



Tagger tracking

-update-

Miroslav Myska, Jaroslav Adam
CTU in Prague

Machine learning for reconstruction in tagger detectors

- Working machine learning was developed by the group to obtain original scattered electrons from detected tracks in tagger detectors
- Input layers consists of track parameters (position and angles in x and y)
- Output layer gives full kinematics of scattered electrons p' (energy and polar and azimuthal angles)

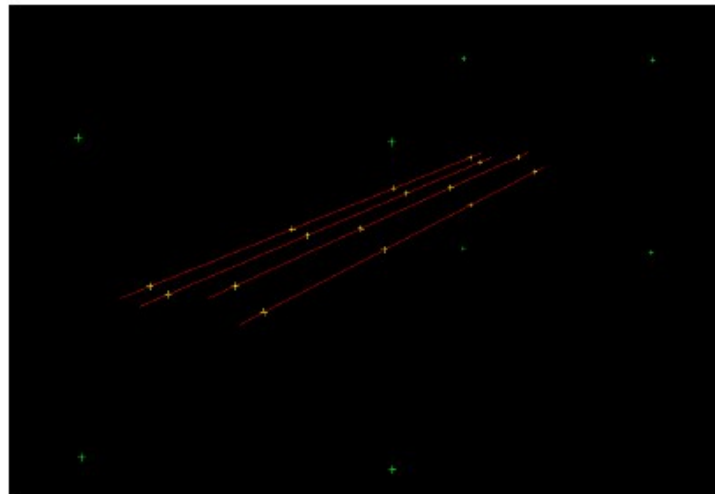


Figure: Detected tracks

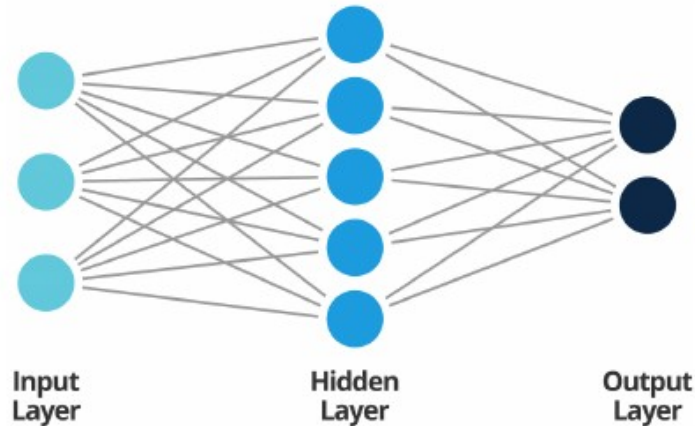


Figure: Artificial intelligence

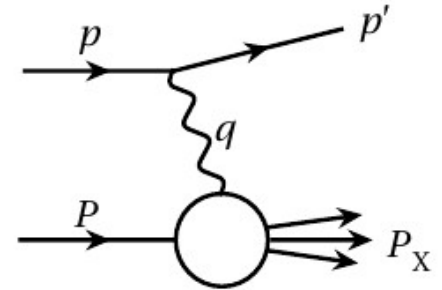
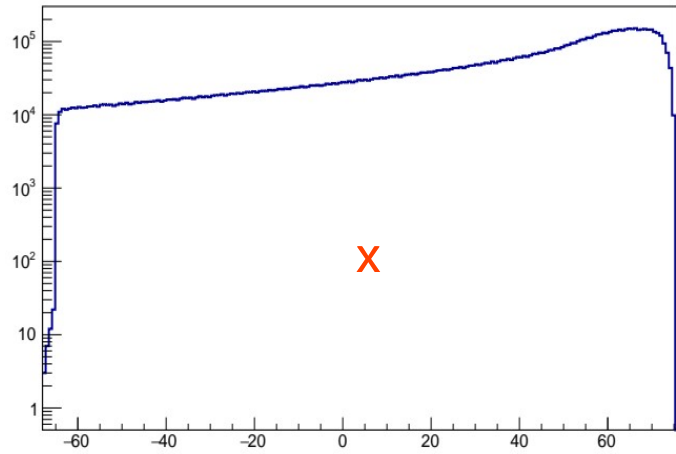


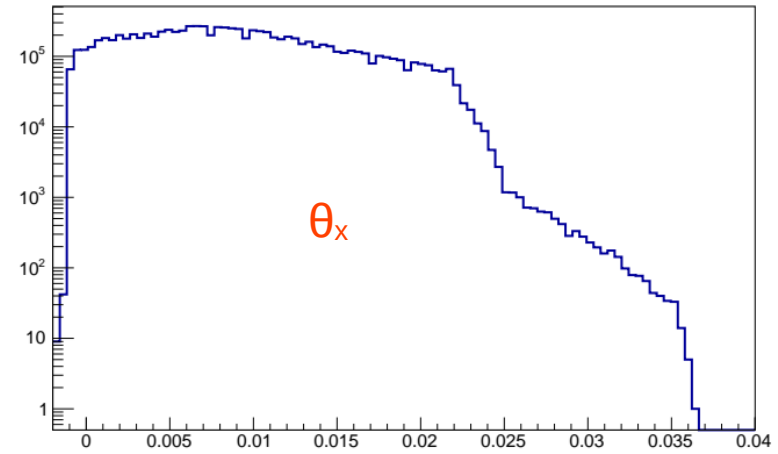
Figure: Original electron p'

Tagger 1

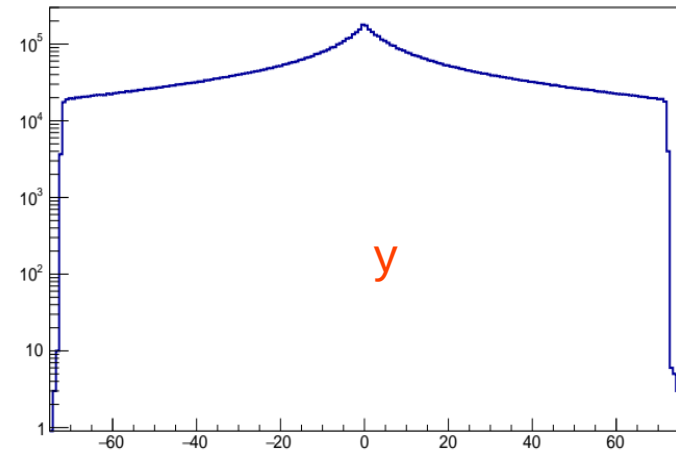
s1_hx



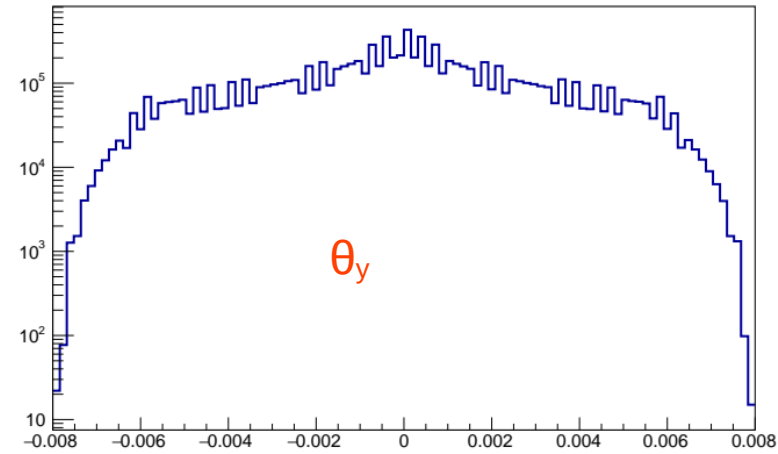
s1_htx



s1_hy

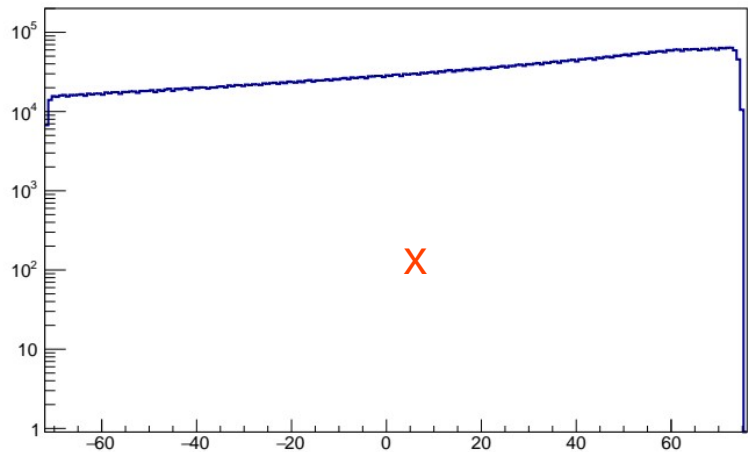


s1_hy

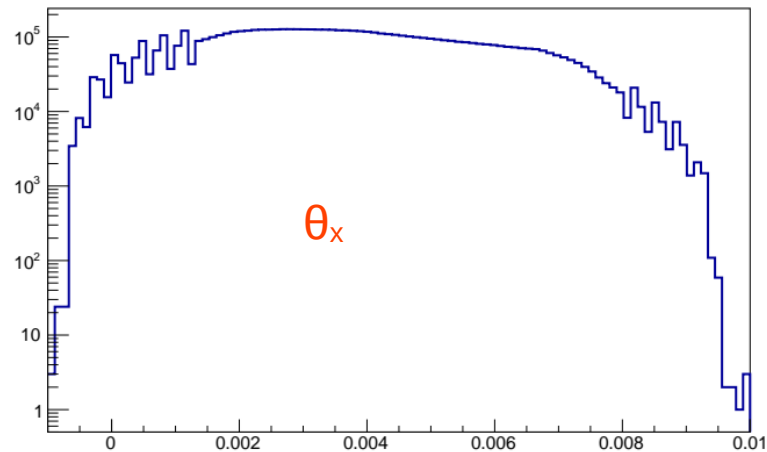


Tagger 2

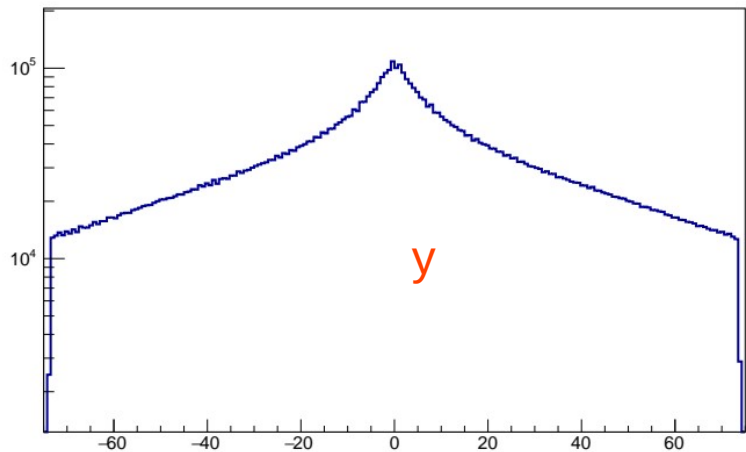
s2_hx



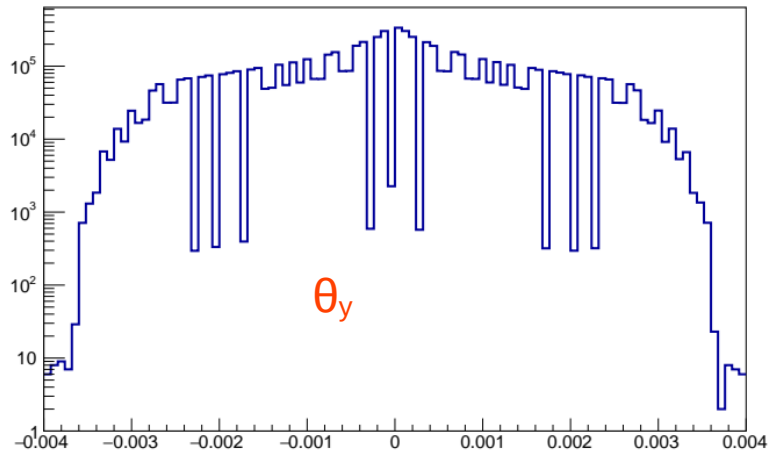
s2_htx

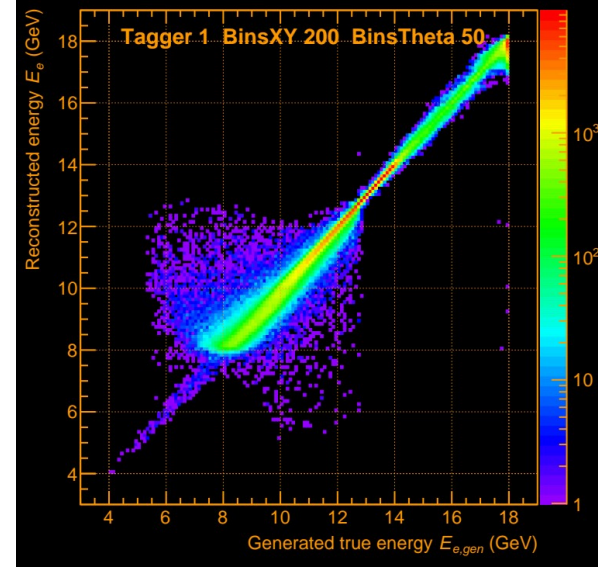
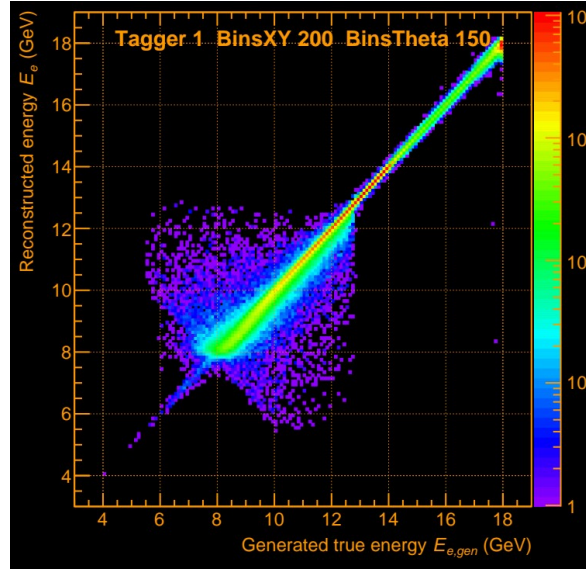
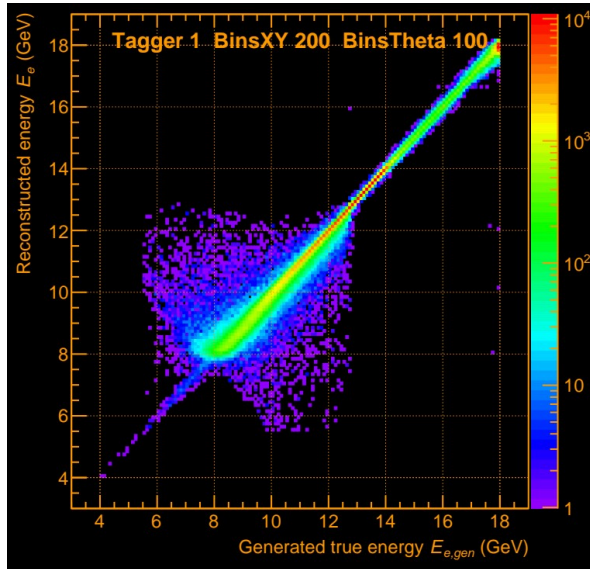


s2_hy

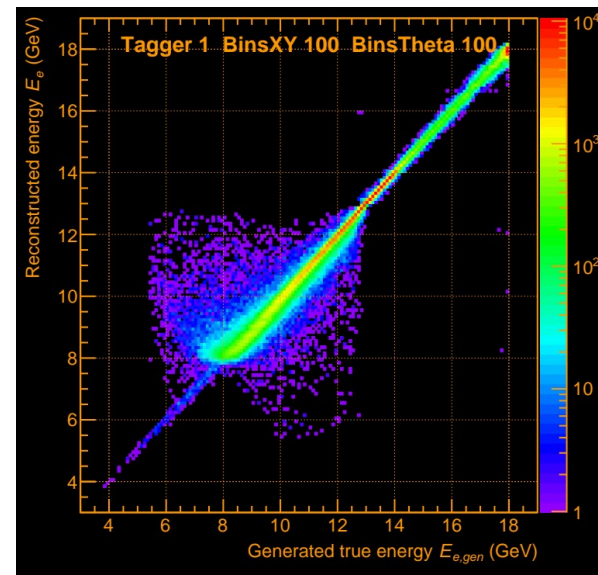
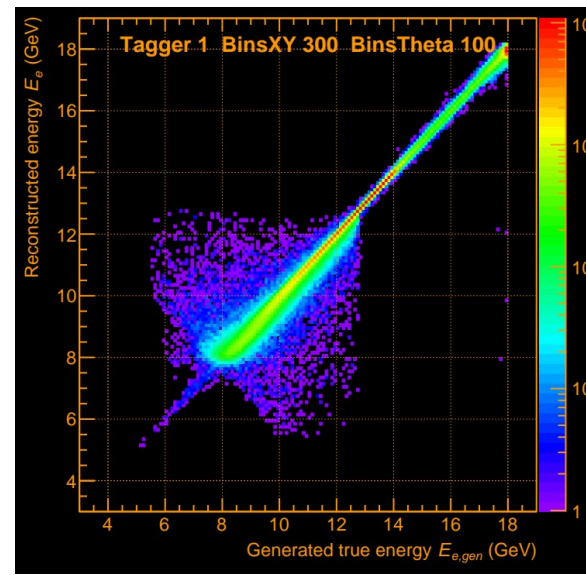


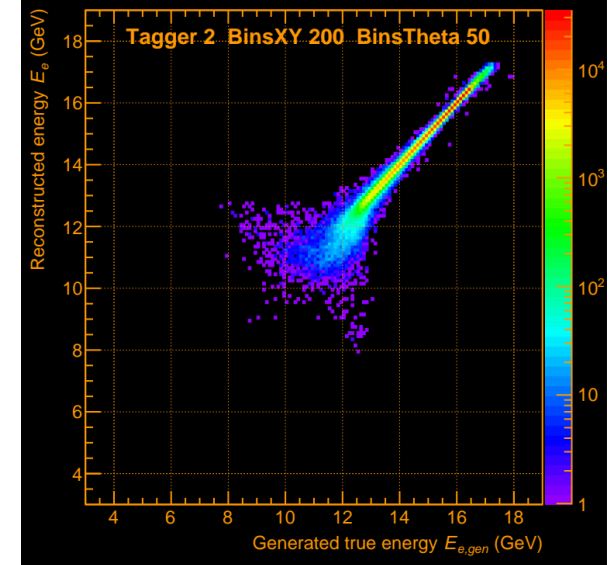
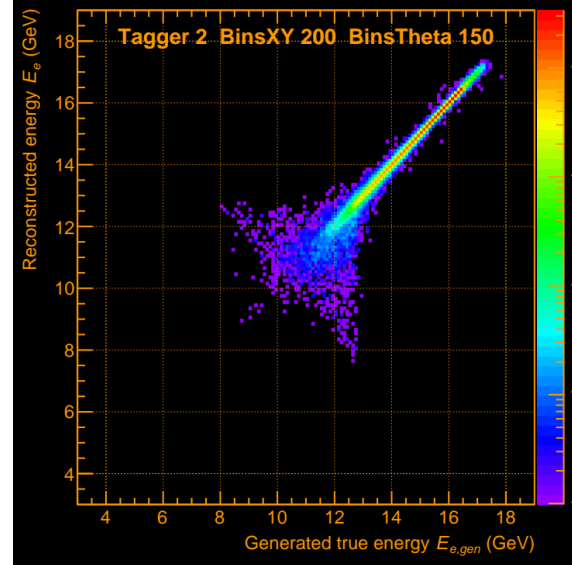
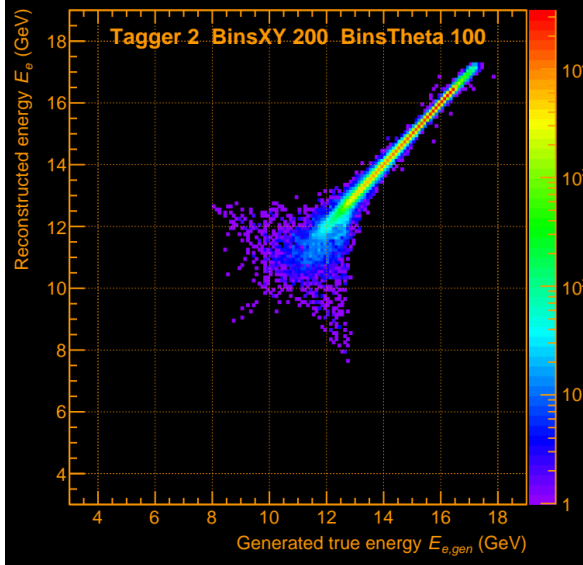
s2_hty



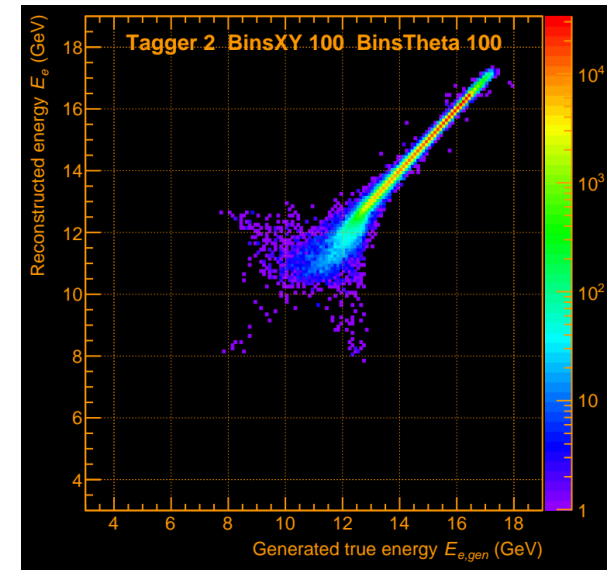
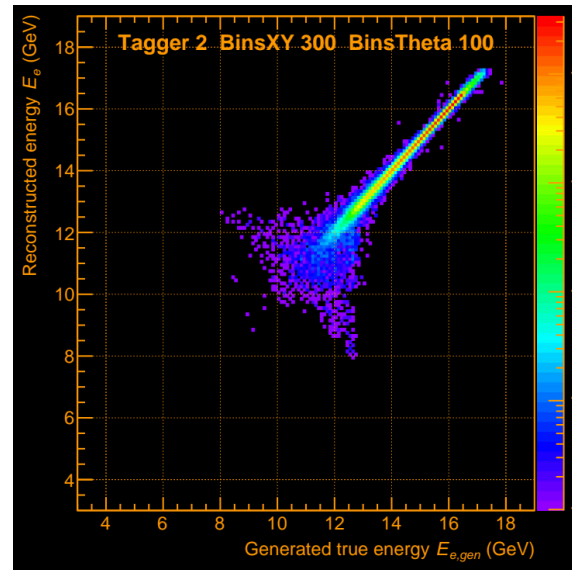


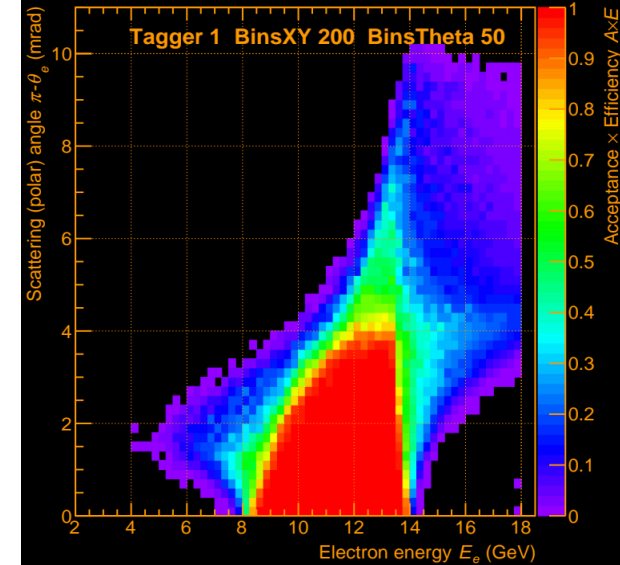
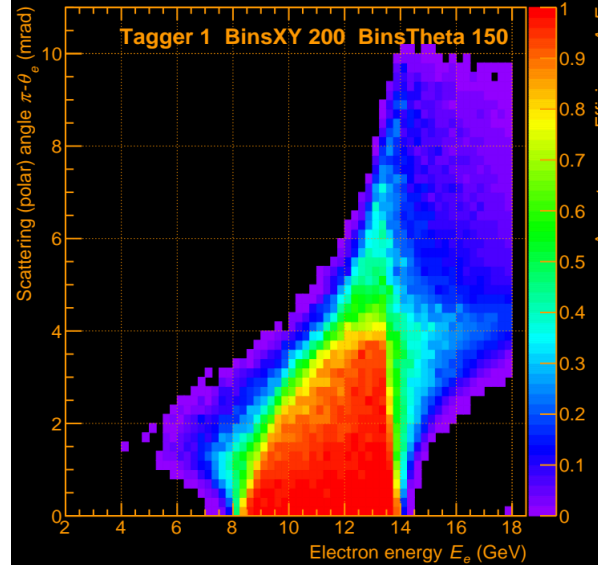
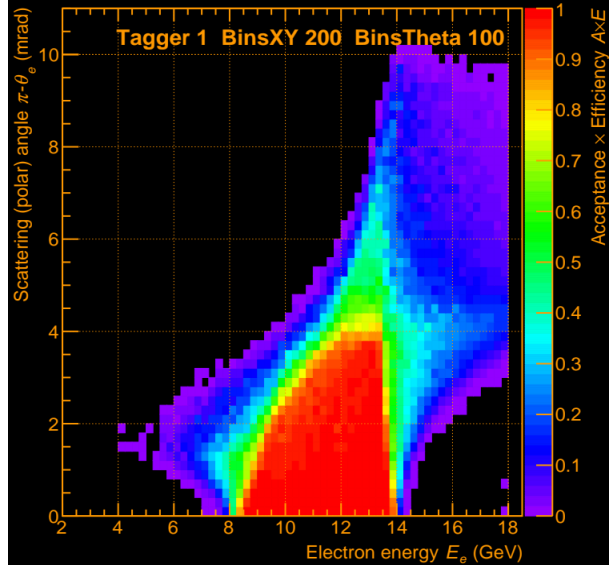
Tagger 1



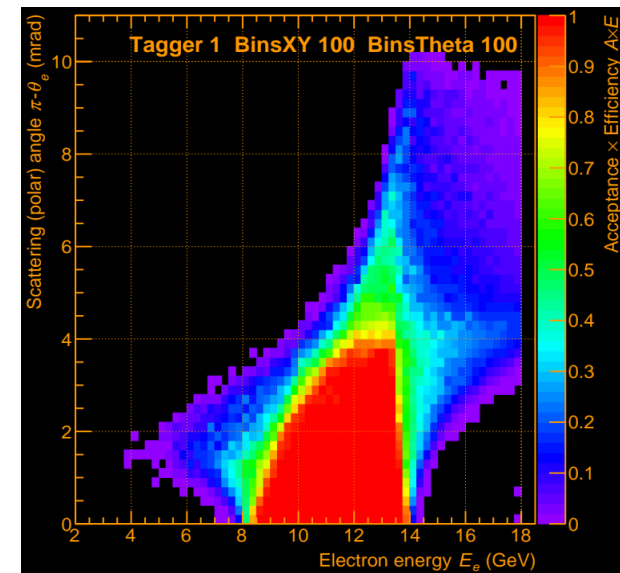
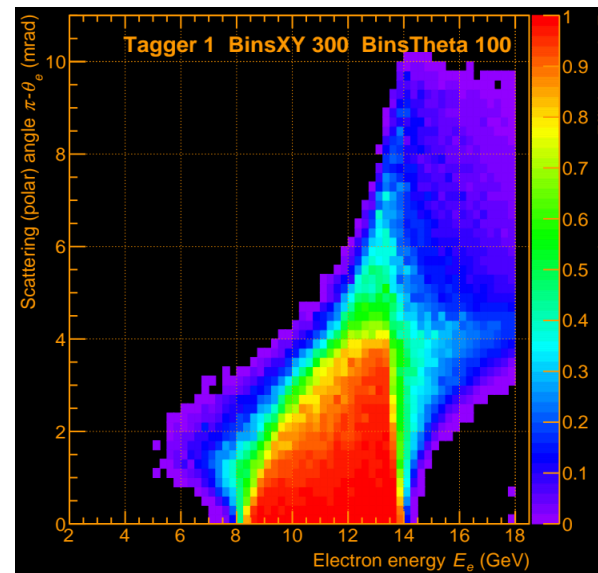


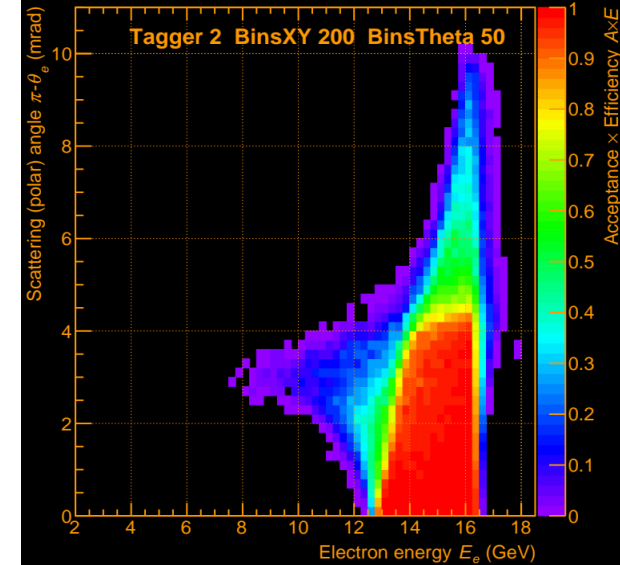
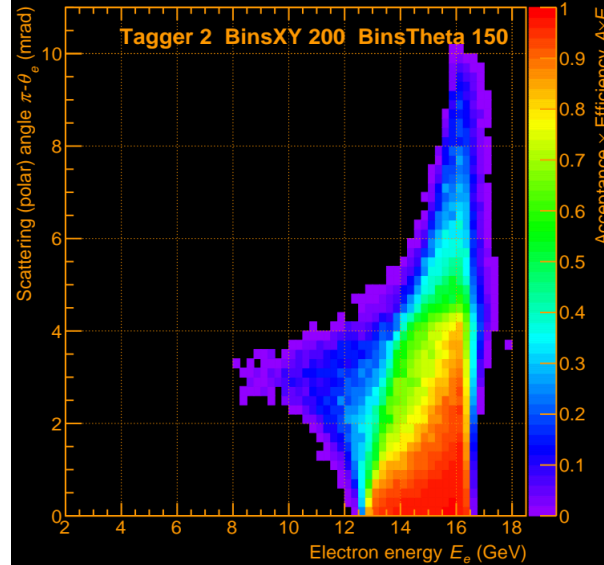
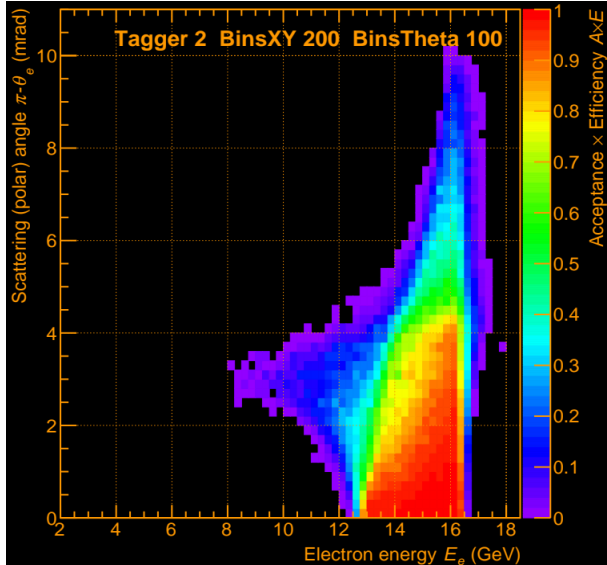
Tagger 2



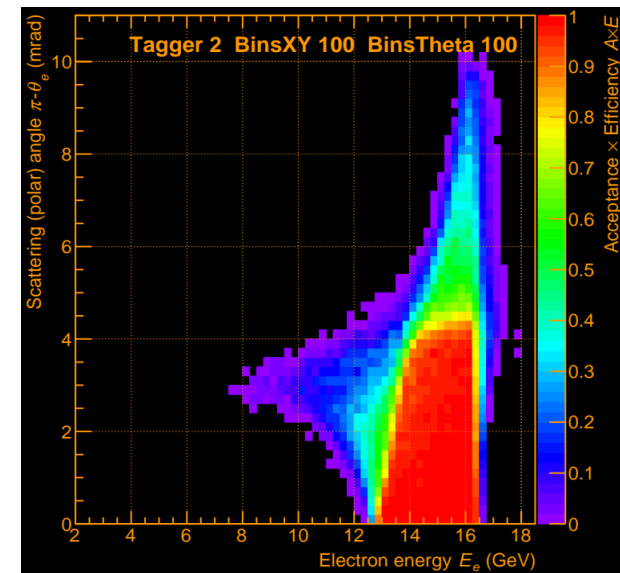
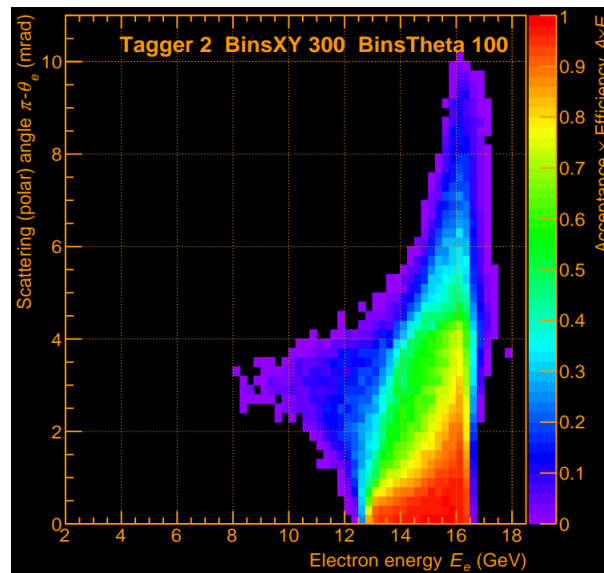


Tagger 1





Tagger 2



Other plots

