

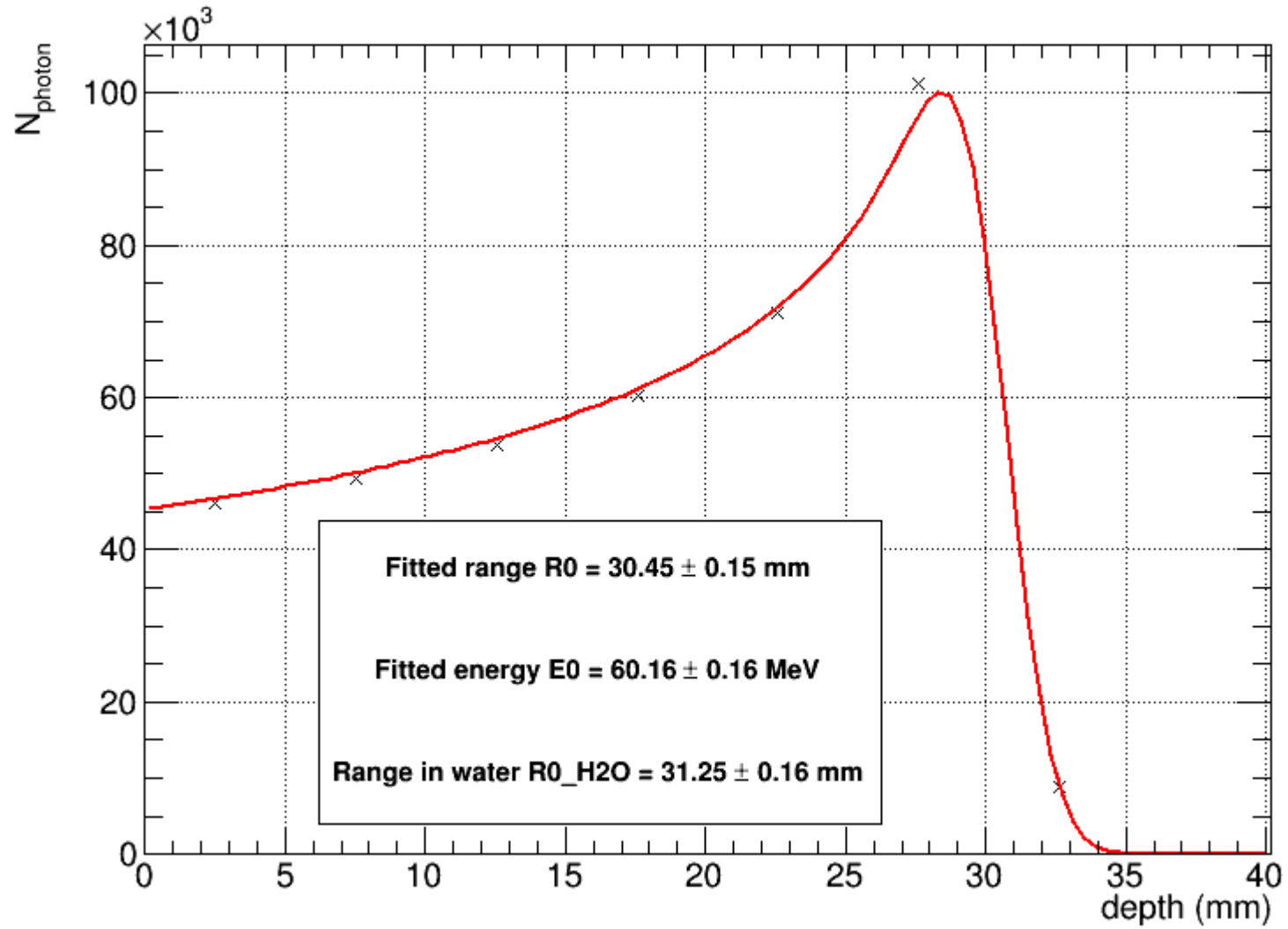
A fit curve for the photon yield

Test different layer thicknesses and beam energies

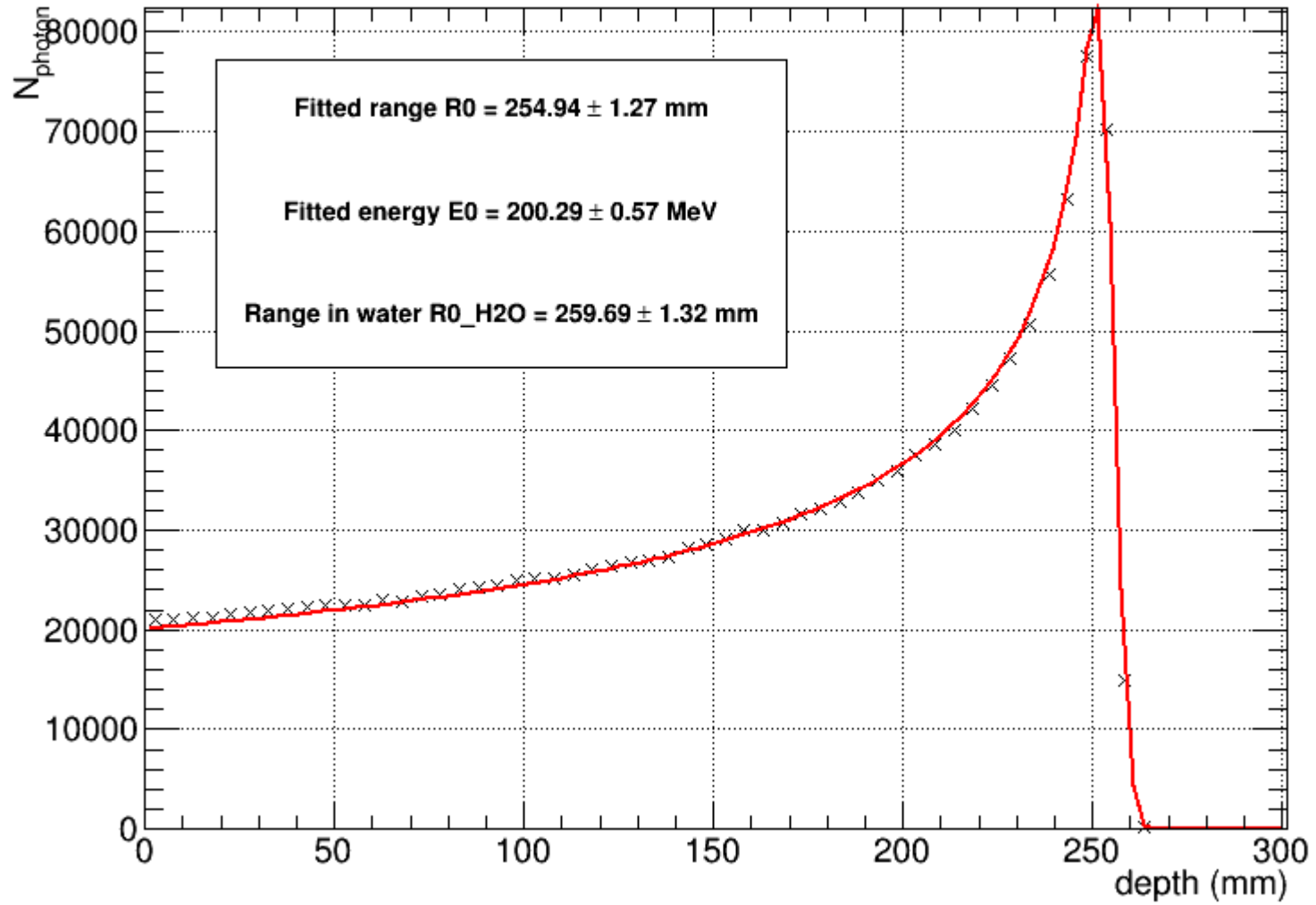
State of fit procedure

- Fit doesn't work perfectly yet – only using approximation
- Same problem with Bragg curve fit (under investigation)
- Other problem: Error bar on scintillation photons. Not only Poisson error since energy deposition fluctuates!
- Therefore, χ^2 of fit not meaningful
- Good thing: Use spline of $R(E)$ data instead of power law. This gives more accurate transformations between beam range and initial beam energy
- Test of Ruben's idea: introduced 30% random variation in bin content. Fit is still quite stable!

8x5 mm at 60 MeV



60×5 mm at 200 MeV



5×10 mm at 60 MeV

