Fragmentation measurements of ⁸⁶Kr at Riken June3-9, 2004; Betty Tsang -- spokesperson

US-Japan Collaboration

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Scheudule – First 3.5 days

- Debug takes 1 day
- Scan from Brho=1.7-2.3 for Be and Ta tgts
- Monitor calibrations:
 - Momota, Okuno plastic stacks
 - Very linear over a large dynamic range
 - MSU NaI & BaF
 - NaI good to about 10 enA
 - BaF extend a little further
 - No time to do detail study
- Detail calibrations of Momota and Okuno with plastic scintillator at F2
- Transmission of F2 to F3 is nearly 100% for Z>10



Problems encountered

- Charge states measurements
 - Very close to the predictions of Global
- However spread is larger than predictions so we cannot measure close to charge states especially for Ta targets
- Also charge states mess up the resolutions of fragments

June 7- 9: High intensity measurements of rare isotopes, 80Zn & 79Cu

- Beam intensity 100 pnA of beam
 NSCL 10-16 pnA
- RIPS is relatively free from background radiation compared to A1900.

– Wedge is not needed

- Run for about 30 hrs with high intensity
 - Probably see 80Zn (8 protons removed) and 79Cu (9 p removed)

