

TRIUMF plans: Discussion Points

1. What is this group's opinion of the TRIUMF technique? (Spallation+He-II)
2. Are there developments around the world on 2010-2012 timeframe (RCNP, elsewhere) that could affect this?
3. Are you interested in collaborating on source developments for TRIUMF (e.g. @RCNP)?
4. What is the ideal 1st experiment for this facility?
5. How many people might submit an LOI this year to TRIUMF?

Comments on Spallation He-II UCN Source

- Unique source concept that is feasible.
- This should be pursued somewhere.
- TRIUMF would be an ideal place.
- Technical issues and costing should be pursued.
- Need to identify clear physics goal.
Optimize source-experiment coupling.
- Relationship to JPARC should be solidified.

Comments on Flagship UCN Experiment

- High UCN densities are a very good thing.
- For TRIUMF concept, important to focus on expts where density important, as opposed to production rate.

Comments on Flagship UCN Expt

- gravity – currently limited by UCN density, a real chance to make an impact.
- neutron lifetime – tough business, but new magnetic traps are in infancy. still time to contribute.
- EDM – tough business, large collaboration required, cost, but possible to make headway given high UCN density.
- $n\bar{n}$ – UCN production rate, can He-II compete with SD2? may have niche with UCN, cheaper than beam expts which cost \$100M
- RIB-UCN interactions should be pursued with high priority! unique to TRIUMF

General Comments

- What kind of cost levels are you talking about?
 - \$2M+outside contributions (scale of TWIST).
Japanese contributions. For bigger expts, TRIUMF would draw outsiders by availability of high UCN density.
- How much current can you take?
 - 40 μA pk, 10 μA avg.
 - cooling, shielding, remote handling req'd.
 - have to be careful of gamma heating
- Manpower
 - better to concentrate manpower than having many small groups.

Thank you

- attendees and speakers
- organizing committee
- Chuck Davis (local organizer)
- Akira Konaka (the real instigator)
- Sandi Miller (TRIUMF conference coord)
- Dana Giasson (website)
- Sharon and her staff (the excellent food)