Measured versus Calculated

^{51}Cr neutrino absorption by ^{71}Ga

- Energy similar to ^{7}Be solar ν's

  ^{7}Be: 0.86 MeV (90%), 0.38 MeV (10%)

  ^{51}Cr: 0.75 MeV (90%), 0.43 MeV (10%)

- Calculation includes: Hartree-Fock electronic wave functions, standard weak interaction theory, small atomic corrections, excited state transitions, ...

- Theory*: $\sigma(^{51}\mathrm{Cr}) = 58.1\left(1^{+0.036}_{-0.028}\right) \times 10^{-46}\ \mathrm{cm}^2$

- Measured: $R = \sigma_{\mathrm{measured}}/\sigma_{\mathrm{calculated}}$

  $R(\mathrm{GALLEX})^{\dagger} = 0.93 \pm 0.07\ ,\ 1\sigma$

  $R(\mathrm{SAGE})^{\ddagger} = 0.97 \pm 0.12\ ,\ 1\sigma$

*Bahcall, Phys. Rev. C, 56, 3391 (1997)

†Hampel et al., Phys. Lett. B, 388, 384 (1996); in press (1998)

‡Abdurashitov et al., Phys. Rev. Lett., 77, 4708 (1997)