

- Cross section of neutrinos on various targets are small. Detectors must be very large to see enough events.
 - at $\sim 1MeV$ on protons, neutrons, deuteron
 $\sim 10^{-44}cm^2$
 - at $\sim 10MeV$ on Chlorine, Carbon, etc.
 $\sim 10^{-42} - 10^{-41}cm^2$
 - high energies (1 GeV) on protons and neutrons
 $\sim 10^{-38} \times (E_\nu/GeV)cm^2$
 - high energies (GeV) on electrons
 $\sim 10^{-41} \times (E_\nu/GeV)cm^2$