

## Comparison *Theory* and *Experiment*:

$$g = 2$$

+ 0,002 319 304 377

- 0,001 278 645 8

+0,000 000 844 4

+0,000 000 087 5

+0,000 000 000 4

➡ 2,001 041 590 9 (21)(50)

2,001 041 596 4 (8)(6)(44)

# P.A.M. Dirac, 1928

## QED of free electron, Dehmelt 1987

relativistic correction in  $C^{5+}$ 

bound-state QED, 1st order in  $\alpha$

nuclear recoil effect

nuclear volume effect

theory, T. Beier et al., 1999

our measurement on  $C^{5+}$ , 1999

(electron mass, Van Dyck 1995)

(systematics)

(statistics)