

## Nuclear lunch questions

- (1) Can we think of  $^{10}\text{Be}_\Lambda$  as a more stable  $^{10}\text{Be}$ ? How does  $\Lambda$  produce more binding in a nucleus? (Arbin)
- (2) What is the typical lifetime of a hyper nucleus? (Shamim)
- (3) What new terms appear in the  $V_{\Lambda N}$  compared to  $V_{NN}$ ? (Brian)
- (4) Is there other kind of coupling besides  $\Lambda$ - $\Sigma$  coupling? What is the significance of  $\Lambda$ - $\Sigma$  mixing? (Nowo)
- (5) Is there a practical application of hyper nuclei? Could enough be produced and would they be available long enough? (Youngshin)
- (6) In the collision that creates hyper nuclei, what energies are used? Is there a minimum energy? (Cody)
- (7) Does the doublet splitting structure also happen in ordinary nuclei like  $^7\text{Li} = ^6\text{Li} + \text{N}$ ? Do they have same number of levels but may be in higher energy value? (Harsha)
- (8) How is the  $\pi$  beam obtained? How is the K beam directed? (Azamat)
- (9) How is the spectrum of hyper nuclei obtained? Is it from a shell model calculation? (Bijaya)
- (10) If there are more than  $1\Lambda$ , will Pauli principle be considered? (Anthony)