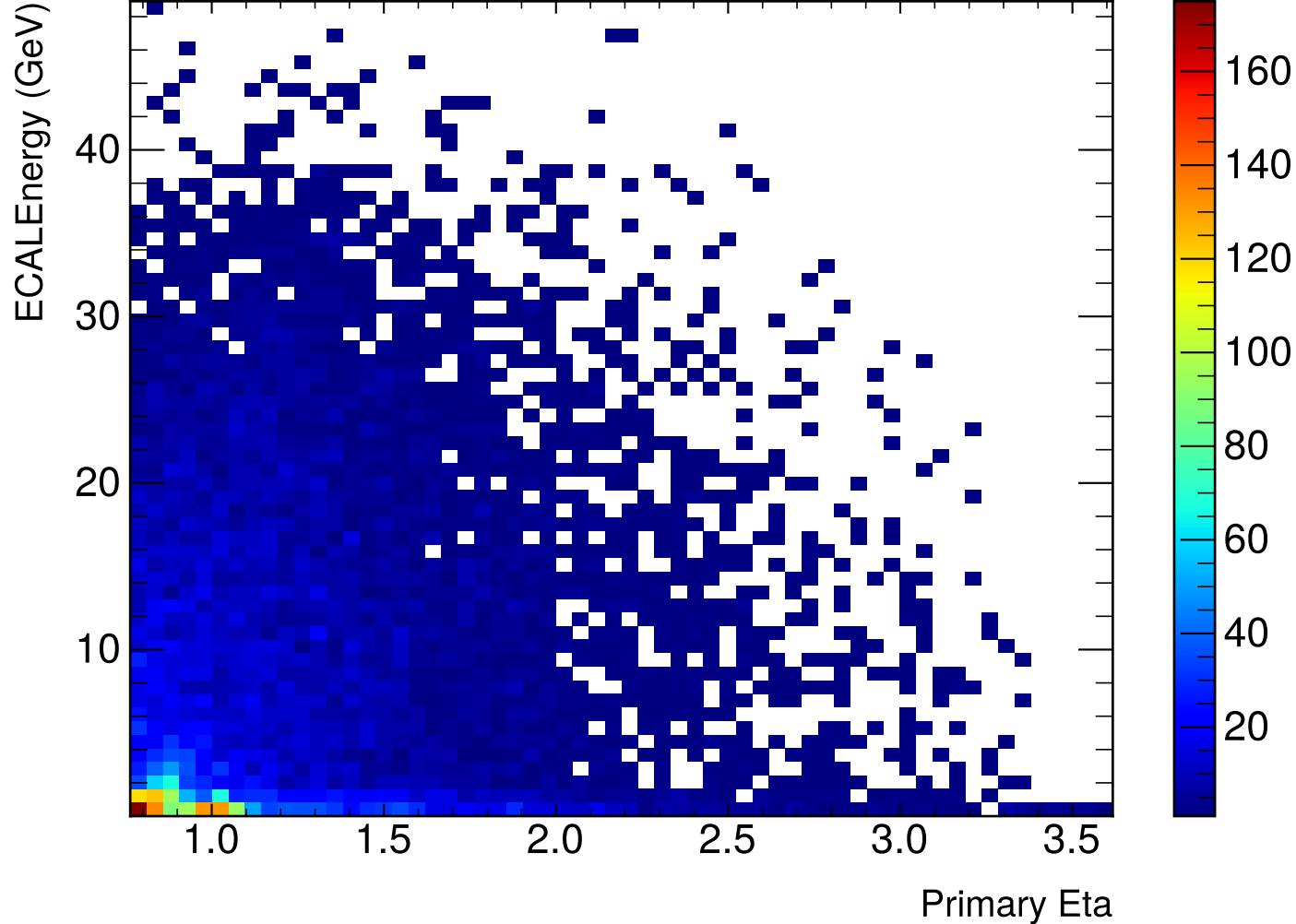
## Pythia8+Geant4



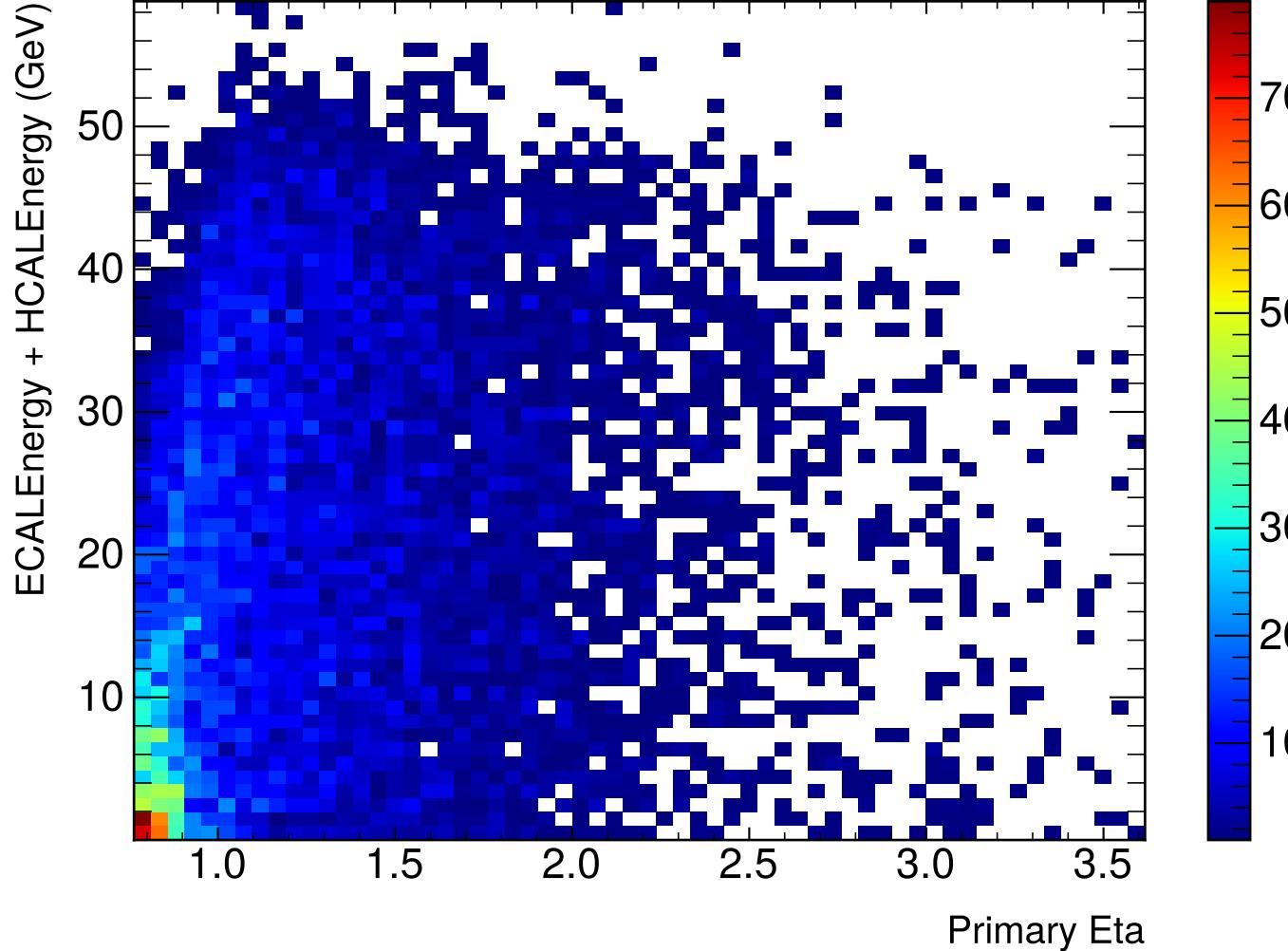
$\pi^+@50\text{GeV}$  spanning  $0.76 < \eta < 3.64$



$\pi^+@50\text{GeV}$  spanning  $0.76 < \eta < 3.64$

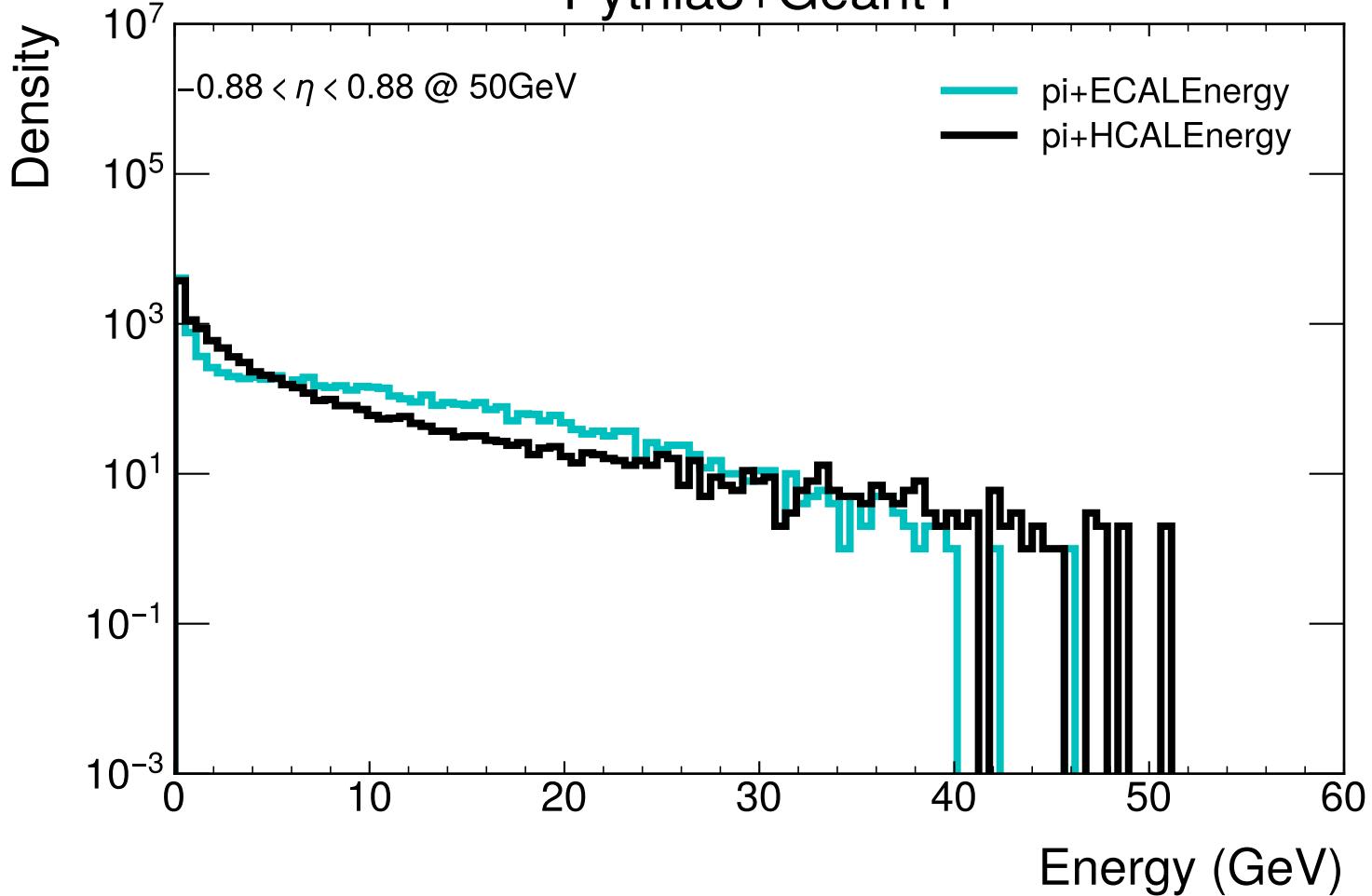


$\pi^+ @ 50\text{GeV}$  spanning  $0.76 < \eta < 3.64$

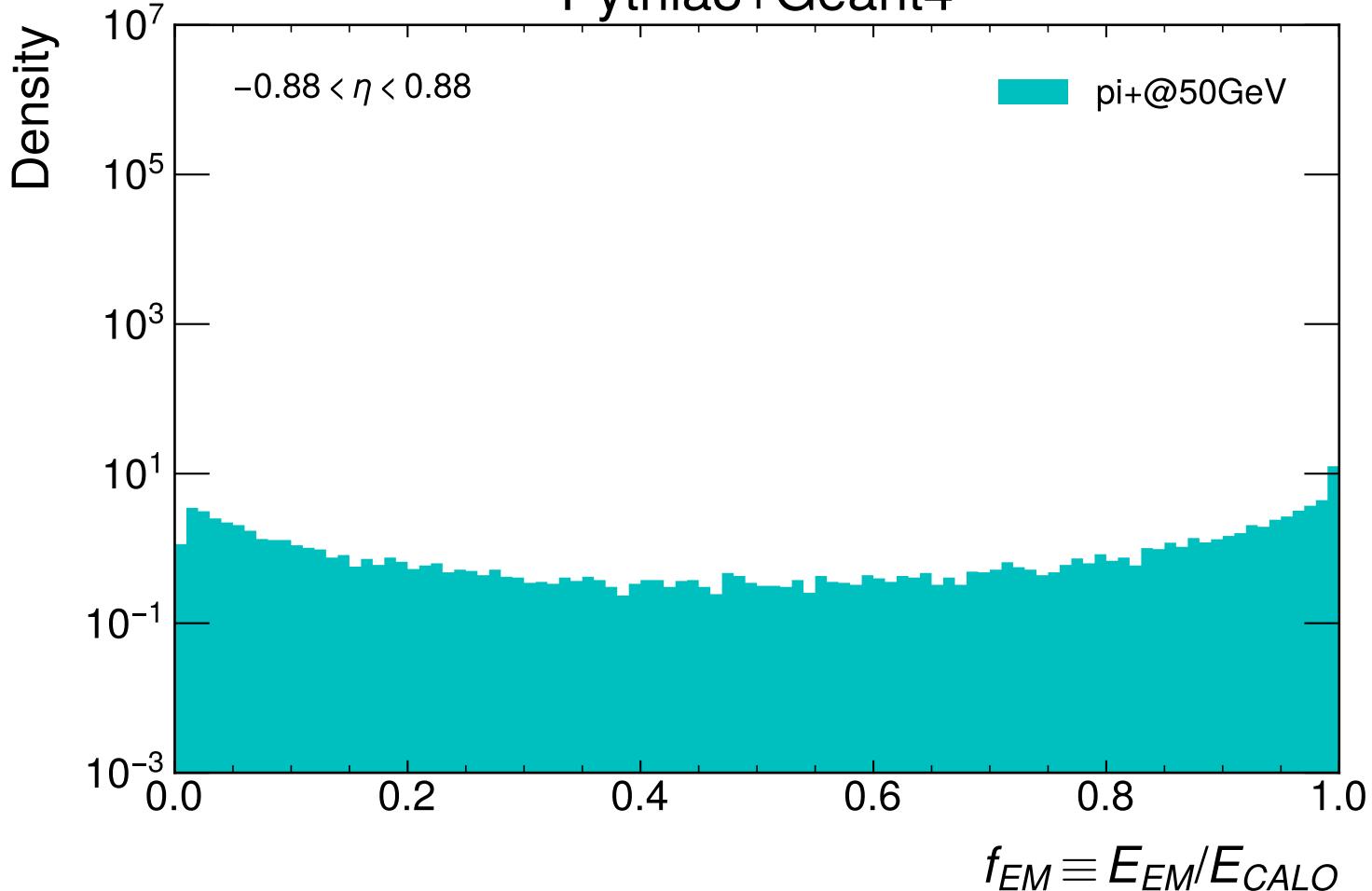


# ATHENA simulation [DD4hep]

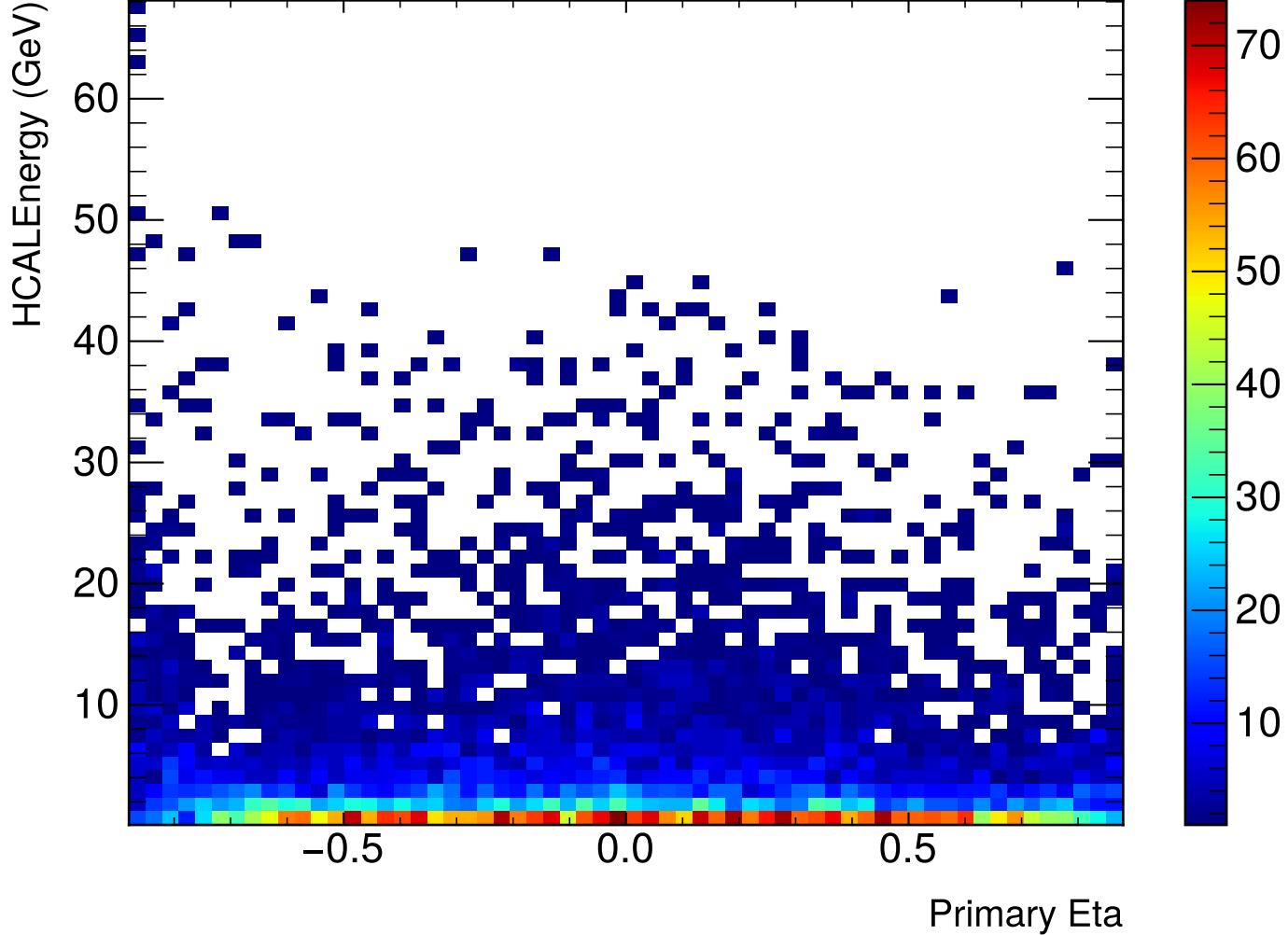
## Pythia8+Geant4



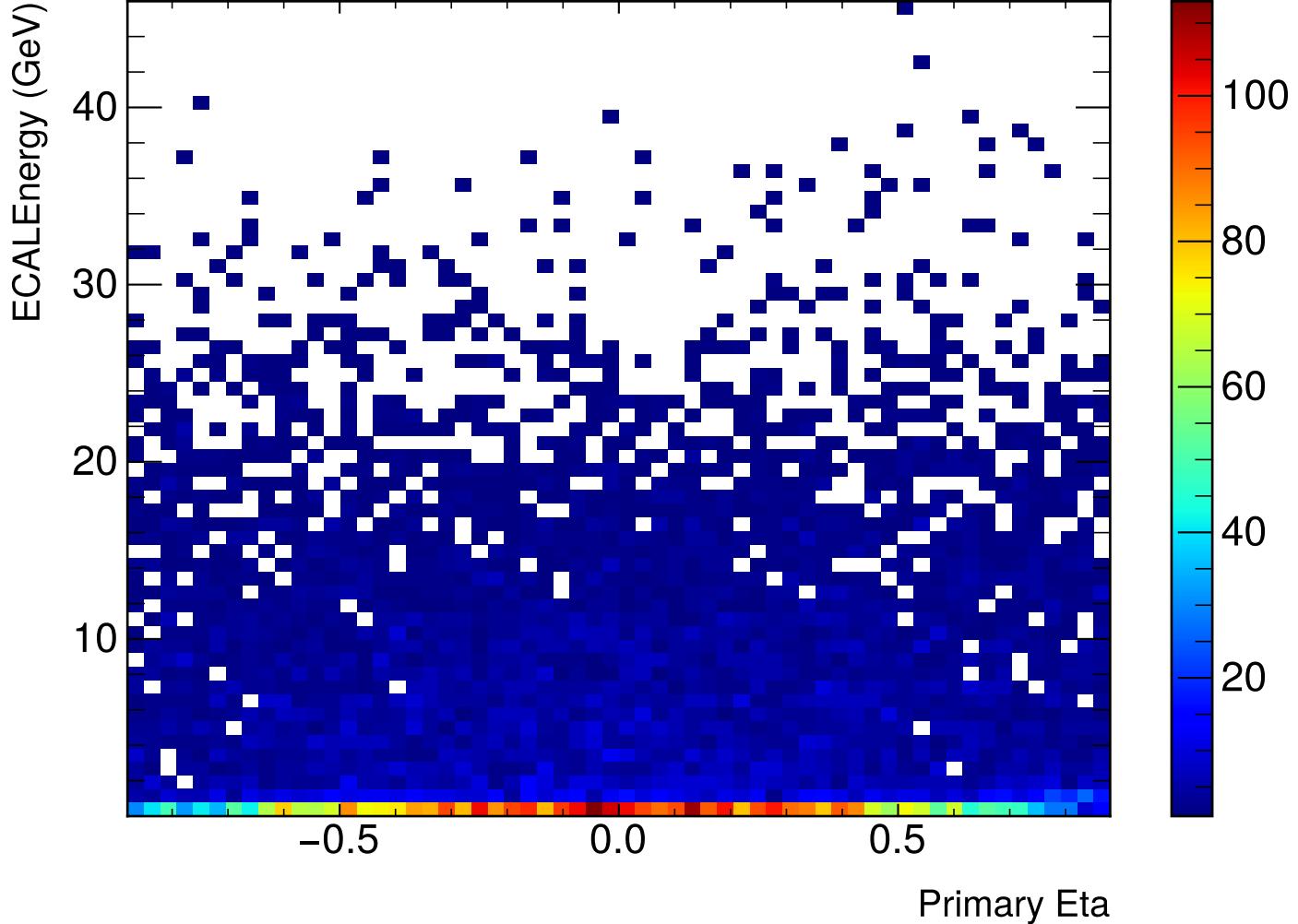
# ATHENA simulation [DD4hep] Pythia8+Geant4



$\pi^+@50\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+@50\text{GeV}$  spanning  $-0.88 < \eta < 0.88$



$\pi^+ @ 50\text{GeV}$  spanning  $-0.88 < \eta < 0.88$

