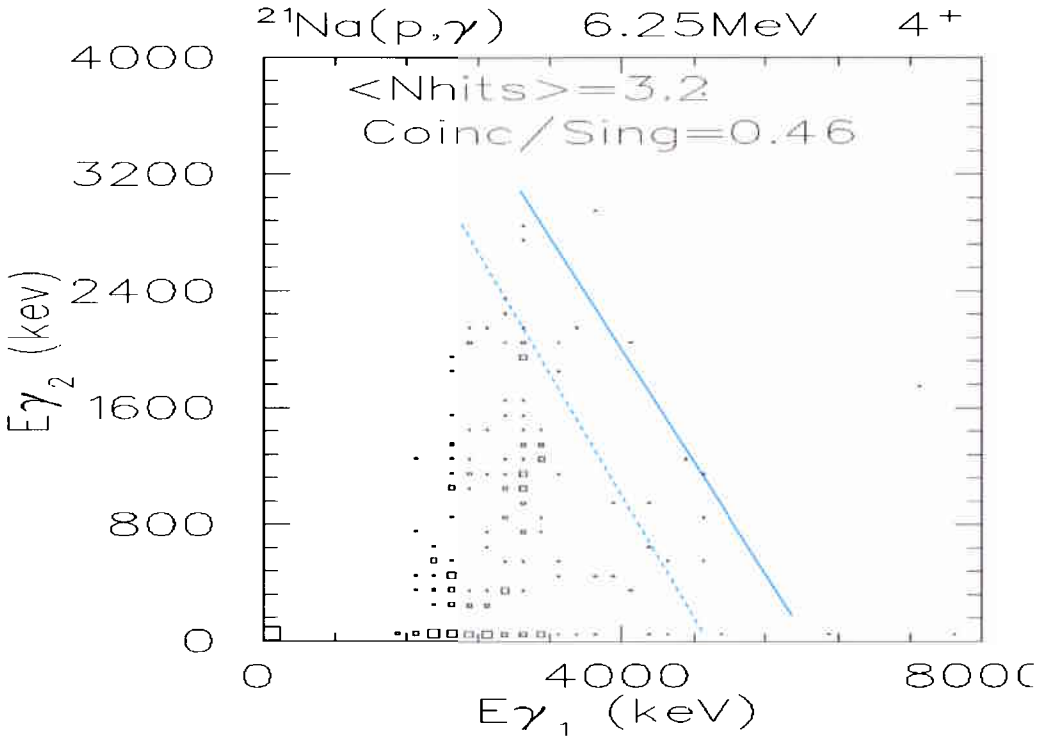
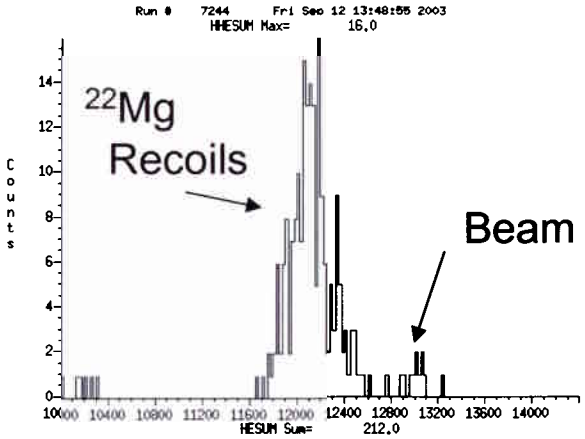
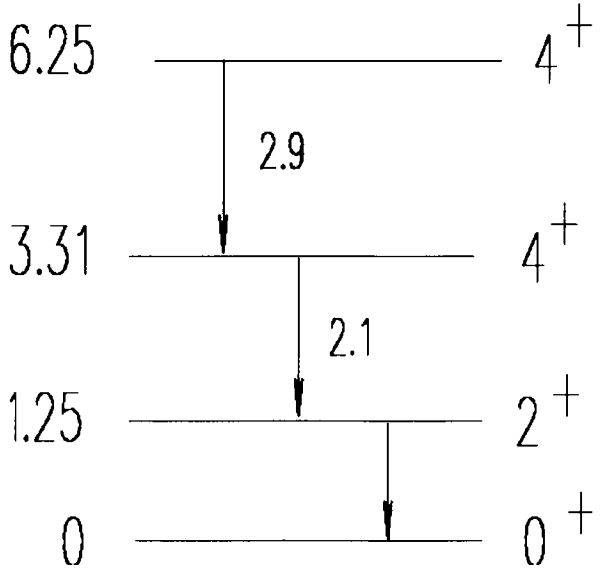
The 733 keV resonance (E_x = 6.25 MeV)



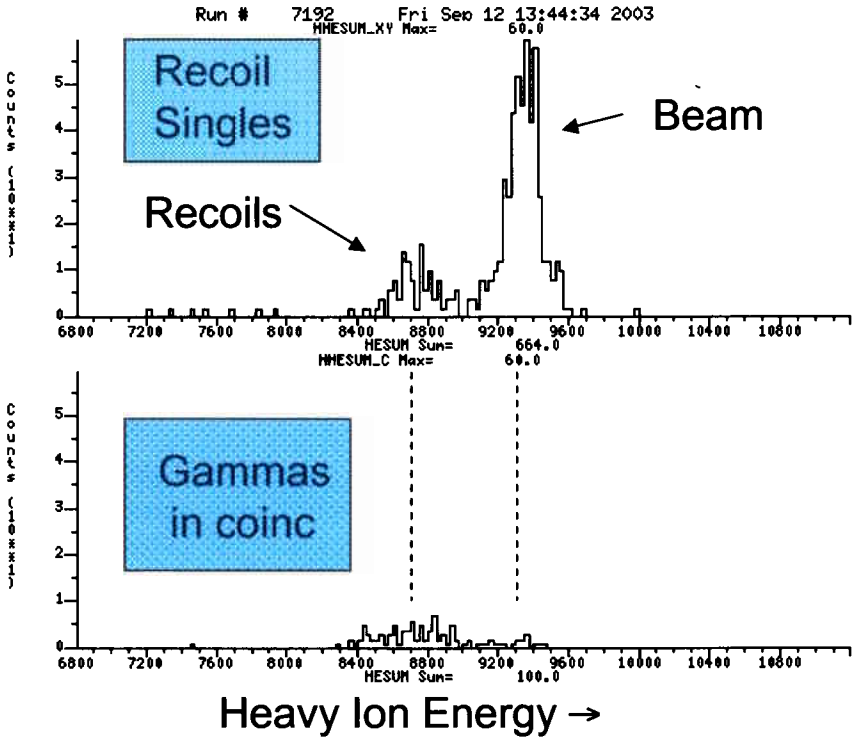


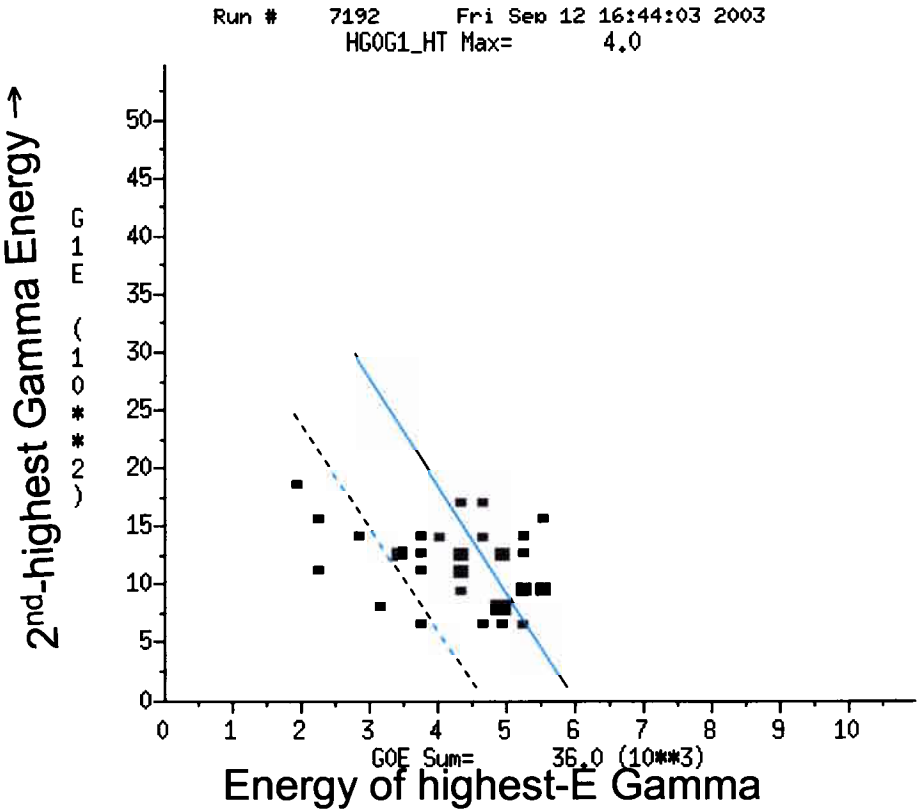


- ωγ ≈ 250 meV
- with J = 4 $\rightarrow \Gamma_\gamma \geq$ 220 meV
- compare ^{22}Ne (6.35, 4$^+$):

  τ = 19 (4) fs $\rightarrow$ $\Gamma_\gamma \leq$35 (7) meV

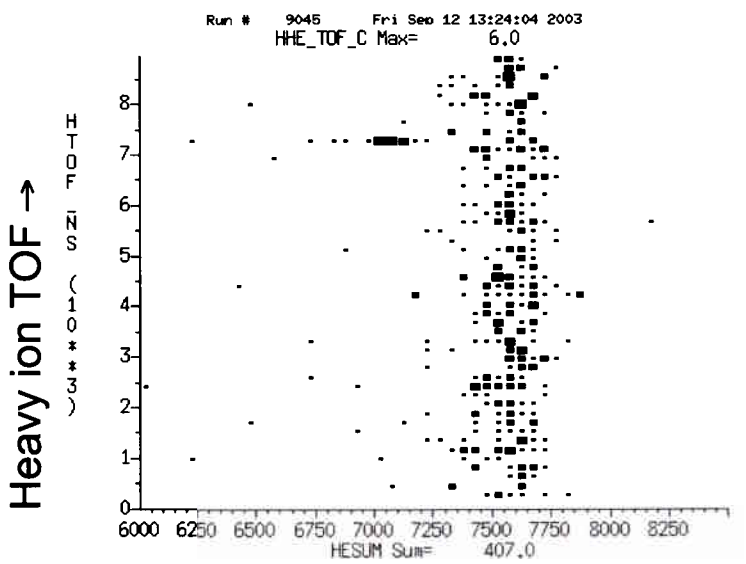
The 538 keV resonance (E_x = 6.04 MeV)

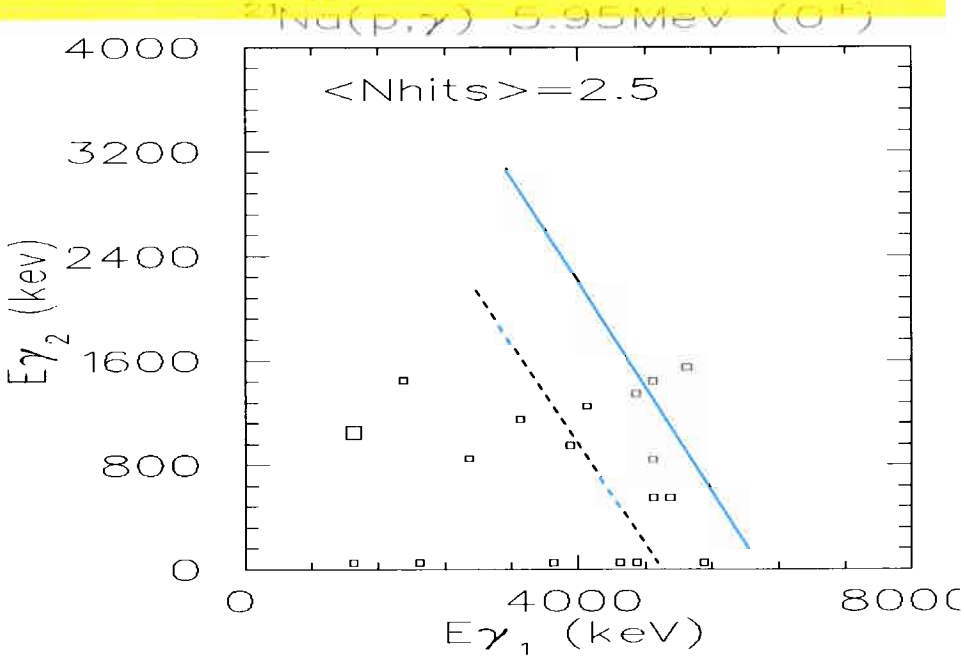




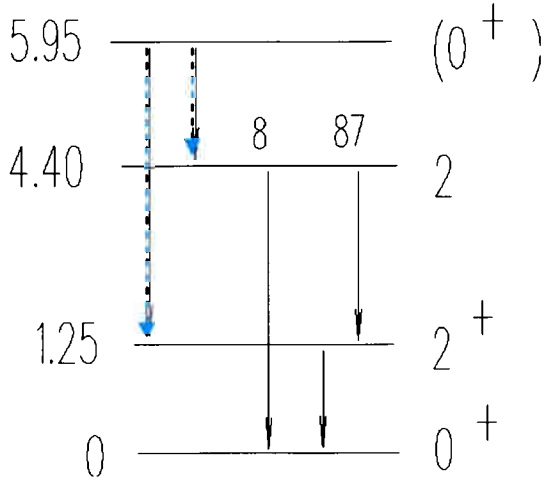
- ωγ ≈ 10 meV
- B.Davids et al. find $\Gamma_p/\Gamma \approx 1$, suggest $J^\pi = 1^- \longrightarrow \Gamma_\gamma \approx 30$ meV
- compare ^{22}Ne (6.69 MeV?): $\Gamma_\gamma = 2\ (1)$ meV

The 454 keV resonance (E_x = 5.96 MeV)

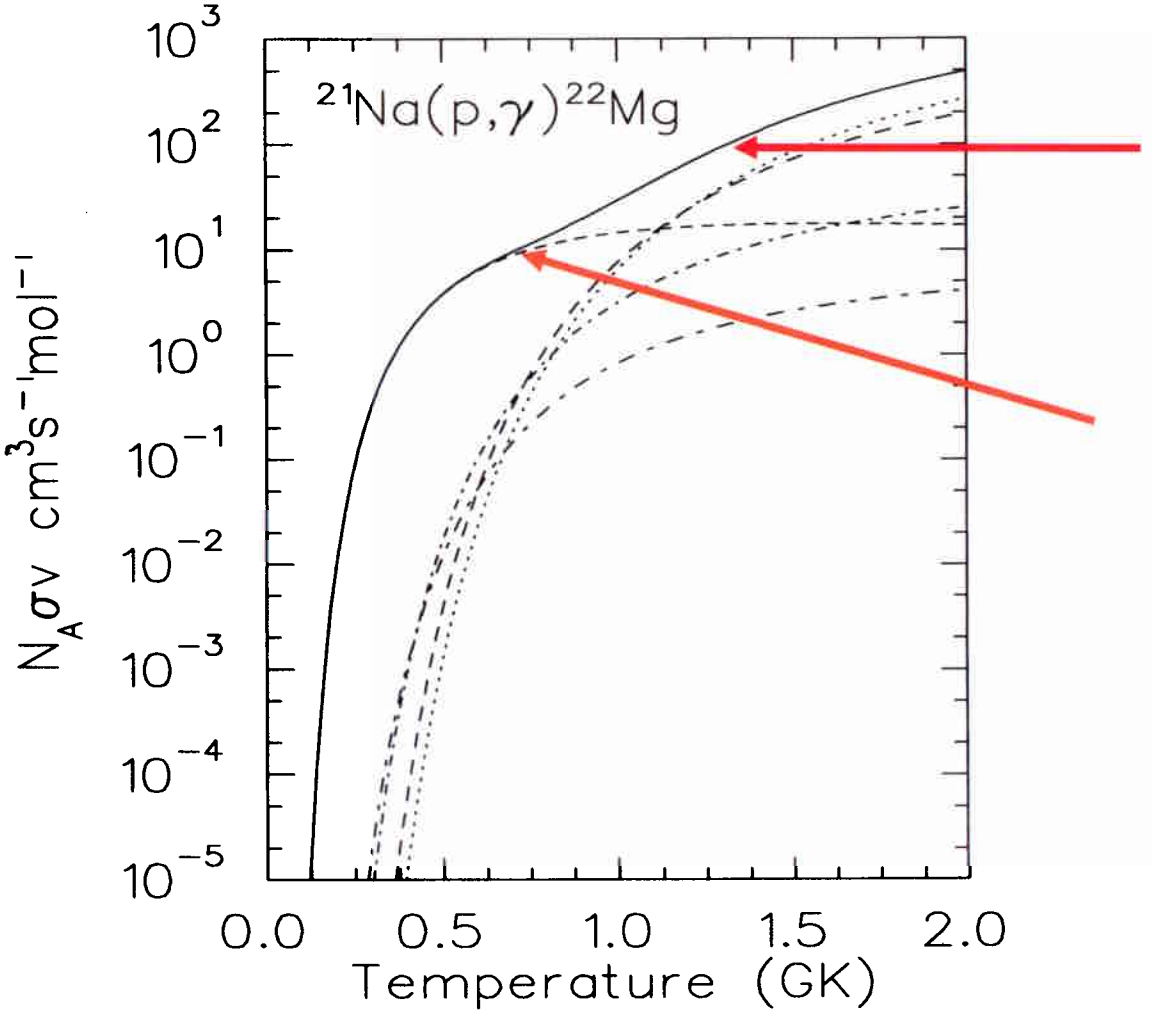




- $\omega\gamma \approx 1$ meV
- B. Davids et al. find $\Gamma_p/\Gamma \approx 1$, suggest J = 0 → $\Gamma_\gamma \approx 8$ meV
- compare ^{22}Ne (6.24, 0$^+$): $\Gamma_\gamma \approx (1\text{-}7)$ meV



Stellar Rate – all ^{22}Mg levels



Sum of levels measured in this work.

Below 0.8 GK only the 206 keV resonance matters