

- New magnetic field: B_field_Ansys_20240809_NI_13500A.fld.bin
- no detector resolution effect
- Using the first Geant4 track steps in GEM as the GEM hit coordinates
- Require both GEMs on the same are have hits, but requirement on trigger

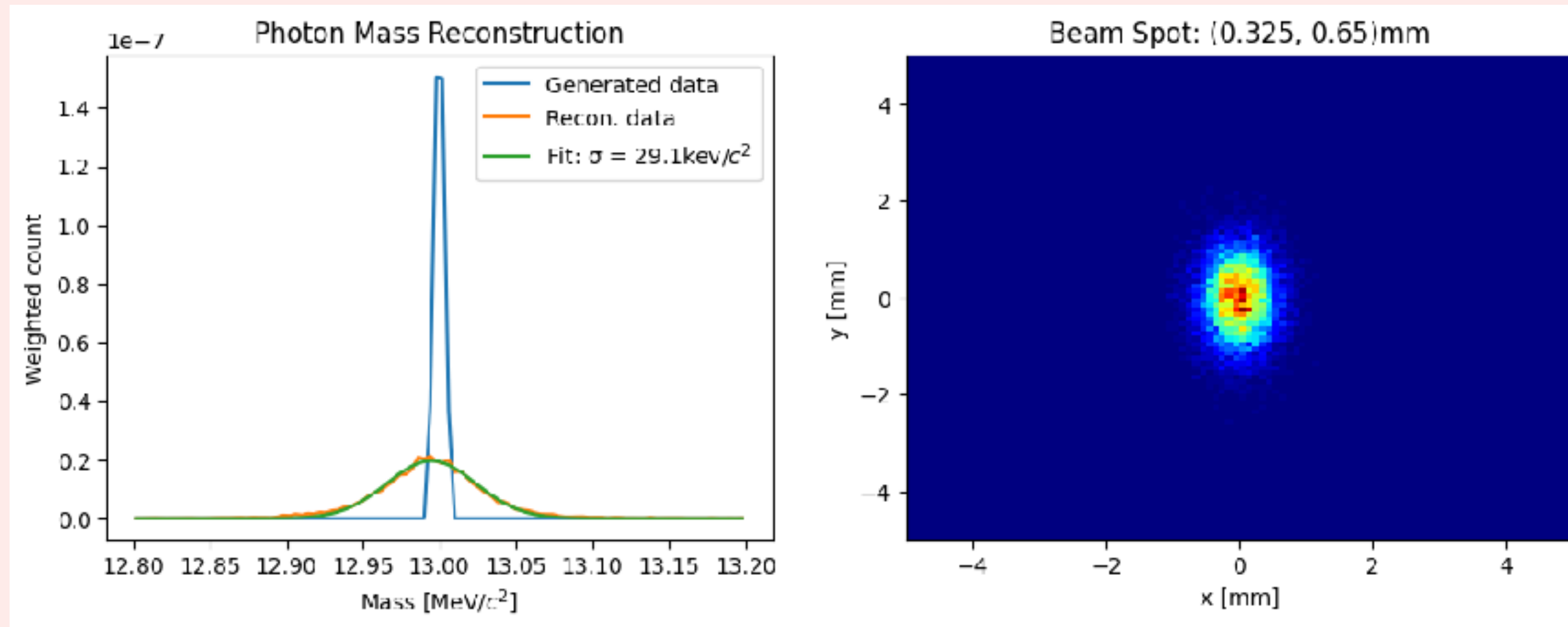
MainzGen Setup:

```
setup          = DL_SIG_13_30_elec36_pos20
beam_energy    = 0.03000435168
e-_angle       = 36
e-_momentum    = 0.01249
e-_acceptance_theta = 0.02356
e-_acceptance_phi   = 0.08727
e-_acceptance_momentum = 0.2
e+_angle       = -20
e+_momentum    = 0.01249
e+_acceptance_theta = 0.02356
e+_acceptance_phi   = 0.08727
e+_acceptance_momentum = 0.2
max_theta      = 90
range_mass     = 0.012995 0.013005
range_energy   = 0 0.02
range_decay_phi   = -90 90
range_decay_theta = 0 180
approx_mass    = 0.013
approx_momentum
approx_energy
```

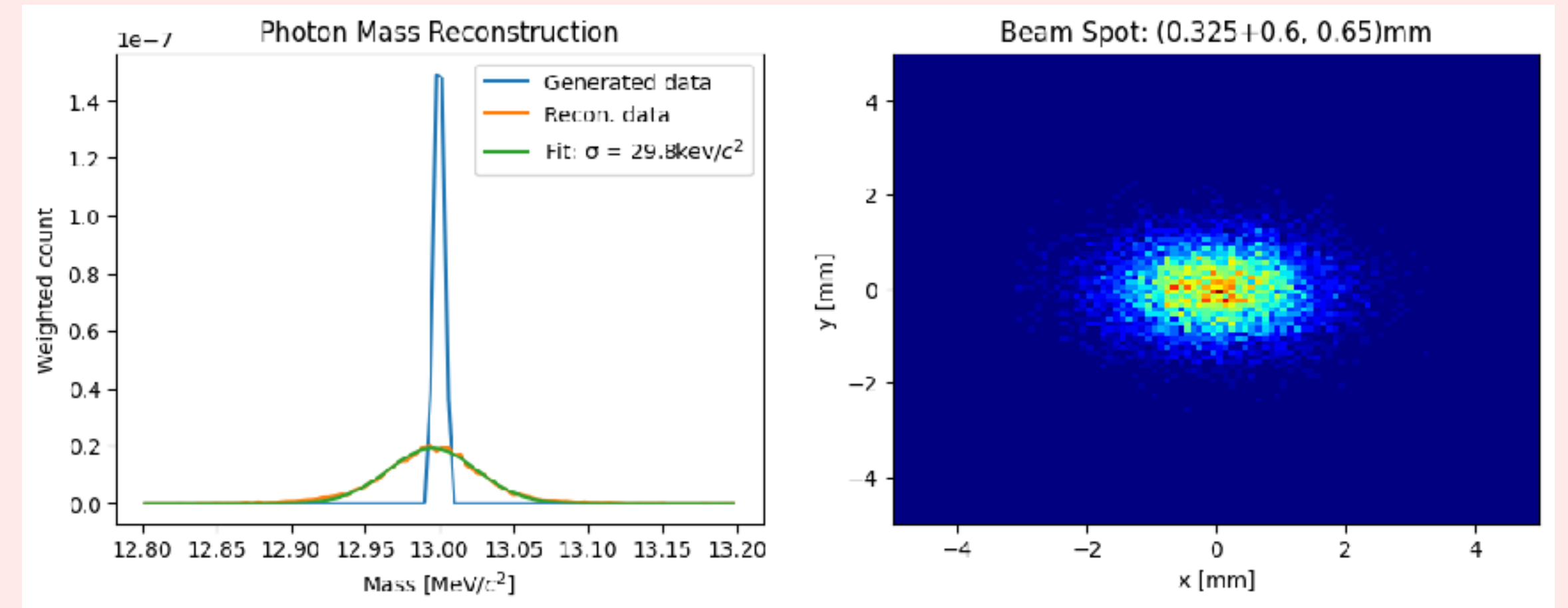
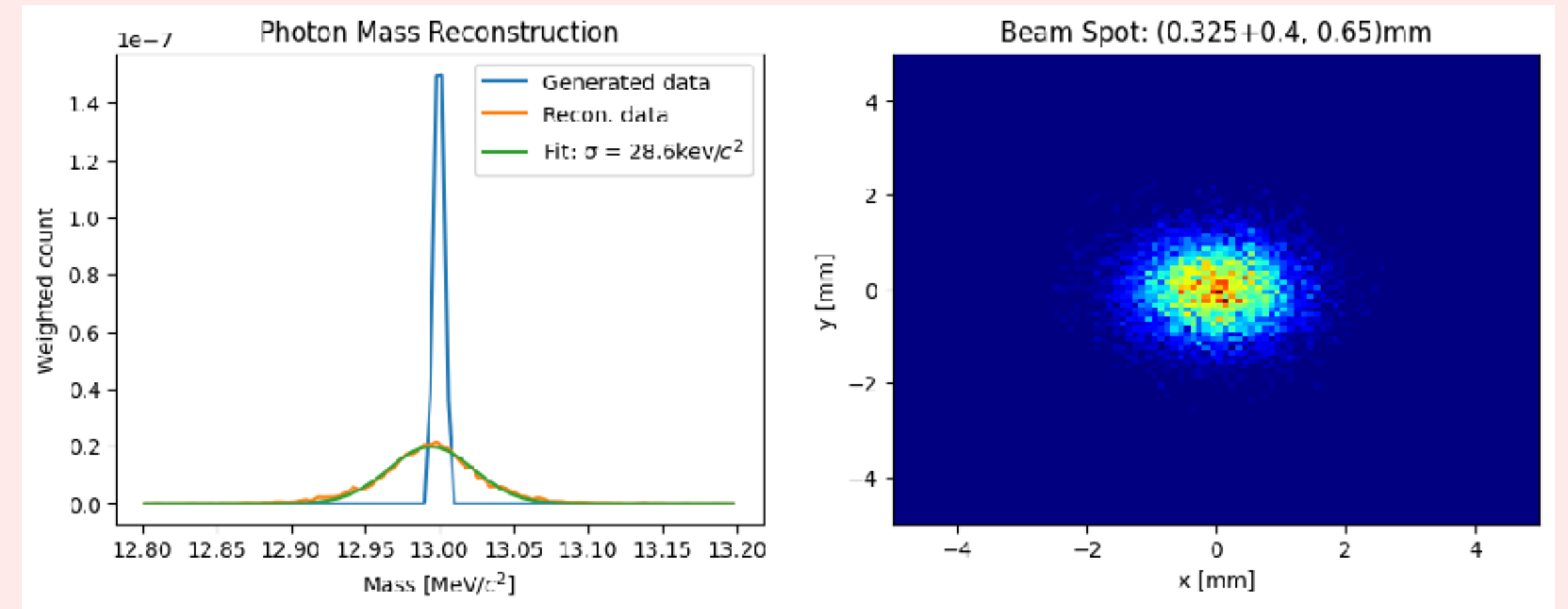
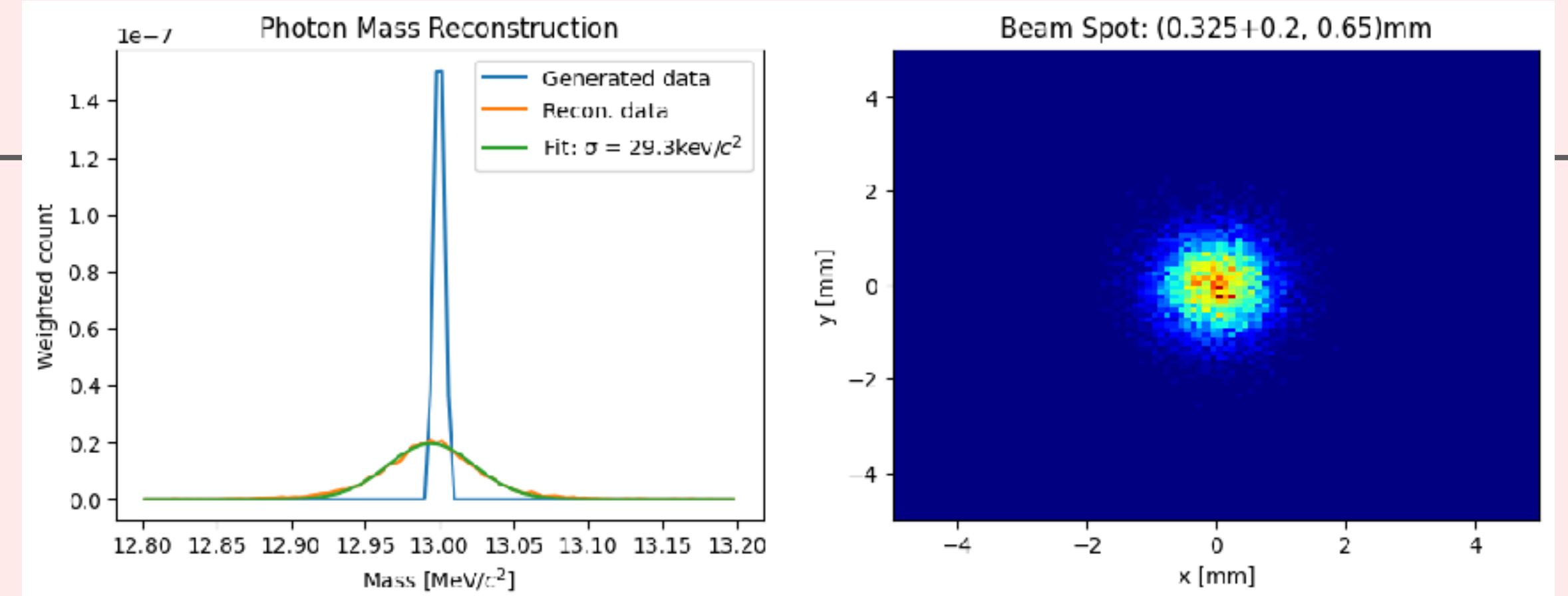
Number of generated events used: 10k

Recon. m_γ res vs beam size

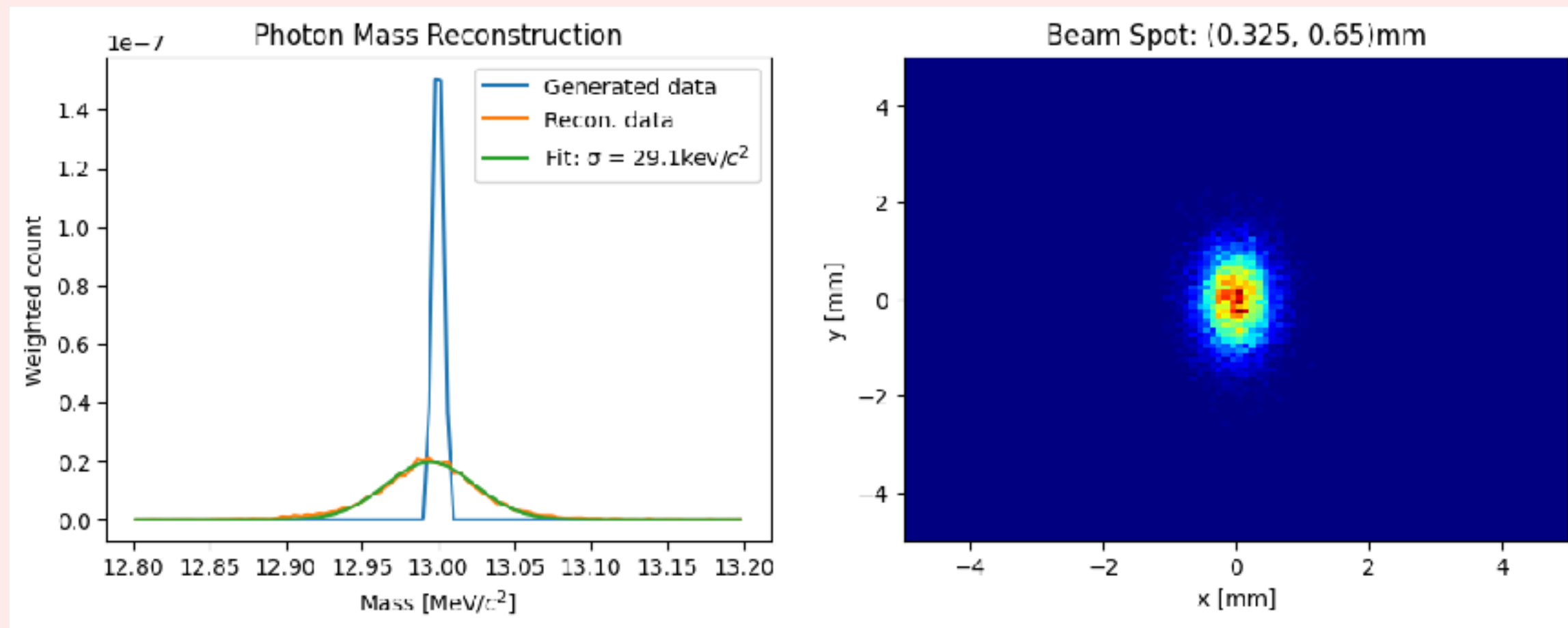
Resolution at current nominal beam setting



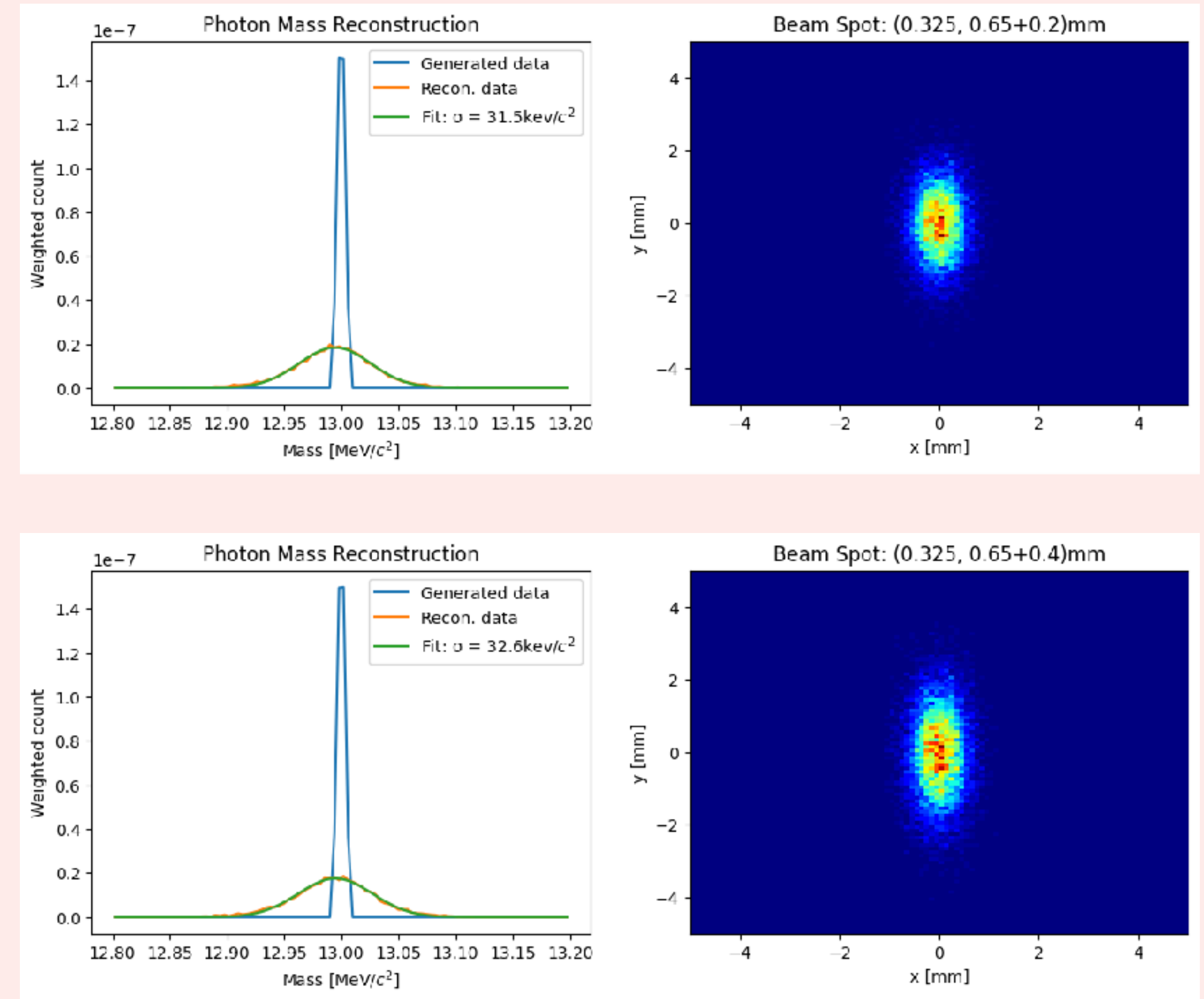
- Change of beam in x direction has little effect on mass recon



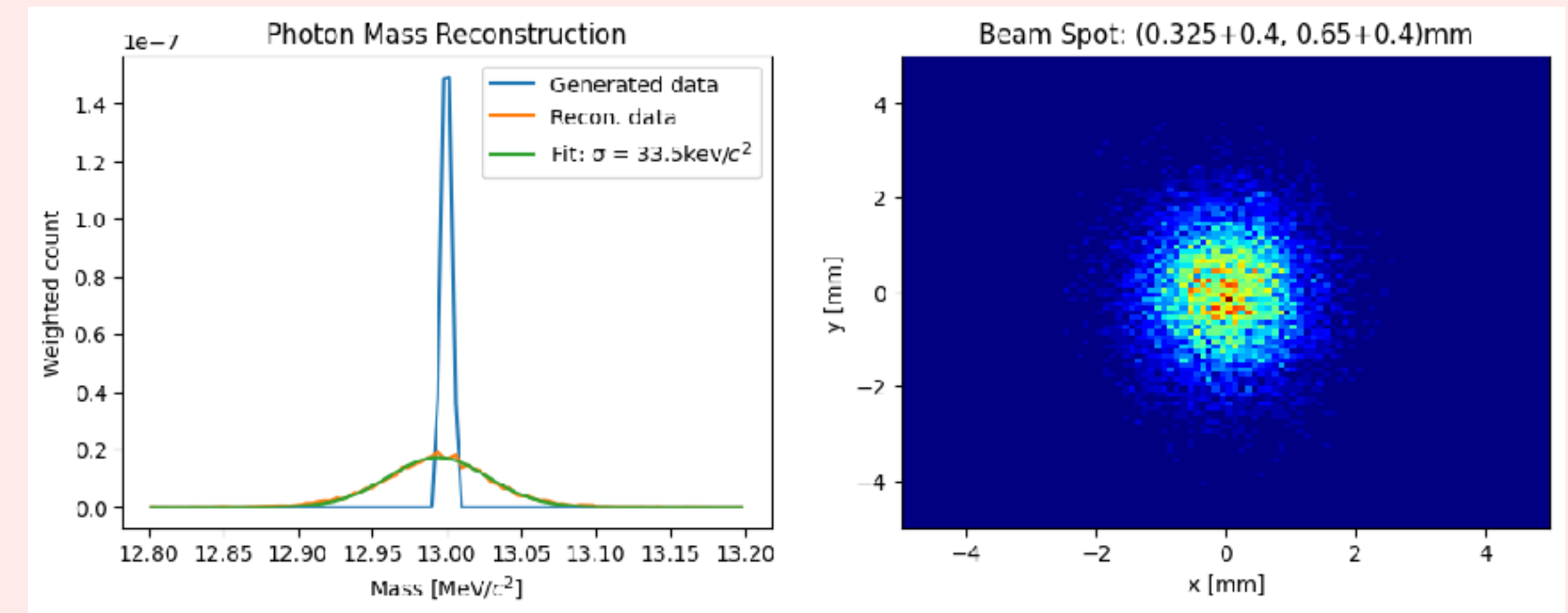
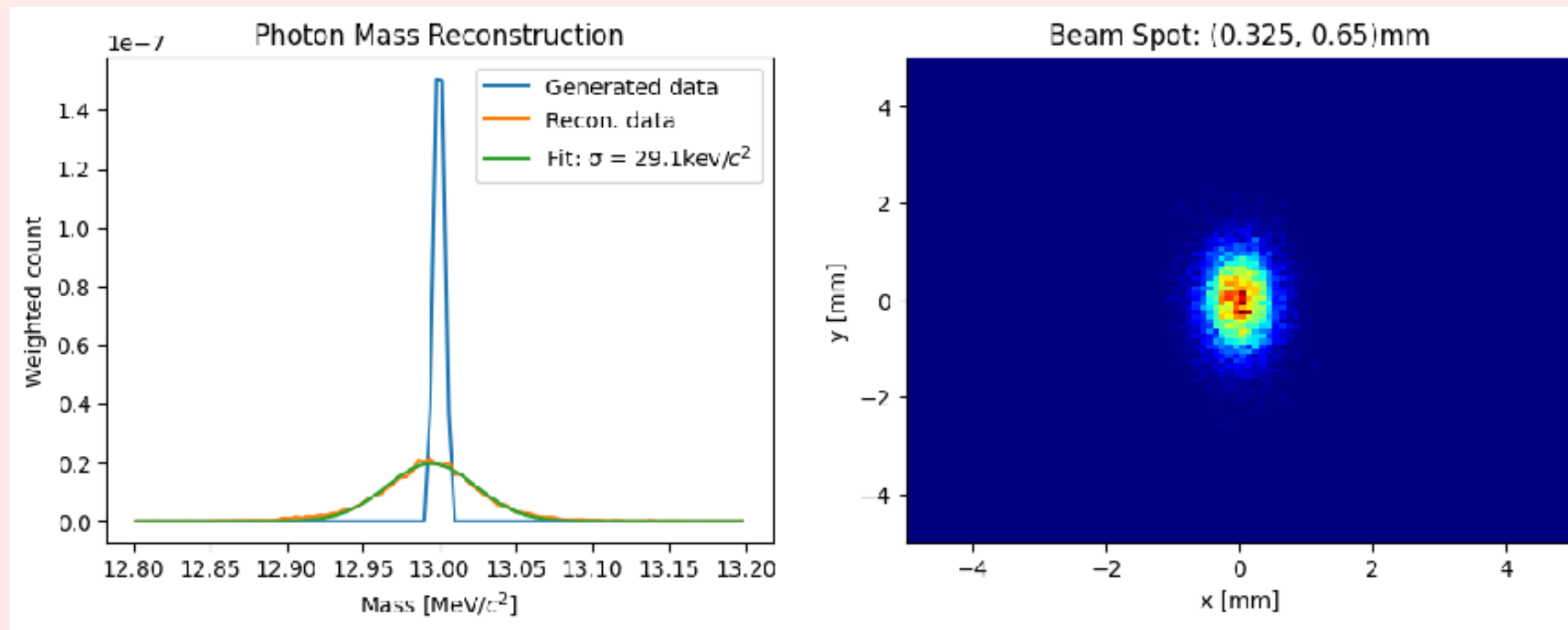
Resolution at current nominal beam setting



- Change of beam in y direction has bigger effect on mass recon



Resolution at current nominal beam setting



Resolution with the old fit

