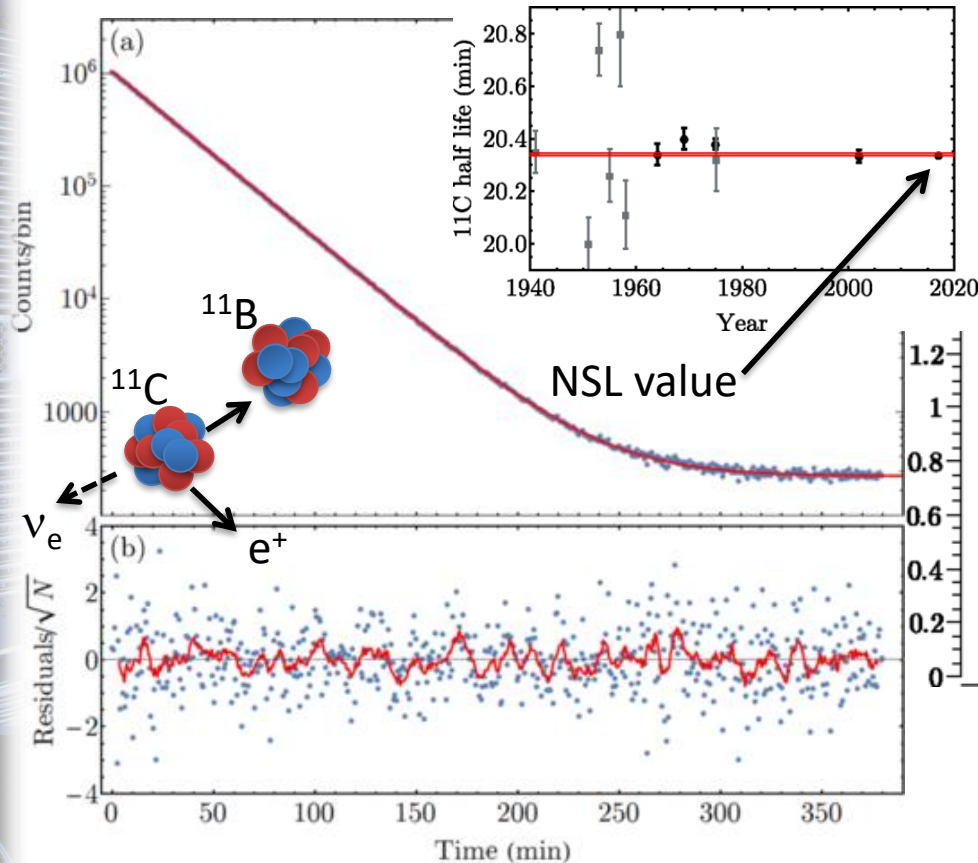


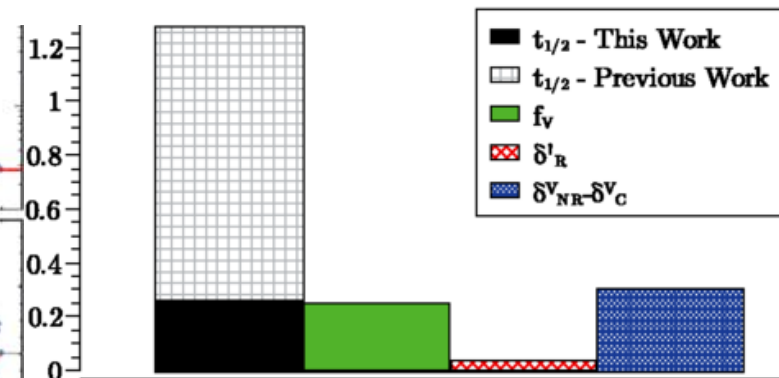
^{11}C half-life measurement at the NSL



Precision tests of Standard Model through the CKM matrix element V_{ud} from superallowed mixed mirror decays are limited by the experimental uncertainties. We performed a precision half-life measurement on ^{11}C , one such decay.



The fractional uncertainty on the $t_{1/2}$ is now comparable to other quantities entering in the f_t -value determination, and smaller than the theory-based $\delta_{NR}^V - \delta_C^V$ correction term.



A measurement of the mixing ratio ρ using the future NSL-trap is planned to extract V_{ud} .

