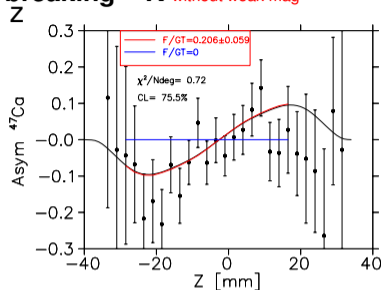
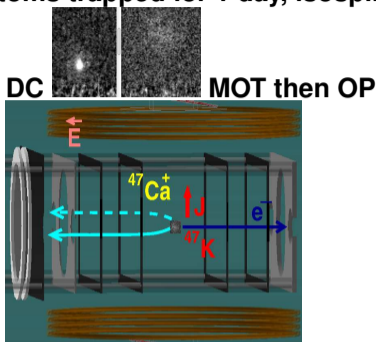
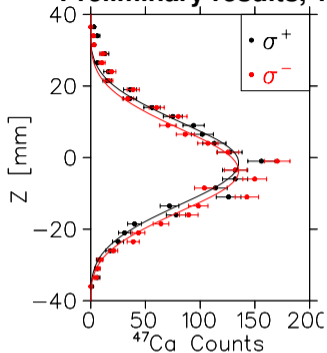


Preliminary results, 1000 atoms trapped for 1 day, isospin breaking  $^{47}\text{K}$  without weak mag



Nonzero  $^{47}\text{Ca}$  direction asymmetry wrt spin

$\Rightarrow$  a nonzero Fermi contribution

$M_F/M_{GT} = 0.21 \pm 0.06 \text{ stat} \pm ? \text{ syst} \Rightarrow$

$\langle \bar{A} | V_{\text{Coulomb}} | A \rangle = 190 \pm 54 \text{ stat} \pm ? \text{ syst keV}$

After laser improvements to collect more  $^{47}\text{K}$ , we hope to take 10x the data Dec

all  $\beta$ 's (BK),  $A_\beta$  (corrected for  $d\Omega$  and % strips)

$\sigma^+$ : top 52/1.08/1.13 bot 89,  $\text{Asym} = -0.35 \pm 0.08$

$\sigma^-$ : top 185/1.08/1.13 bot 65  $\text{Asym} = 0.40 \pm 0.06$

(Ave Asym)/P =  $0.96 \pm 0.04$  /  $v = 0.966$  /  $\langle \cos \rangle = 0.99$

=

$A_\beta = -0.417 \pm 0.057 \text{ (stat)} \pm ? \text{ (syst)}$

Gamow-Teller calculation  $-0.422 \Rightarrow$

$M_F/M_{GT} = -0.004 \pm 0.049 \text{ stat} \pm ? \text{ syst}$