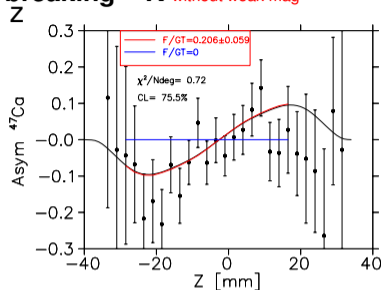
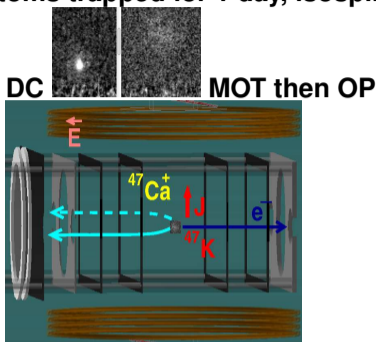
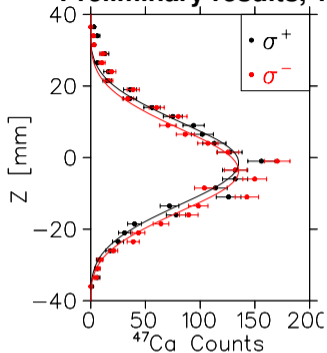


Preliminary results, 1000 atoms trapped for 1 day, isospin breaking ^{47}K without weak mag



Nonzero ^{47}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}K , we hope to take 10x the data Dec

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

σ^+ : top 52*1.08/1.13 bot 89, Asym= -0.28 ± 0.08

σ^- : top 185*1.08/1.13 bot 65 Asym= 0.46 ± 0.06

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

=

$A_\beta = -0.440 \pm 0.092 \text{ (stat)} \pm ? \text{ (syst)}$

Gamow-Teller calculation $-0.422 \Rightarrow$

$M_F/M_{GT} = +0.018 \pm 0.089 \text{ stat} \pm ? \text{ syst}$