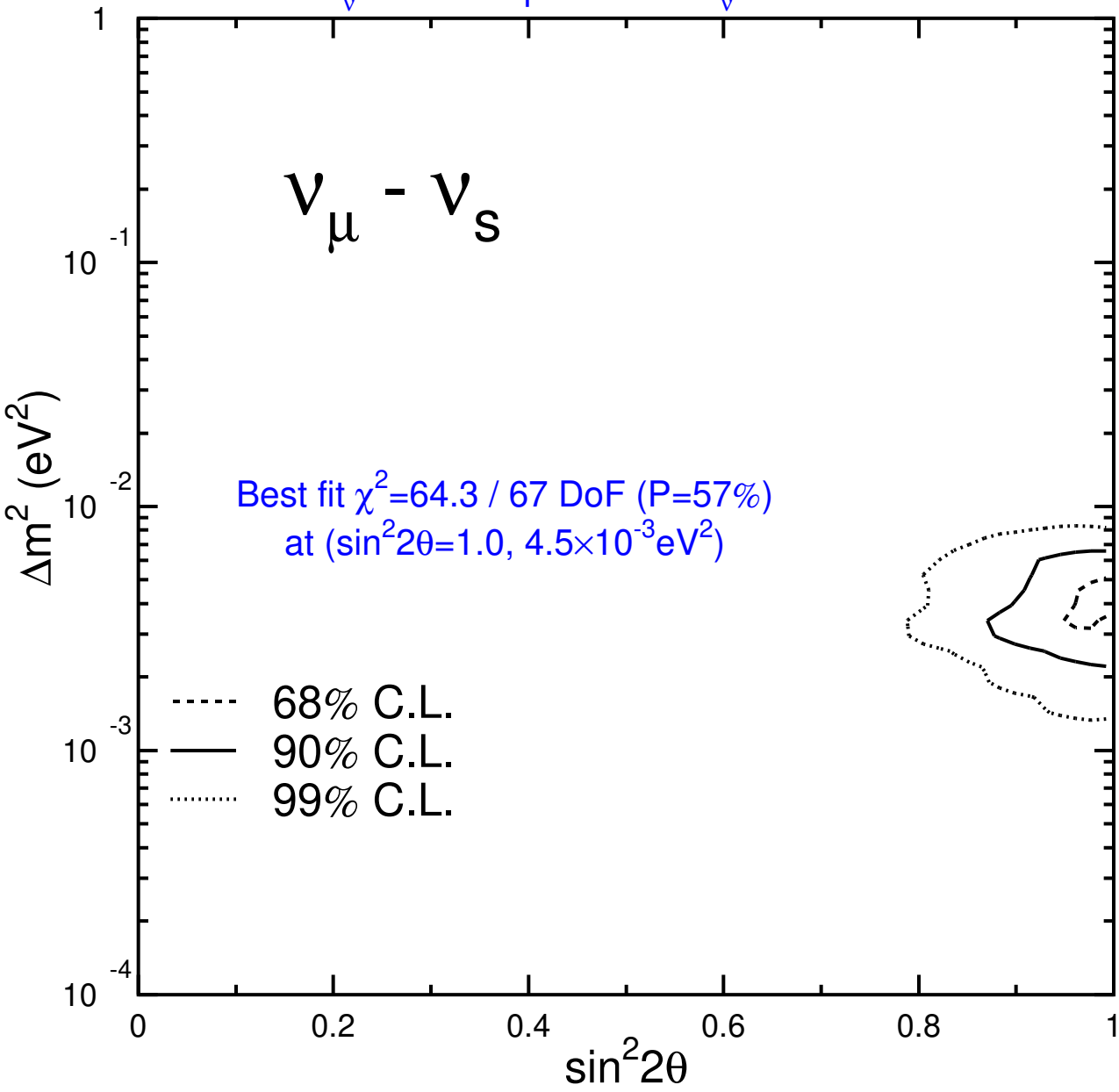- neutral current interactions cause potential difference between ν_μ and ν_s in matter: $H_{eff}=\sqrt{2}G_F N_N/2$
- scales as $E_\nu/\Delta m^2 \rightarrow$ important for $E_\nu \geq 5$ GeV