

Nuclear Lunch Questions – February 8, 2012

1. How are heavy nuclei formed experimentally? **Harsha**
2. What experimental setup would allow the measurements of the emitted particles?
Anthony
3. What qualifies a nucleus as superheavy? **Shamin**
4. What does it mean for a nucleus to “exist solely due to its shell effect”? **Chen**
5. How does one take into account the formation probability of the emitted particles in the theory? **Bijaya and Constantinos**
6. What is the ASAF model? What is the nuclear potential used in this calculation? **Brian Muccioli**
7. What elements would the Gamow model be able to explain? What elements may it fail to explain? **Azamat**
8. Which particles are emitted in radioactivity with $A > 4$, as seen experimentally? **Sushil**