

ISAC Experiments Requesting Actinide Target

Most are spallation products, so produce (or are) α -emitters

• 'Symmetries'

Actinide?

| | | | |
|-------|--|-----|-------|
| E929 | ^{223}Rn electric dipole moment | yes | Spall |
| E1010 | Fr hyperfine anomaly | yes | Spall |
| E1065 | Anapole weak N-N Fr | yes | Spall |
| LOI | Fr electric dipole moment | yes | Spall |

• Reaction/Coul Ex

| | | | |
|-------|--|-------|-------|
| E993 | $^{46-52}\text{Ar}$, $^{50-54}\text{Ca}$ CoulEx | yes | Spall |
| E1060 | $^{24-30}\text{Ne}$ CoulEx | helps | Spall |
| E1067 | $^{20-28}\text{Na}$ proj frag | helps | Spall |
| E1075 | $^{28-30}\text{Na}$ CoulEx | helps | Spall |
| ~LOI | $^{99-101}\text{Rb}$ for r-process | yes | Fiss |

• Masses

| | | | |
|--------|-----------------------------|---|-------|
| LOI-44 | ^{19}C mass (halo) | ? | Spall |
|--------|-----------------------------|---|-------|

• β , γ Decay

| | | | |
|--------|--|-------|------------|
| LOI-39 | ^{78}Ni decay | yes | Spall/Fiss |
| E955 | ^{32}Na , ^{30}Mg , $^{20,22}\text{O}$ | yes | Spall |
| E984 | $^{118-132}\text{Ag}$, $^{118-128}\text{Rh}$ | helps | Spall/Fiss |
| E988 | $^{166-172}\text{Tb}$ | yes | Spall |
| E1064 | $^{51,52,53}\text{K}$ toward ^{54}Ca | helps | Spall |