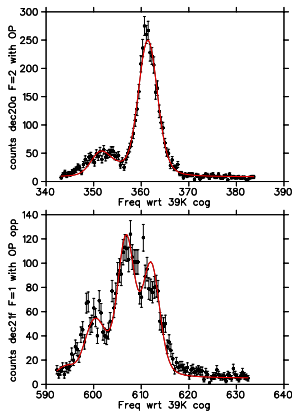
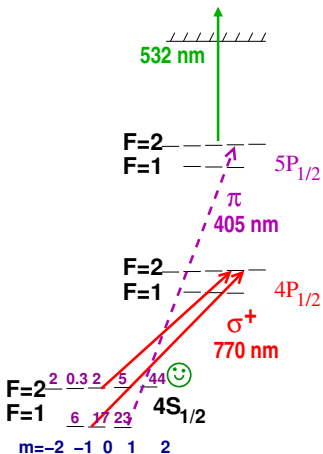


**TRIUMF TRINAT: Direct probe of nuclear polarization  $P$  of trapped  $^{41}\text{K}$  atoms**



- Direct probe of nuclear spin polarization with  $4S \rightarrow 5P$  probe
- NSERC RTI laser + 2 successive co-ops + TRIUMF Research Scientist
- High duty cycle scheme:  $P = 60 \pm 5\%$   
Soon:  
Improve high duty cycle  $P$  for  $\mathcal{T}$  in  $^{45}\text{K}$   
Directly probe higher- $P$  scheme used for  $^{37}\text{K}$   $A_\beta$  2018 PRL, test 1-parameter model  $P = 99.1 \pm 0.1\%$