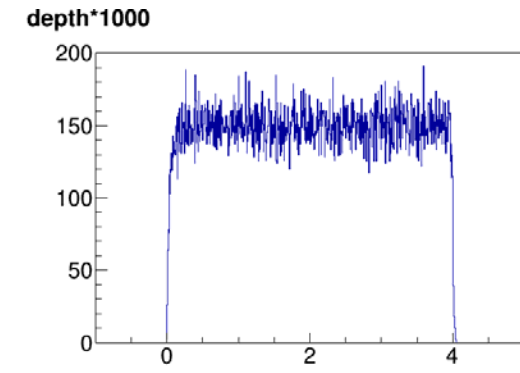
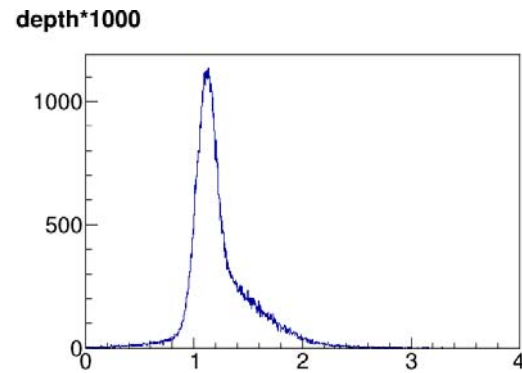
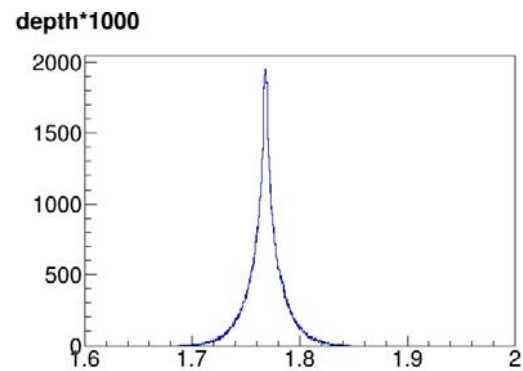


Geant4 Simulation: Last week

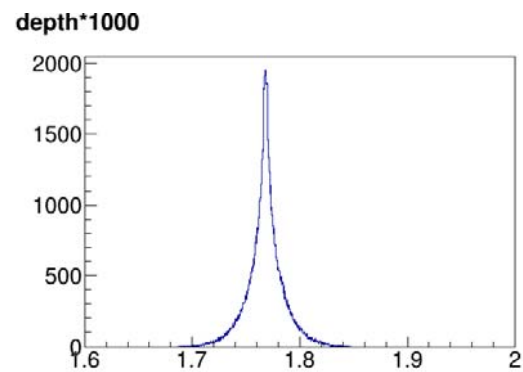


Electron movement
(Range: 0.088 μm)

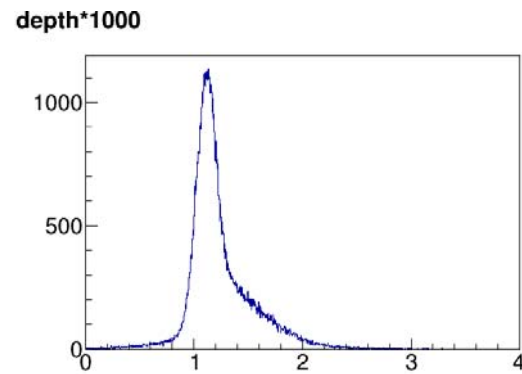
+ Triton implantation →

?????

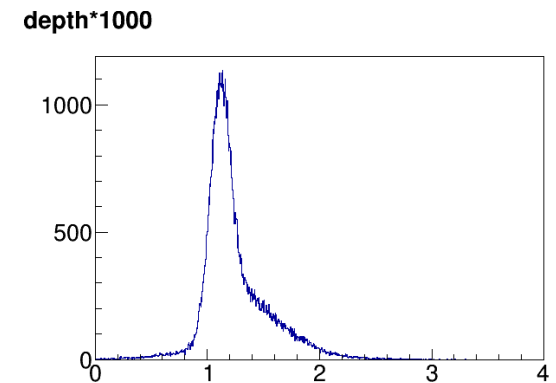
Geant4 Simulation: modified version



Electron movement

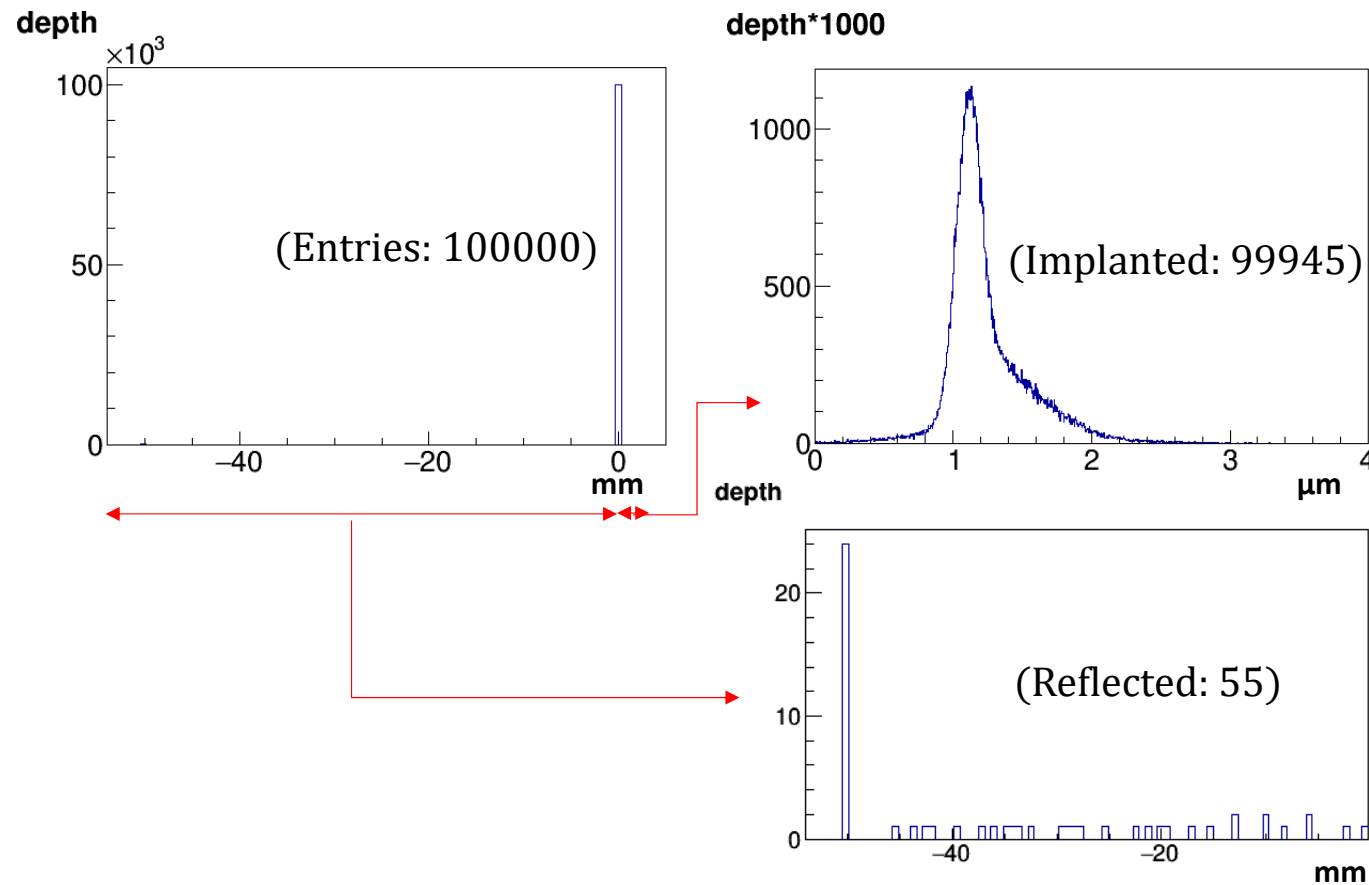


+ Triton implantation →



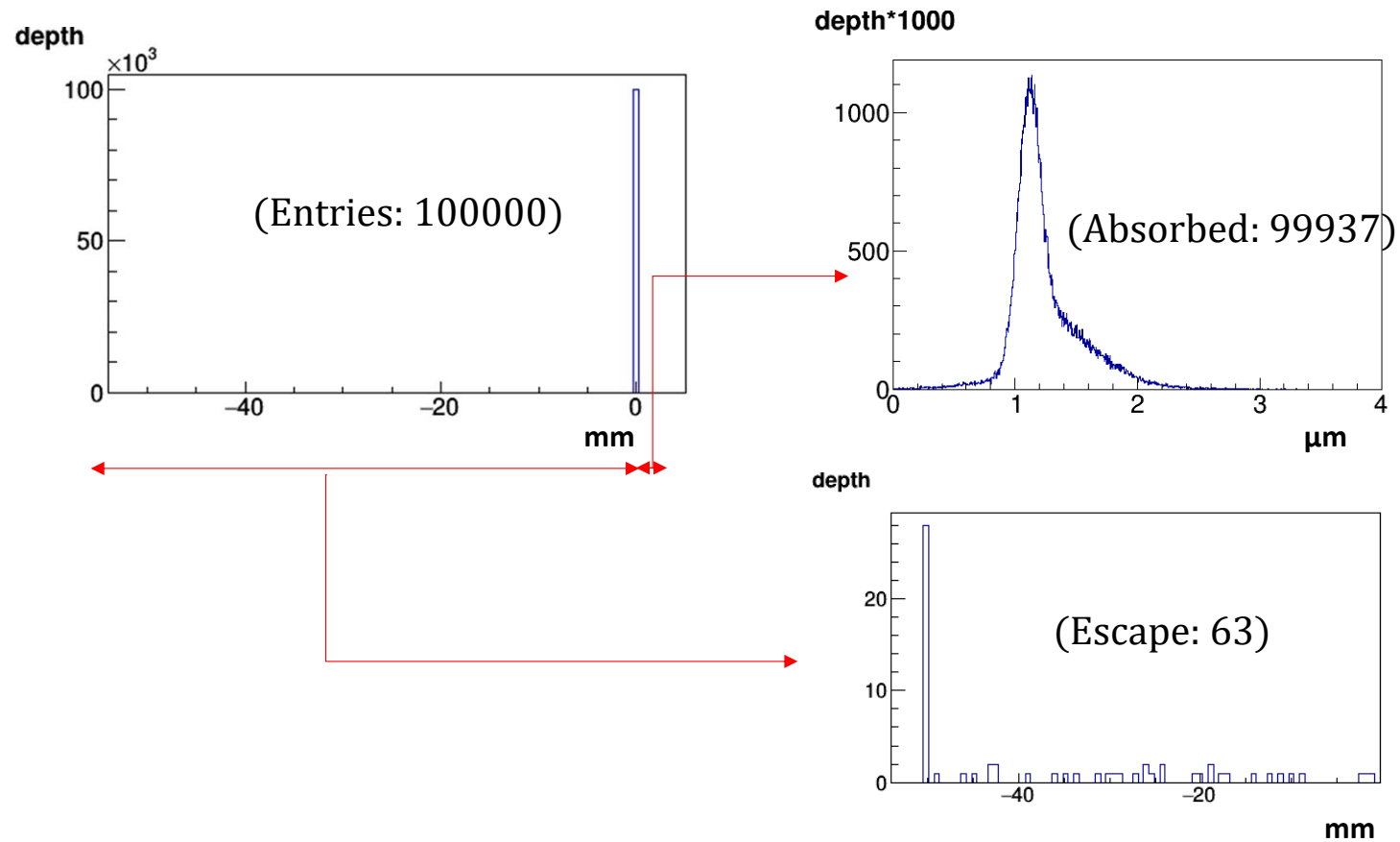
beta particle depth distribution

Geant4 Simulation: Implantation rate



Implantation rate $\approx 99.9\%$

Geant4 Simulation: Absorption rate



Absorption rate $\approx 99.9 \%$

Geant4 Simulation: Next Plan

- Chamber modeling
 - Example:
 - A 1.2 cm³ irradiation cell & 1 mm² × 12.5 μm foil
 - 1 atm ³He
 - Thermal neutrons in the Slowpoke reactor
 - (L.S. Erhardt, D. Deptuck, J.P. Harrison, Nuclear Instruments and Methods in Physics Research A 444 (2000) 92-95)
- Determination of Tritium Position/Direction
 - Neutron irradiation
 - Foil position