Hydrogen

Self energy

$$\Delta E = 10.316793659(1)\ \frac{\alpha}{\pi}\ \alpha^4 mc^2$$

Hänsch et al.

$$\nu_{2S\text{-}1S} = 2\,466\,061\,413\,187\,103\,(46)\,\mathrm{Hz}$$

$$R_\infty = 10\,973\,731.568\,549\,(83)\,\mathrm{m}^{-1}$$

$$R_\infty \sim \alpha^2$$

Time-dependence of α?