Pattern Finding Performance Using Current Tracklet Finding Algorithm

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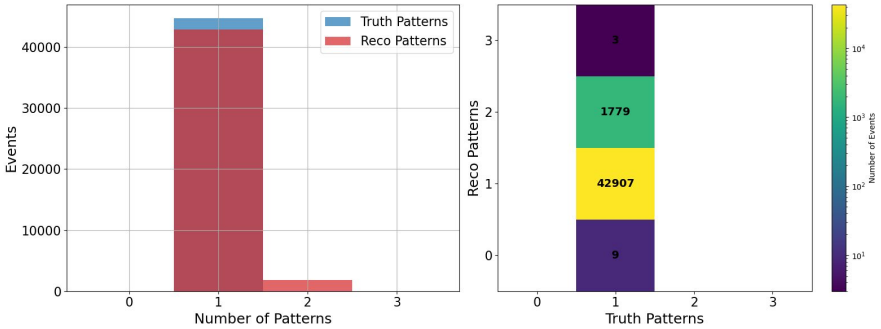
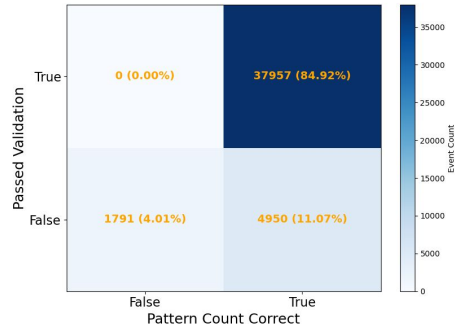
Short Overview

- Tracklet finding reconstruction data can be used in python pattern finding test playground
  - Use it to see how pattern reconstruction performs using reconstructed tracklets as opposed to truth
- Overall performance worse compared to previous plots
  - Before we used truth information from tracklets, so this is unsurprising
- Performance of vertex finding algorithm improved using the new tracklet reco's endpoints
  - Before, we were using Sean's fitting algorithm to determine endpoints of tracklets

π→μ→e Performance Difference using x-z info only



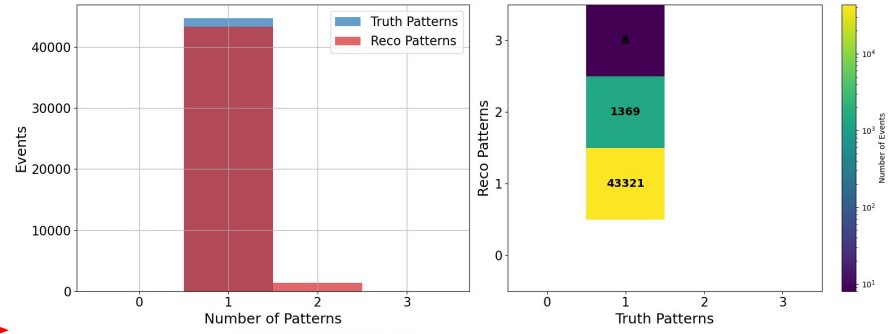


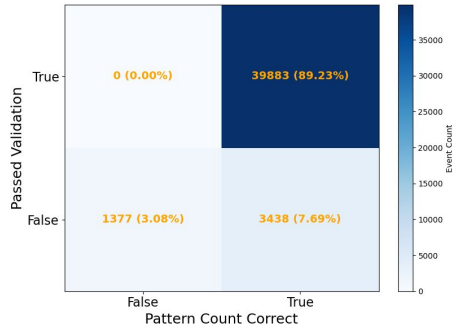
Total Events: 44698

Passed Validation: 37957

Failed Validation: 6741

Performance: 84.92%





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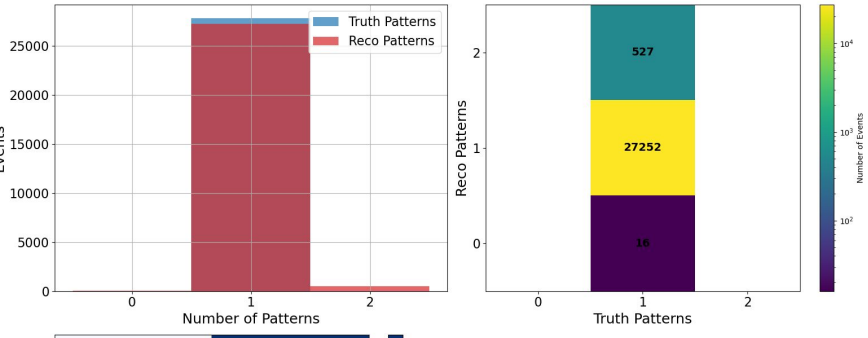

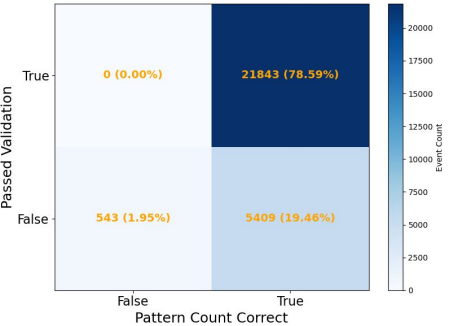

Total Events: 27795

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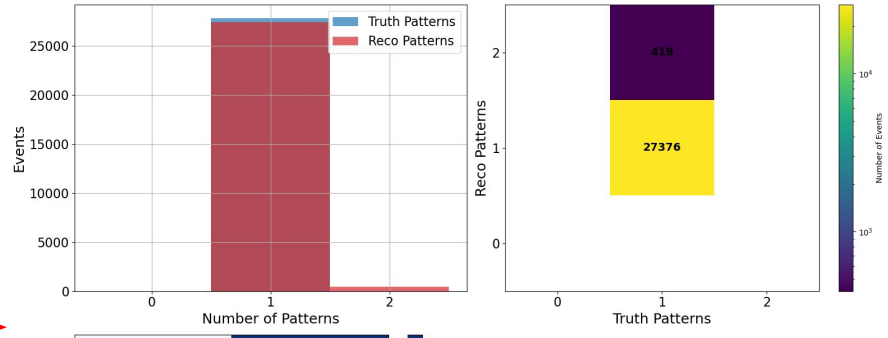
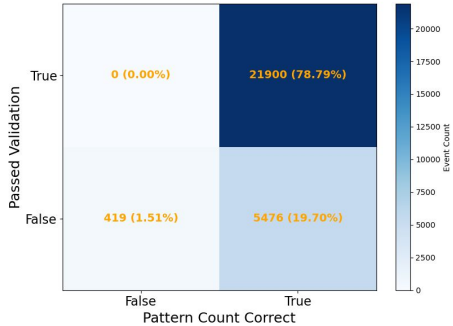
Failed Validation: 5952

Performance: 78.59%





Total Events: 27795

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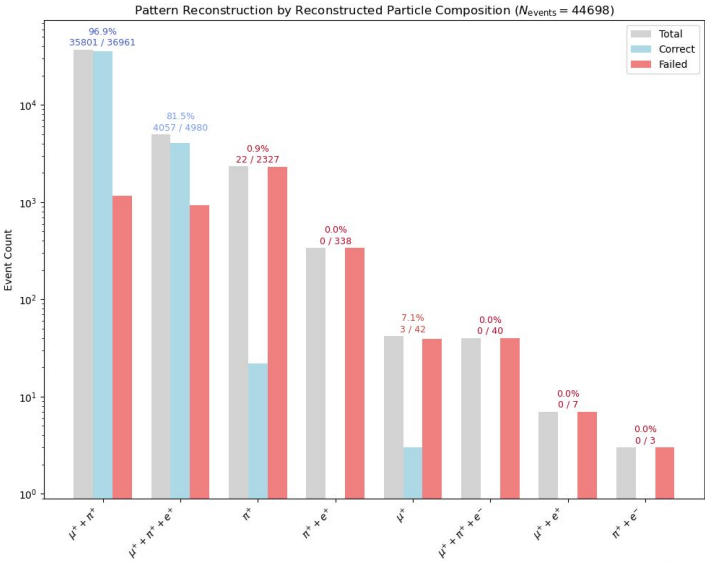
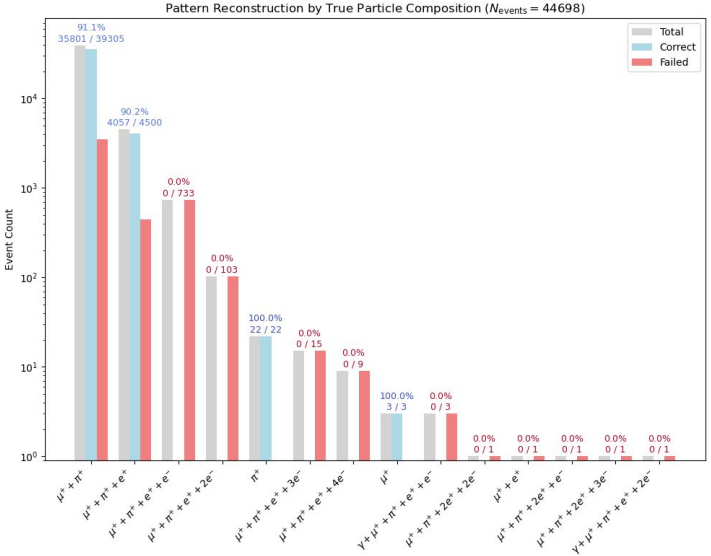
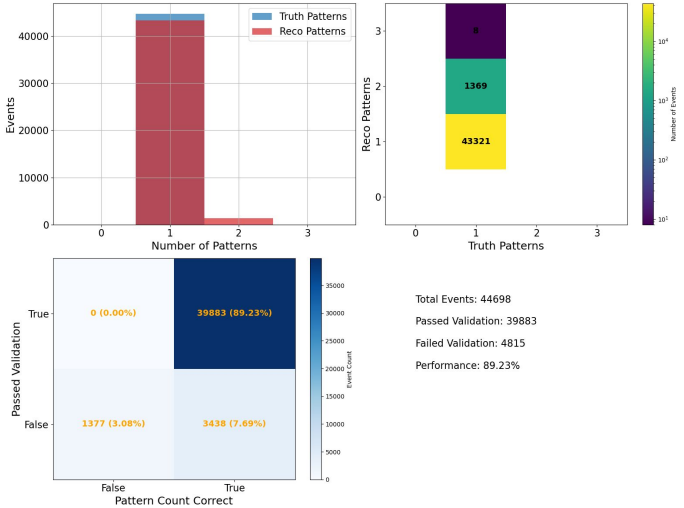
Auxiliary Slides

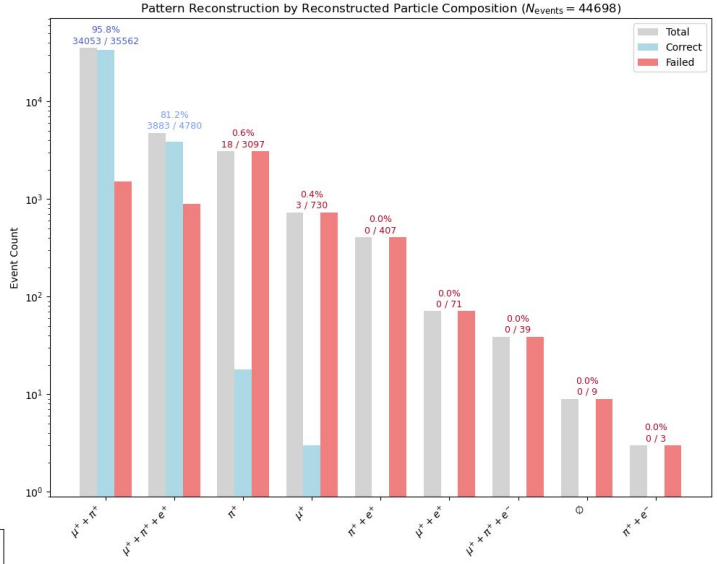
π→μ→e (Reconstructed Tracklet Evaluation, x-z info only)

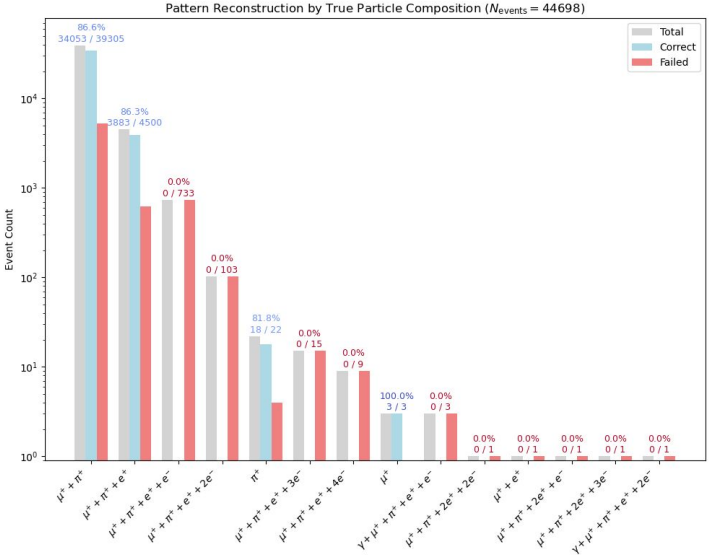


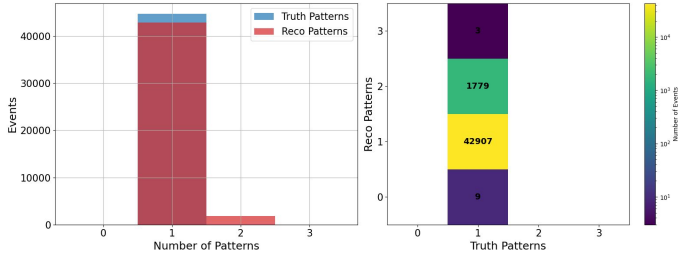


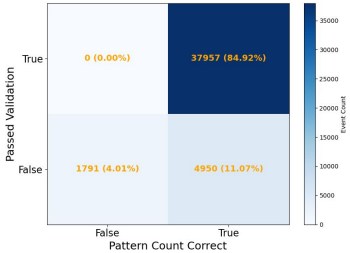


π→μ→e (Truth Tracklet Evaluation, x-z info only)









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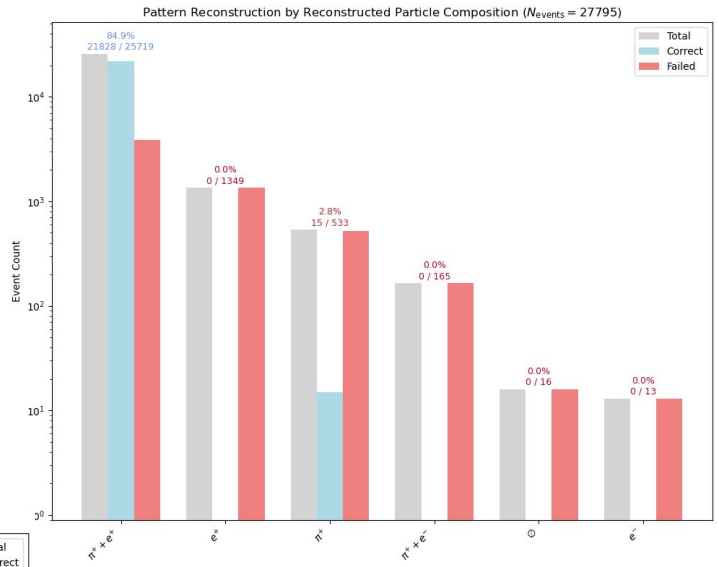

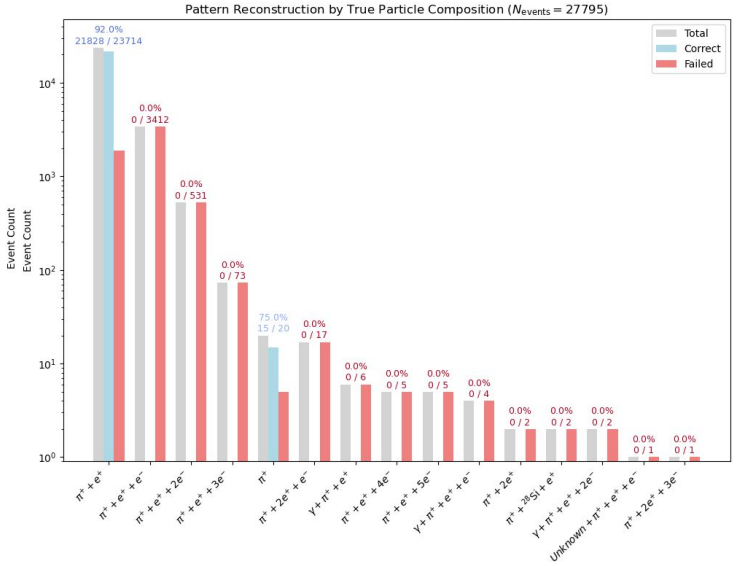

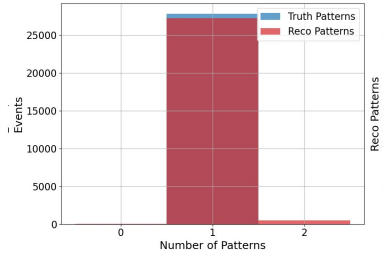

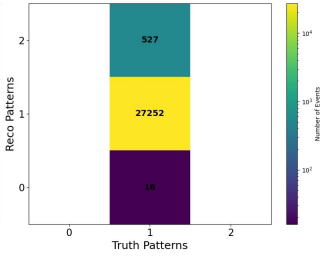

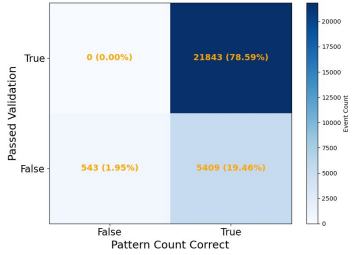

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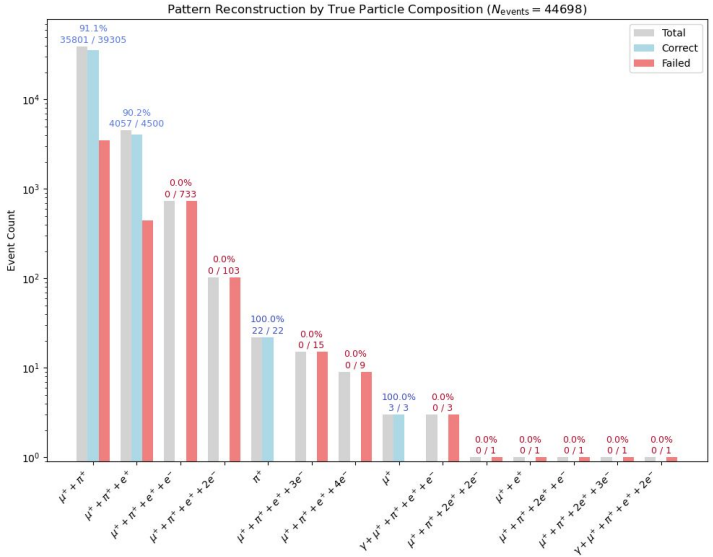

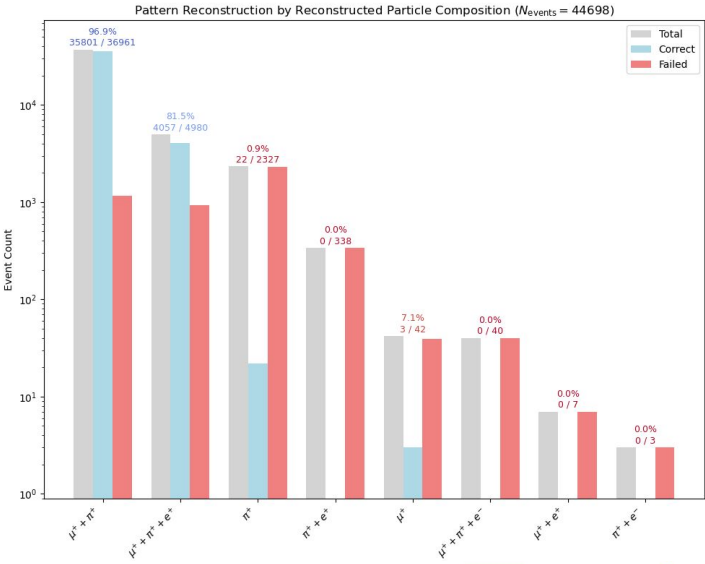

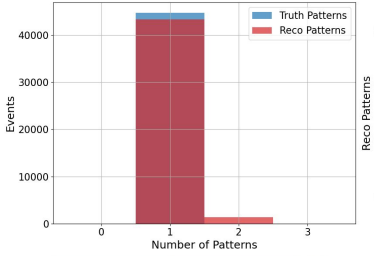

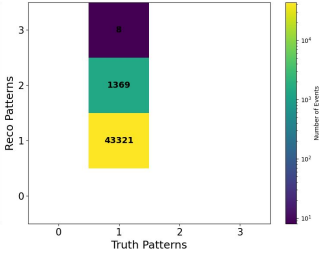

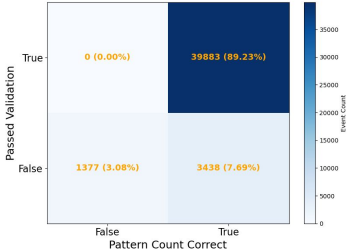

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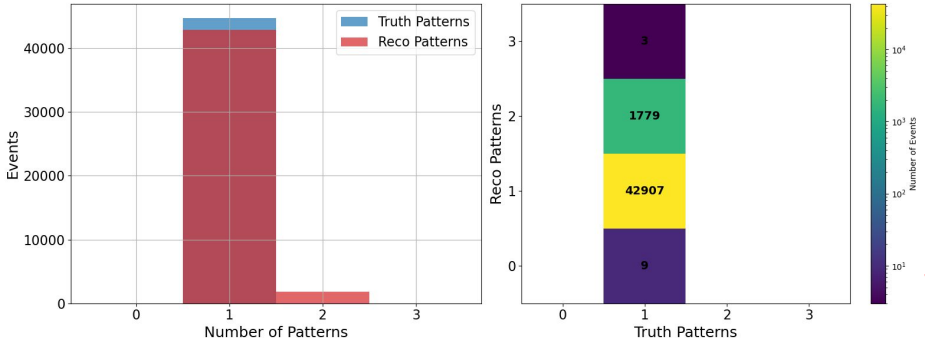

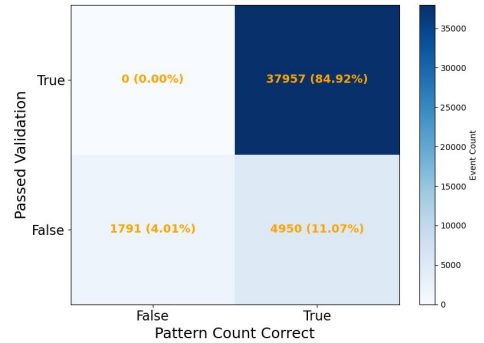

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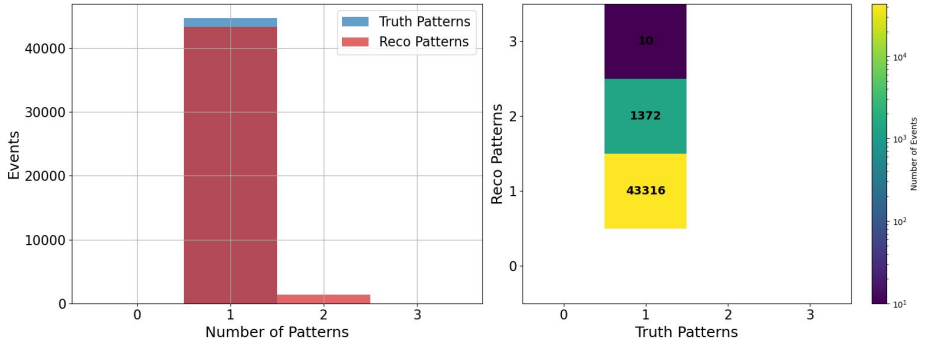
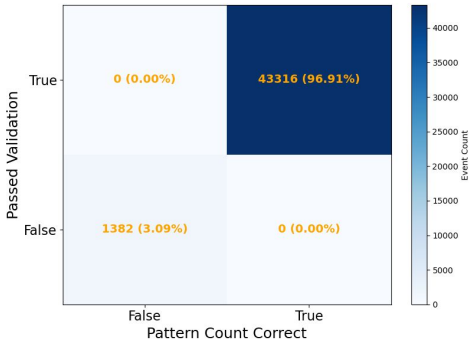




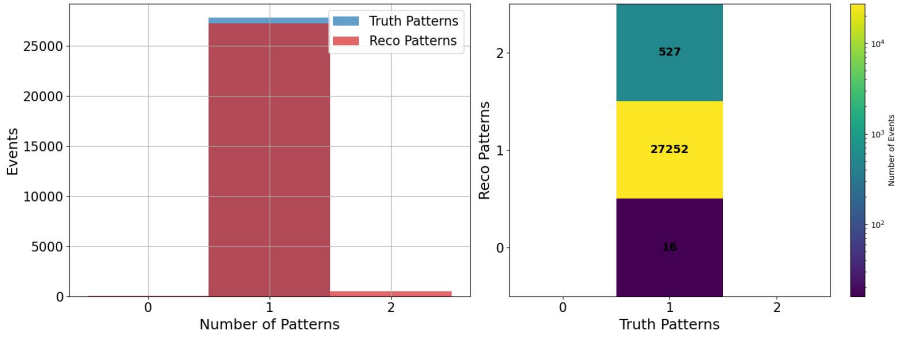
Total Events: 44698

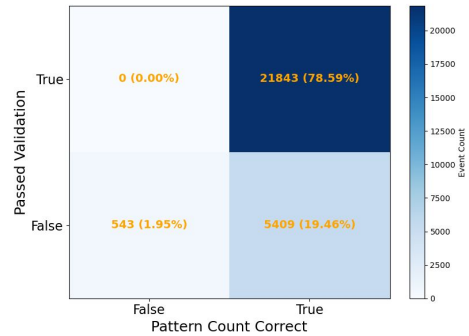
Passed Validation: 43316

Failed Validation: 1382

Performance: 96.91%

π→e (x-z info only) Validation Using True Tracklets → True Patterns Vs. Reco Tracklets → True Patterns





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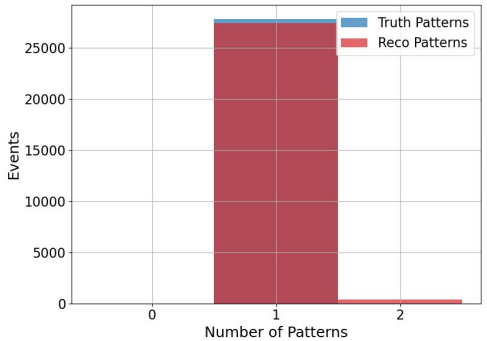

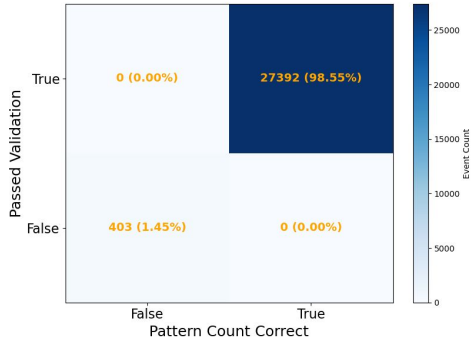

Total Events: 27795

Passed Validation: 27392

Failed Validation: 403

Performance: 98.55%