Target Particle Production with 15 T Peak Solenoid Field

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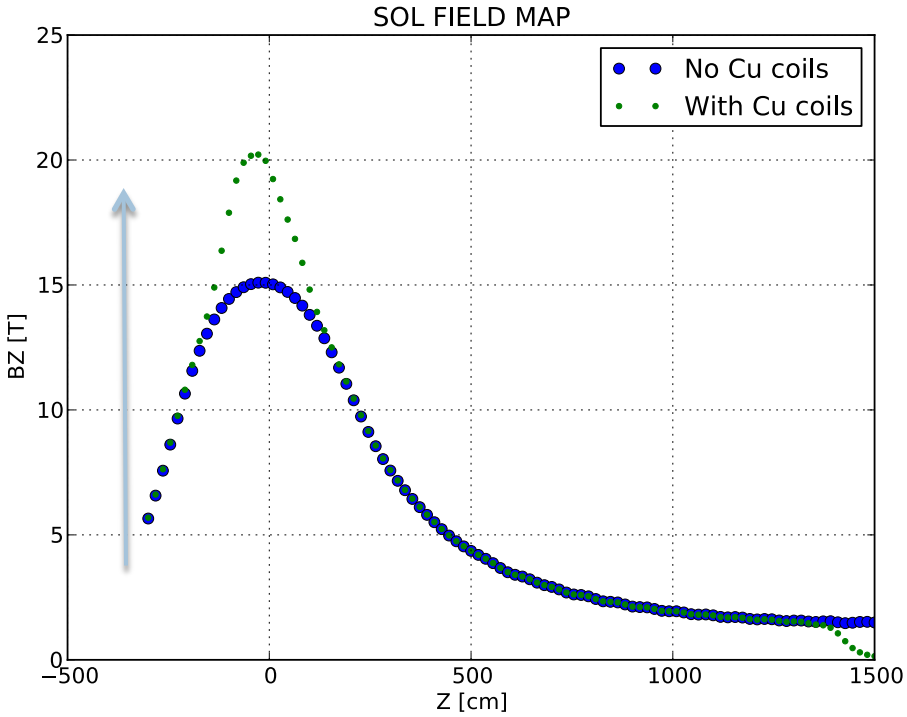

Particle Capture requirement (P_t ~ 0.225 GeV/c)
Br = 20 T X **7.5** cm = 150 T cm
Br = 15 T X **10** cm = 150 T cm

Fixed flux requirement (Aperture Requirement)
Br^2 = 20 X 7.5^2=1125 T cm^2

Br^2 = 15 X 10^2=1500 T cm^2

Muon production with 20 T at Z = 50 m → $2.9x10^4$

MARS simulations with 15 T peak field & new aperture settings (Taper 10-30 cm with Bz = 1.667 constant for z > 1172 cm)
Number of Muons 2.77 X 10^4

Decrease of 4%