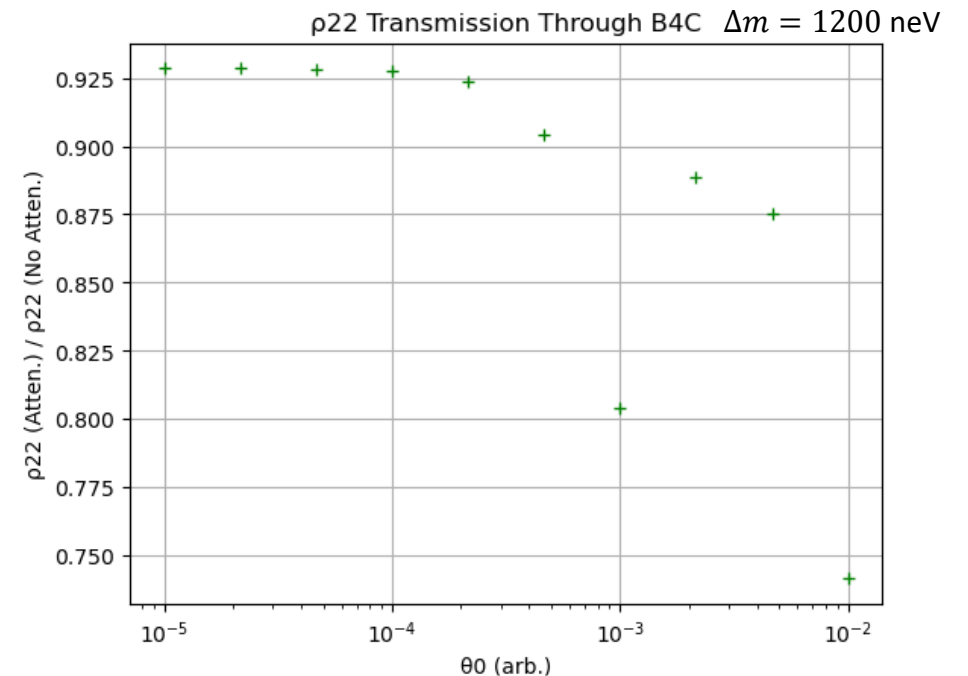
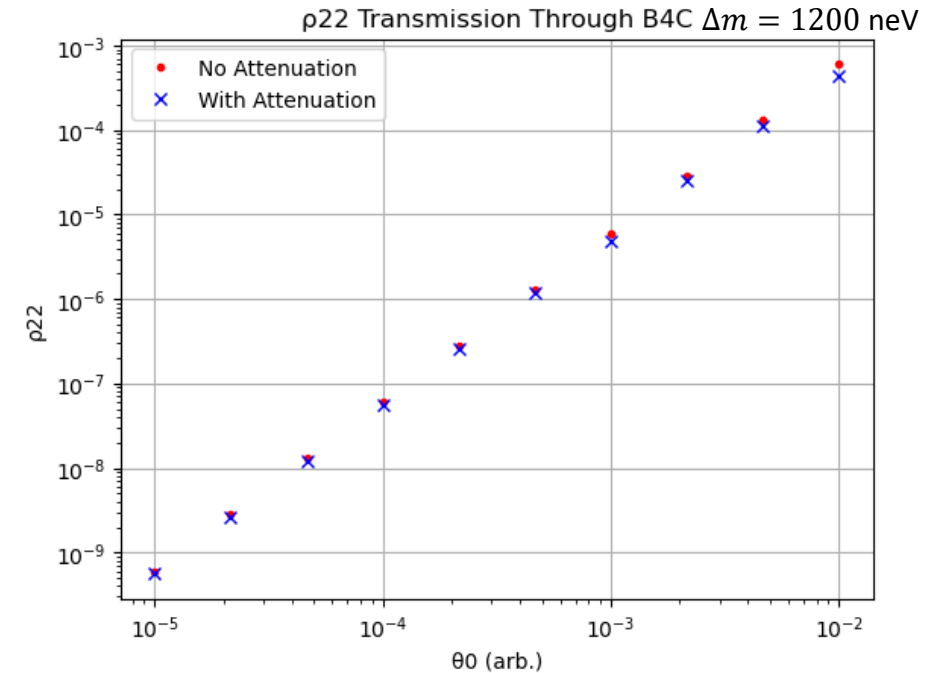


Attenuation Through B4C

4/26/2022

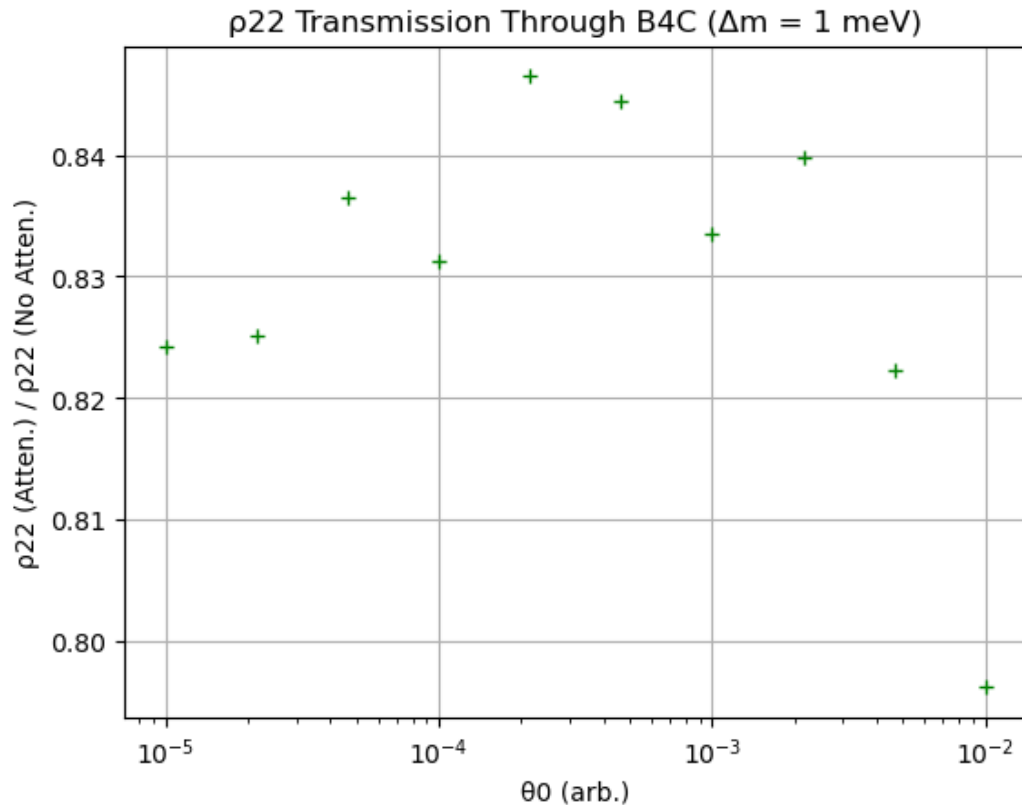
Simulated ρ_n' Before/After 32 mm B4C

- Simulation settings:
 - Single fixed velocity of $v = 1230$ m/s, Δm variable
 - Density matrix for initial condition, propagated through 0.3 m vacuum
 - No magnetic field
 - Scanned $10^{-5} \leq \theta_0 \leq 10^{-2}$
- Measured ρ_n' :
 - “No attenuation” = average ρ_n' over 1 mm before B4C
 - “With attenuation” = average ρ_n' over 1 mm after B4C
 - Take ratio before/after



Limiting cases: Adiabatic Case

- Adiabatic limit: $\Delta m = 1$ meV



- Super Adiabatic limit: $\Delta m = 100$ eV

