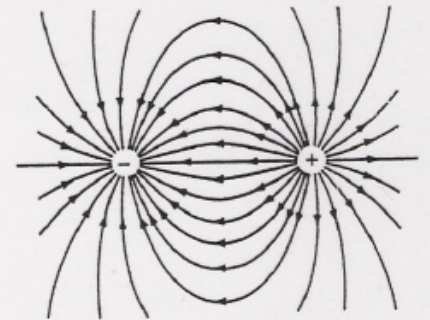
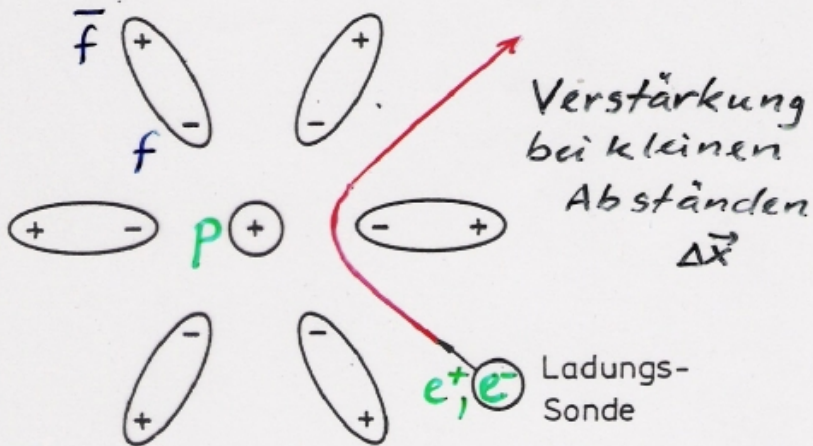


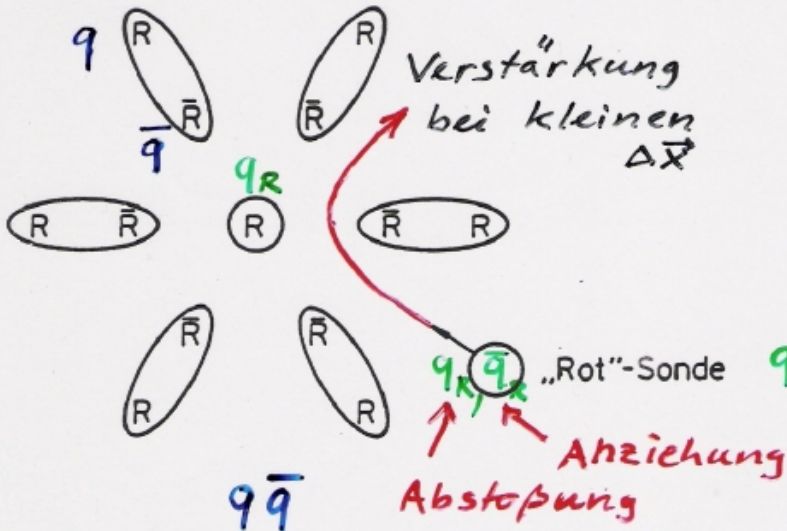
# QED: Vakuumpolarisation



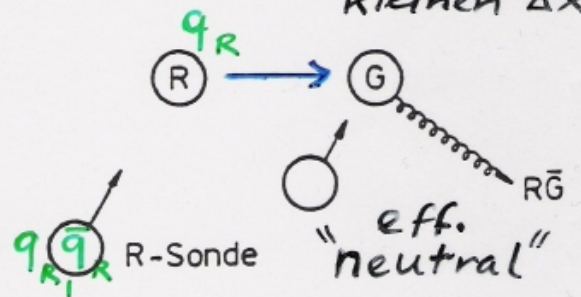
elektrisches Dipol-Feld:

$$V(r) = -\frac{e^2}{4\pi r}$$

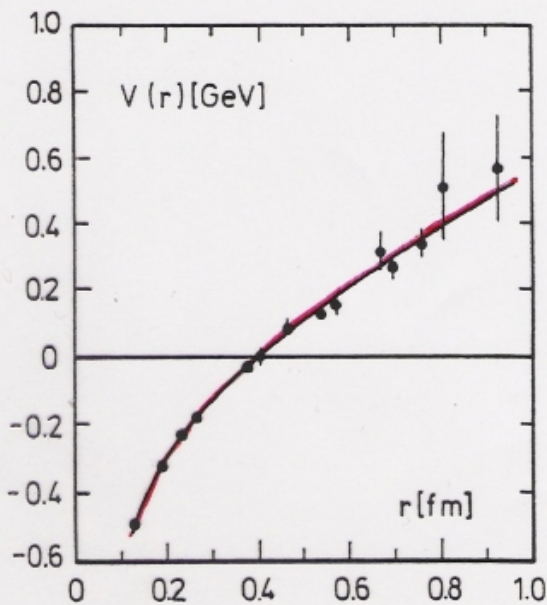
# QCD: Vakuumpolarisation



Abschwächung bei kleinen  $\Delta x$

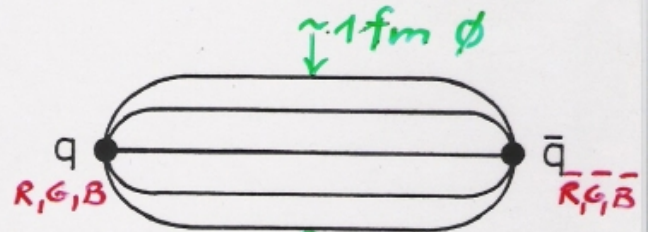


$gg$



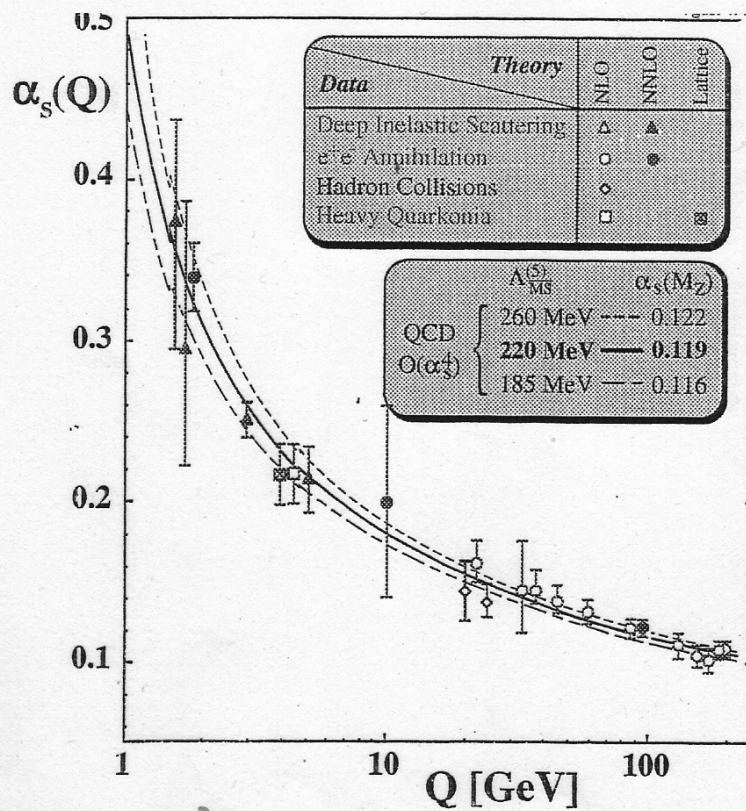
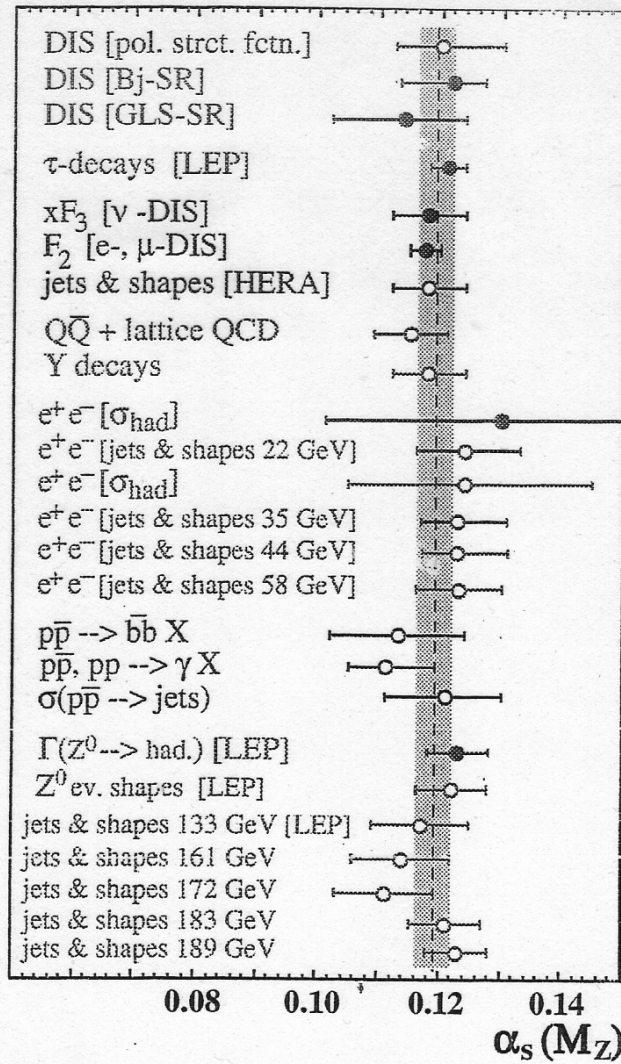
† QCD - Simulationsrechnung ( $SU(3)$ -Singulett) (numerische Lösung)

Flussschlauch, durch Gluon-Selbstkopplung



chromoelektrisches Feld (Parametrisierung):

$$V_c^{q\bar{q}}(r) = -\frac{4\alpha_s}{3r} + \sigma \cdot r$$



$$\alpha_s(M_Z^2) = 0.118 \pm 0.002$$



