

Cherenkov profile

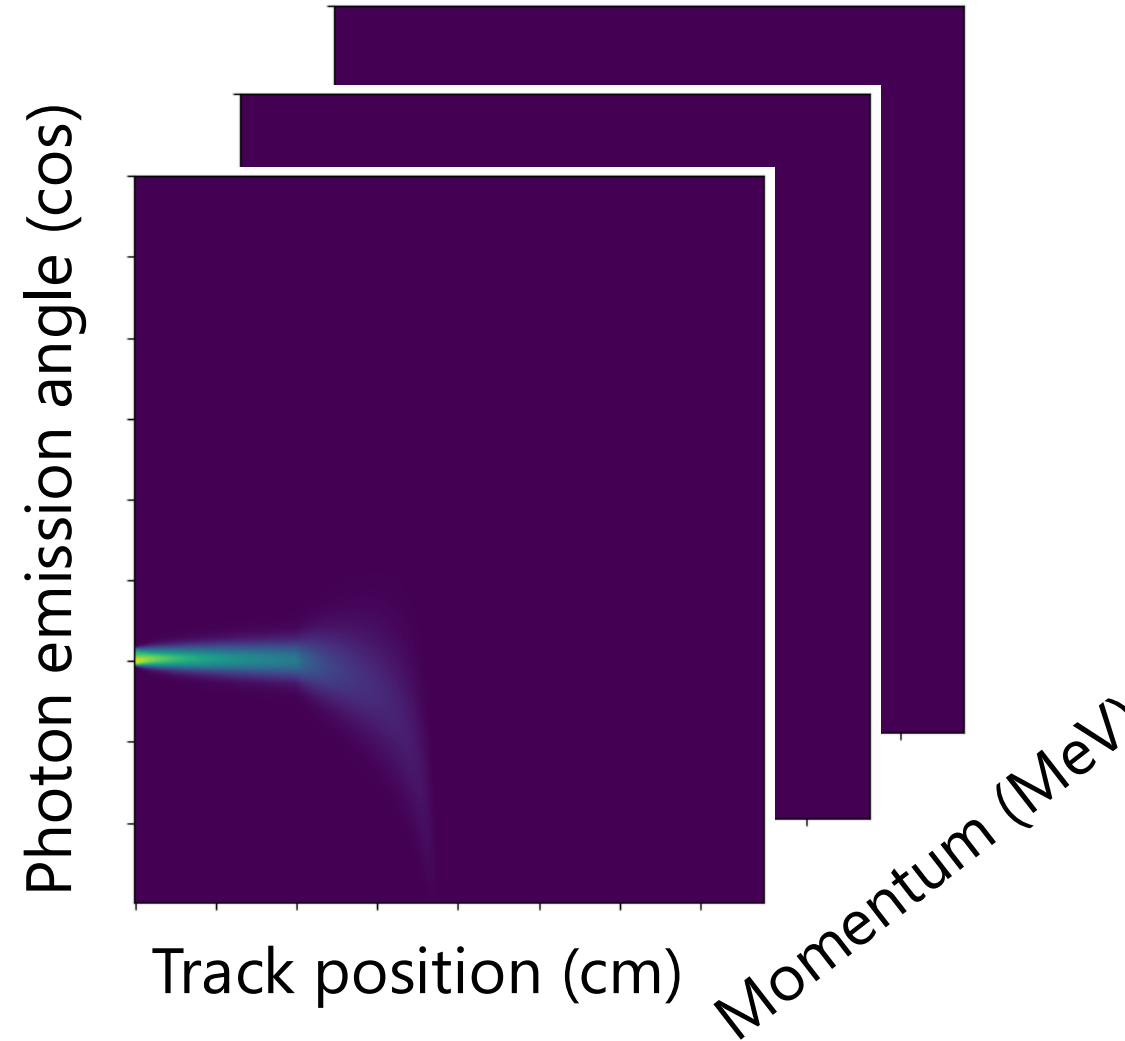
CIDeR-ML general meeting

10 January 2025

Ryo Matsumoto (Science Tokyo)

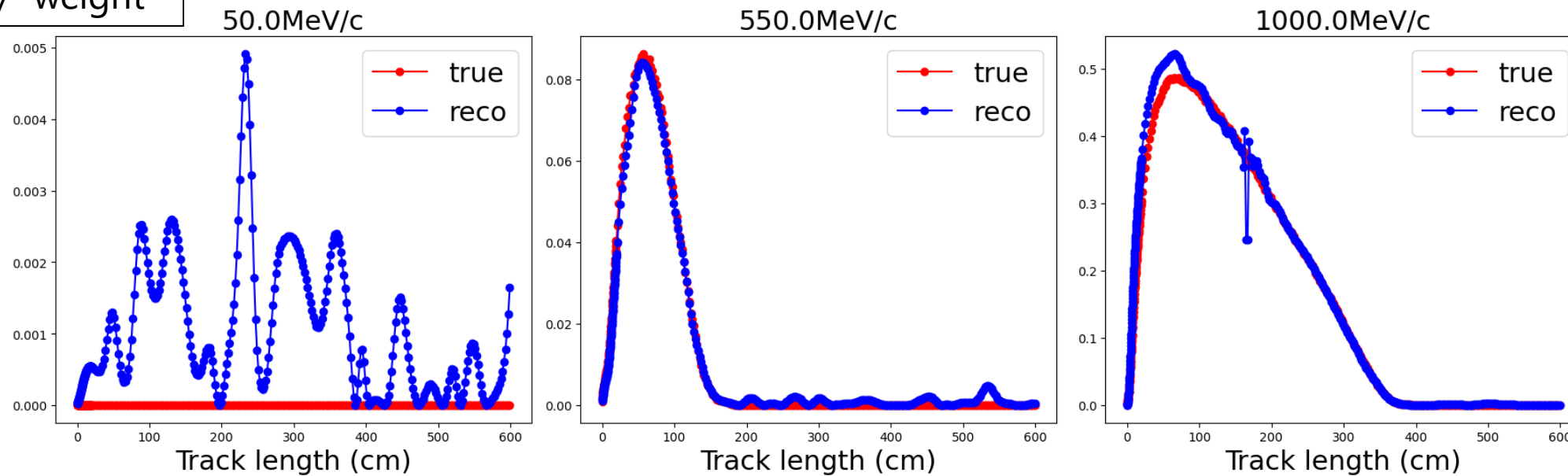
π Cherenkov profile

- $\cos = [-1, 1]$, tracks = $[0, 600]$ cm, $p = [150, 1000]$ GeV/c
- non-linear binning (same as μ)
 - $0.6 < \cos < 0.9$: bin width $4/2500$
else: bin width $10 * 4/2500$
 - $0 < s < 20$ cm: bin width $600/3000$
else: bin width $10 * 600/3000$
- Previous report: Applied training weight as $1/N_{\text{photons}}$ if $N_{\text{photons}} > 0.0001$
→ tried training w/o weight



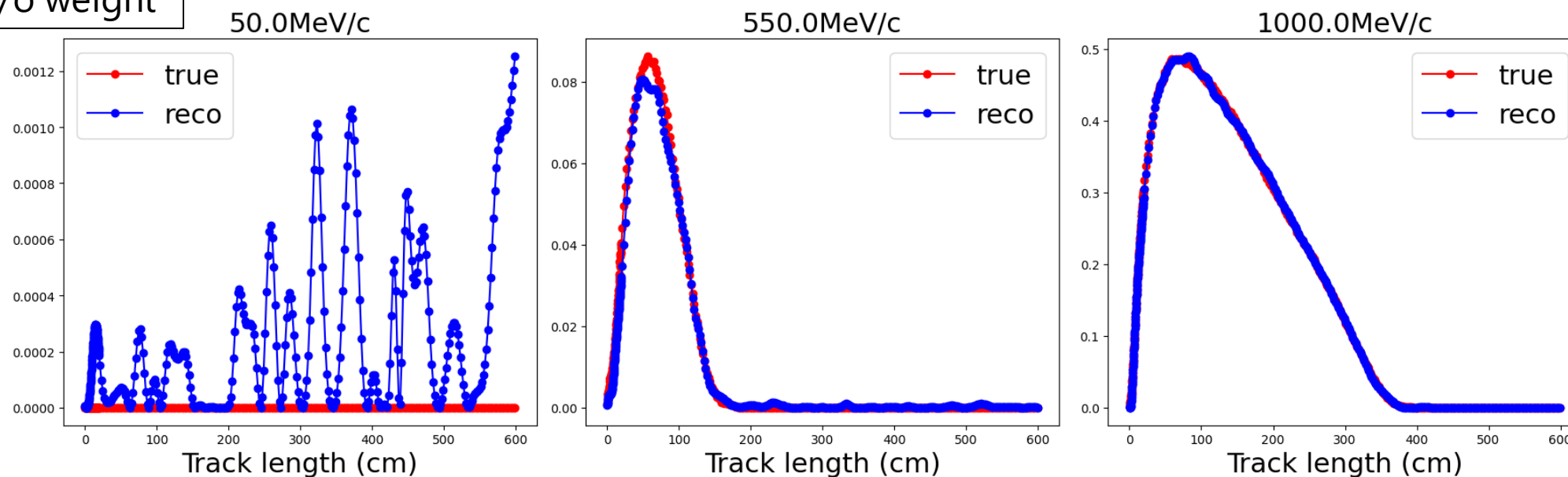
training w/ weight

Cherenkov profile at 42.54026893104909 degree

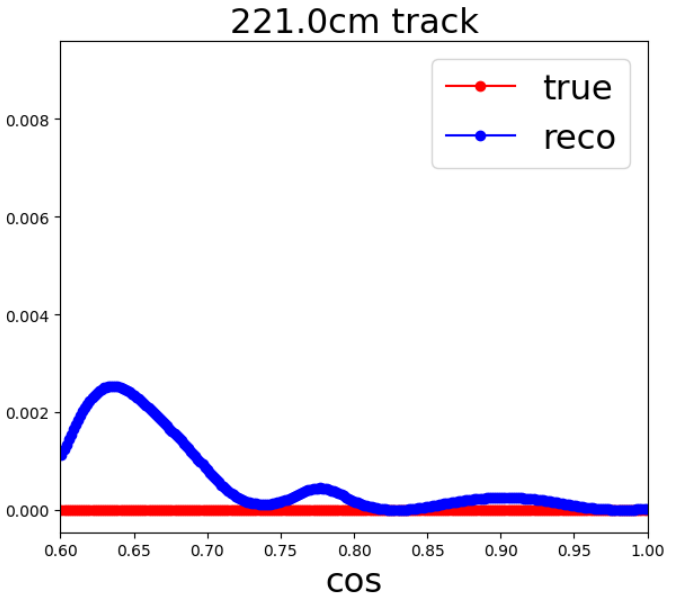
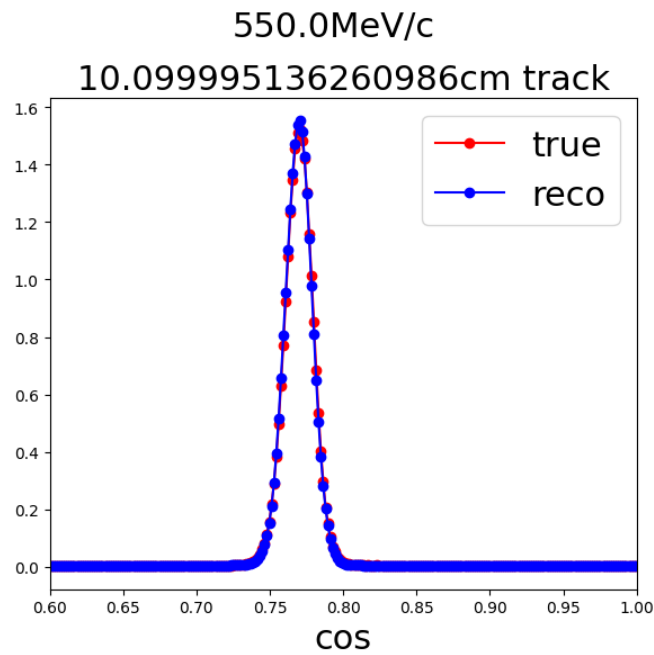
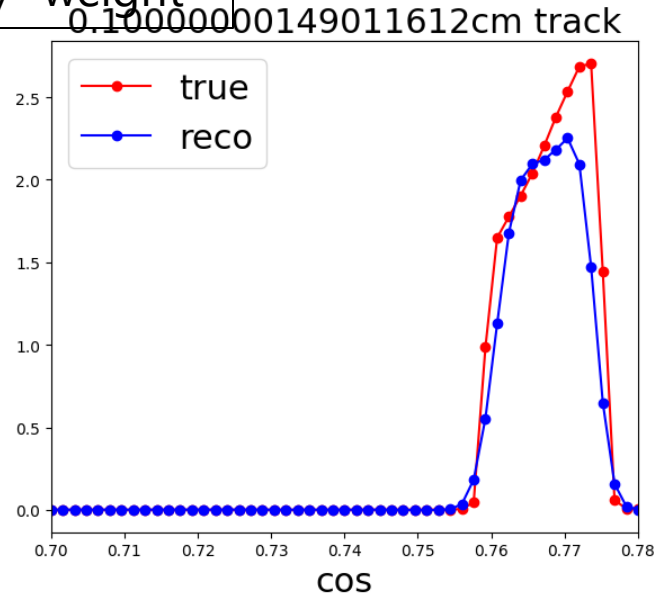


training w/o weight

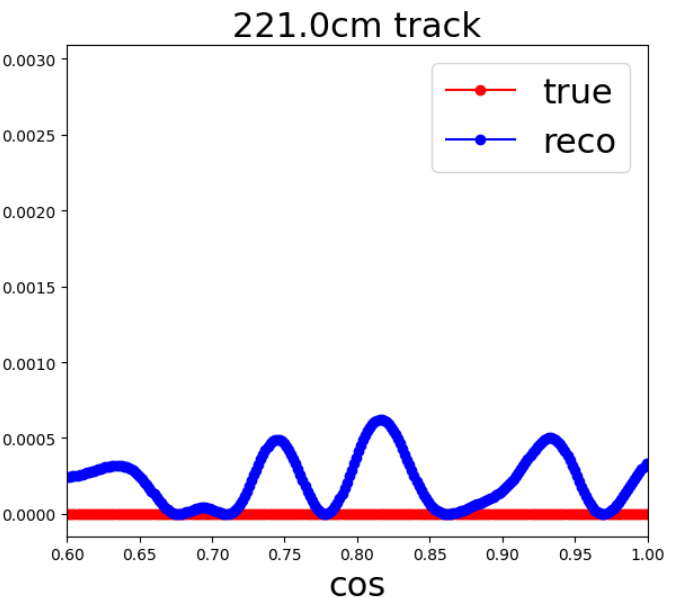
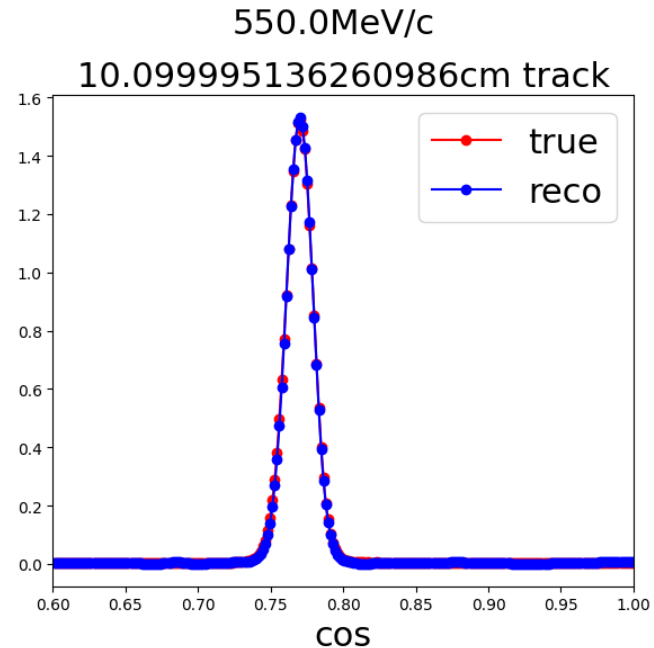
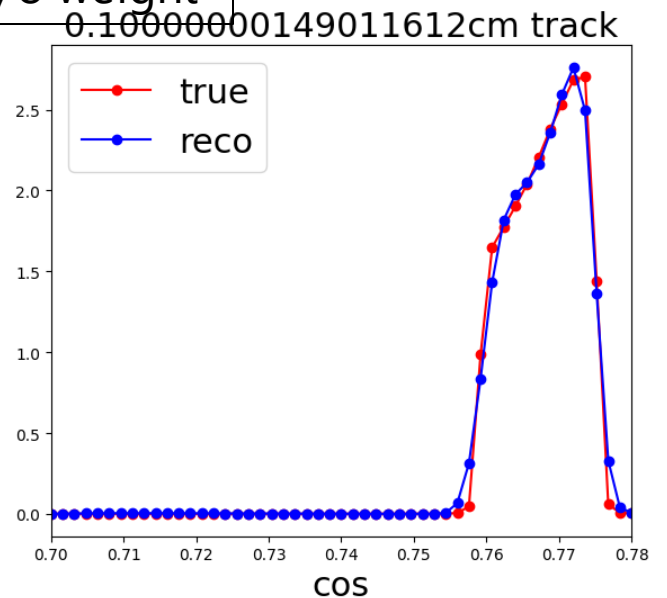
Cherenkov profile at 42.54026893104909 degree



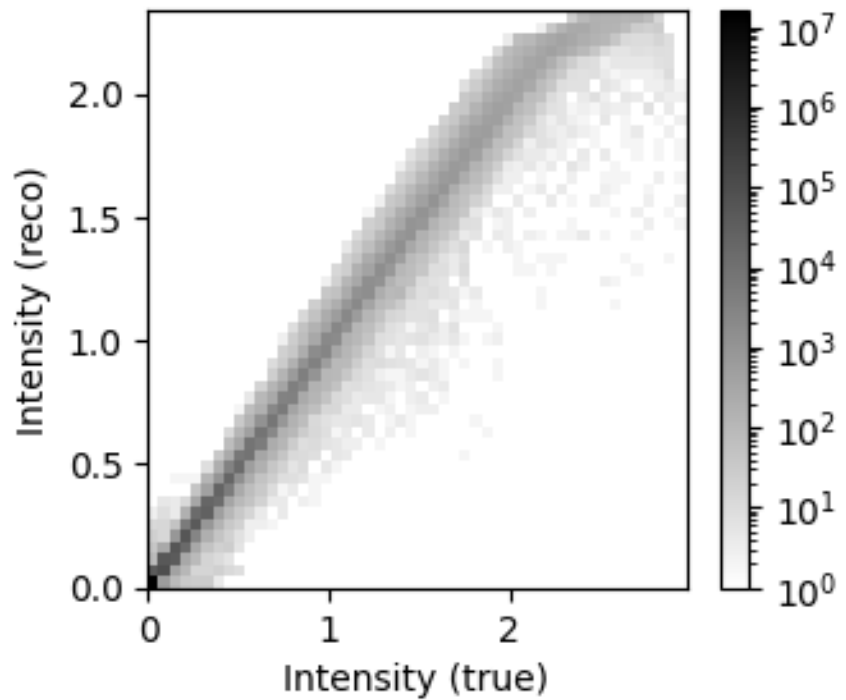
training w/ weight



training w/o weight



training w/ weight



training w/o weight

