The bottom line: Systematic error on ν interaction rates

Nuclear models	$^{+5\%}_{-6\%}$
$^9\mathrm{Be} \rightarrow {}^{27}\mathrm{Al}$	$\pm 1\%$
$\vec{B}$ field	$^{+2\%}_{-3\%}$
$\vec{B}$ in target	*small*

proton centering	$^{+0\%}_{-2\%}$	} *add linearly*
proton profile	$^{+2\%}_{-3\%}$	
target sagging	$^{+0\%}_{-2\%}$	

$$\Longrightarrow \text{From MC based extrapolation:}$$

$$\mathrm{N}_\mu(\mathrm{SK}) = \underbrace{N_0 \pm (stats)}_{\mathrm{N_{FD}}\cdot \mathrm{X} \cdot \left(\frac{\mathrm{V_{SK}}}{\mathrm{V_{FD}}}\right)} \underbrace{\pm 1\%}_{\text{MC stats}} \underbrace{^{+8\%}_{-10\%}}_{\text{MC syst}}$$