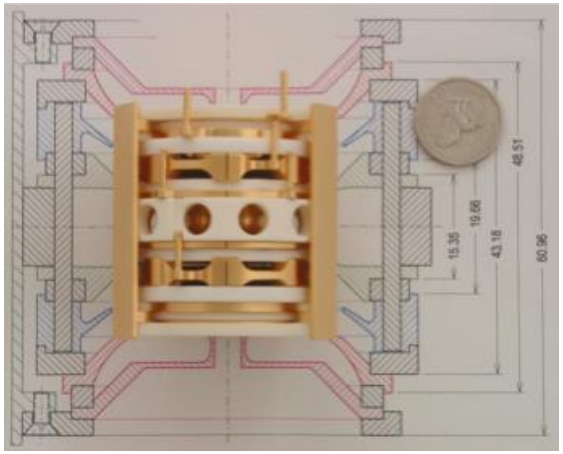
^{21}Na and ^{29}P Q_{EC}-value measurements



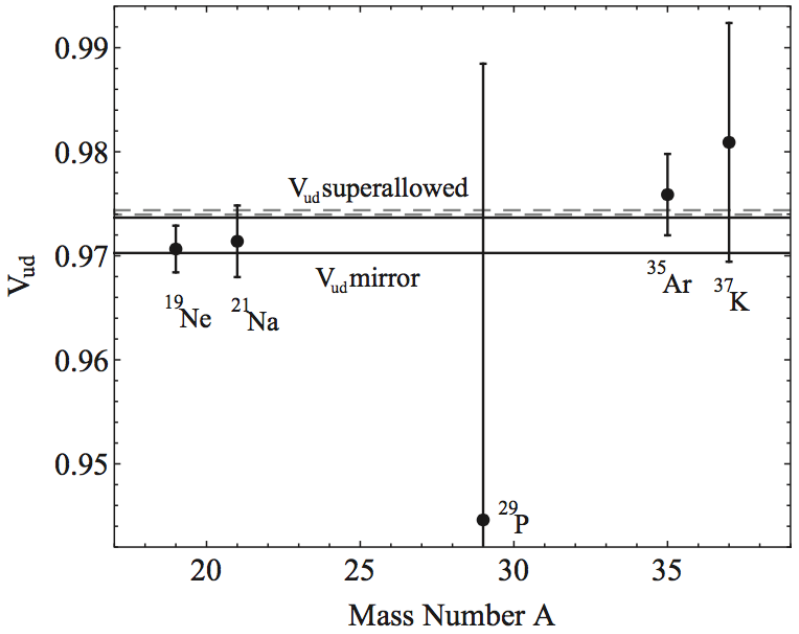
Why a Q_{EC}-value measurements on ^{21}Na and ^{29}P?
There are mirror transition which will allow to:

- Test the CVC hypothesis
- Independent way to extract V_{ud}
- Test same theoretical corrections as Pure Fermi.

- Produced by projectile fragmentation
- Thermalized in linear gas cell
- Measured with LEBIT Penning trap

- 3x more precise Q_{EC}-values.
- V_{ud} from mirror transitions is 1.3σ lower than pure Fermi.

Experimental incentive to measure more precisely the mixing ratio, for a more accurate determination of V_{ud}.



M. Eibach, G. Bollen, M. Brodeur *et al.*, PRC **92** 045502 (2015)