

Questions for 22 October 2014
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- 1) What is the Thomas-Ehrman shift? How is it calculated? -- Brian
- 2) What are the differences between a bound state and a resonant state? How are they similar? -- Nadyah
- 3) What is the role of centrifugal barrier in figure 3? What is the left blue peak caused by? -- Sudhanva
- 4) What are the half-lives of ^{14}O and ^{15}O ? What is the flight time through the separator at GANIL? How does this limit the radioactive beams you can make? -- Bijaya
- 5) Why did the experiment use two different detector set-ups for different isotopes? Does this relate to energy resolution? -- Tyler
- 6) How do proton and neutron interactions result in the shifts in levels in Fig. 2? -- Rekam
- 7) What is resonant elastic scattering? -- Nick
- 8) What is an R-matrix calculation? -- Mamun
- 9) On page 2, in the last sentence, why is uniqueness important? -- Arbin
- 10) What is the proton dripline? Are nuclei that are trapped by the Coulomb barrier considered to be outside or inside the dripline? -- Linda
- 11) Given that the short distance part of the Coulomb cannot be separated from nuclear interaction, how does the definition of stable nuclei as "bound by strong interaction" work? -- Shamim