Nuclear Lunch Questions

Dark Matter Ignition of Type Ia Supernovae

Feb. 24 and March 9

1. What is a type Ia supernovae and how is it different from other types of supernovae? (Andrea)

2. What is the Phillips relation? How is it used to calculate redshift? (Som)

3. What is a dark matter halo? Why is it thought to exist? (Abinash)

4. What is the Chandrasekhar mass limit? How is it calculated? (Sudhanva)

5. What are the XENON and LUX experiments? Are there other experiments to detect dark matter? (Rekam)

6. What is the vacuum energy of the Universe? How is type Ia supernovae used to determine it? (see first sentence of the paper) (Nick)

7. What would this theory imply for pulsars in the Galactic center? (Taya)