

Questions on “Characterizing Neutron-Proton Equilibration in Nuclear Reactions with Subzeptosecond Resolution”.

Moderator: Md. Abdullah al Mamun
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1. Why does the asymmetry term in the liquid drop model have the form $(2Z - A)^2$? [Mahesh]
2. Why was ^{70}Zn chosen for the experiment? Could this approach work with some other element? [Anik]
3. What is the difference between the cyclotron facility of TA&M and MSU? Why would an experimentalist choose one over the other? [Kristyn]
4. Why can they assume that the correlation between rotation angle and decay time is linear when finding the rate constant? [Shiv]
5. Where does the liquid drop model fail? Is it disappointing that the result isn't very limiting compared to the results established in the 70's and 80's? What other experiments can be performed to improve this? [Robert]
6. How does NIMROD do the element and isotope identification? [Bishnu]
7. How is the center of mass velocity measured? [Tyler]
8. How do we know that HF and LF originate from PLF*? [Abinash]
9. Could you infer $n - p$ equilibration if you have a Zn beam incident on targets other than Zn ? e.g. , why Zn on Zn and not Zn on Sn or Al ? [Matt]
10. What are statistical decay? How is it different from dynamical decay? [Joey]