The ratio of proton to neutron yield

In the NC ν-N cross section the dominant contribution, especially at low energies, the dominant contribution come from the sqare of the NC axial formfactor:

$$\sigma_{\nu}^{p,n} \propto \left|G_A^{NC}\right|^2 \simeq\simeq \frac{1}{4}{G_A}^2\left(1 \mp 2\frac{G_A^s}{G_A}\right)$$

The ratio $R_{p/n}$

$$R_{p/n} = \frac{\sigma_{\nu}^{p}}{\sigma_{\nu}^{n}} \simeq 1 - 4\frac{G_A^s}{G_A} \simeq 1 - \frac{16}{5}G_A^s\,.$$

is very sensitive to G_A^s

There was a proposal to measure $R_{p/n}$ by using $\nu, \nu' N$ reactions on ^{12}C using the LAMPF beam at Los Alamos ($\langle E_\nu \rangle \simeq 200$ MeV).

At such low energies nuclear structure effects are relevant, however sstimates of nuclear-model uncertainties were calculated by several groups and shown to be smaller than strangeness effects