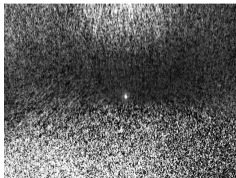
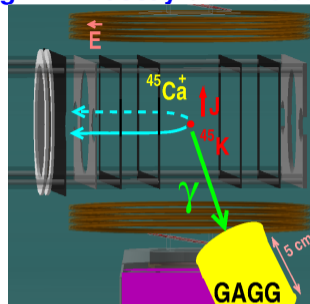
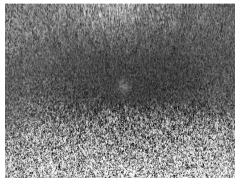


- ‘Isospin-hindered’  $^{47}\text{K}$  decay could show large isospin symmetry breaking from “analog-antianalog” mixing:
  - Determine whether sensitivity to isospin-breaking parity-even time reversal is competitive with neutron EDM (evading the Ng-Tulin bound)
- July 30-31 trapped  $\sim 1,000$  spin-polarized  $t_{1/2}=18\text{ s}$   $^{47}\text{K}$  atoms (once Australian laser arrived ♪Waltzing Matilda ♪) for 2 shifts
  - Measured angular distribution wrt spin of 10,000  $^{47}\text{K}$  recoils (tagged by atomic shakeoff electrons).
  - 1st data set  $\sim 0.04$  sensitivity to an asymmetry that could be as large as 0.06 (asymmetry is 0 if isospin conserved)



DC MOT  $^{47}\text{K}$  1 mm diameter



AC MOT  $^{47}\text{K}$

