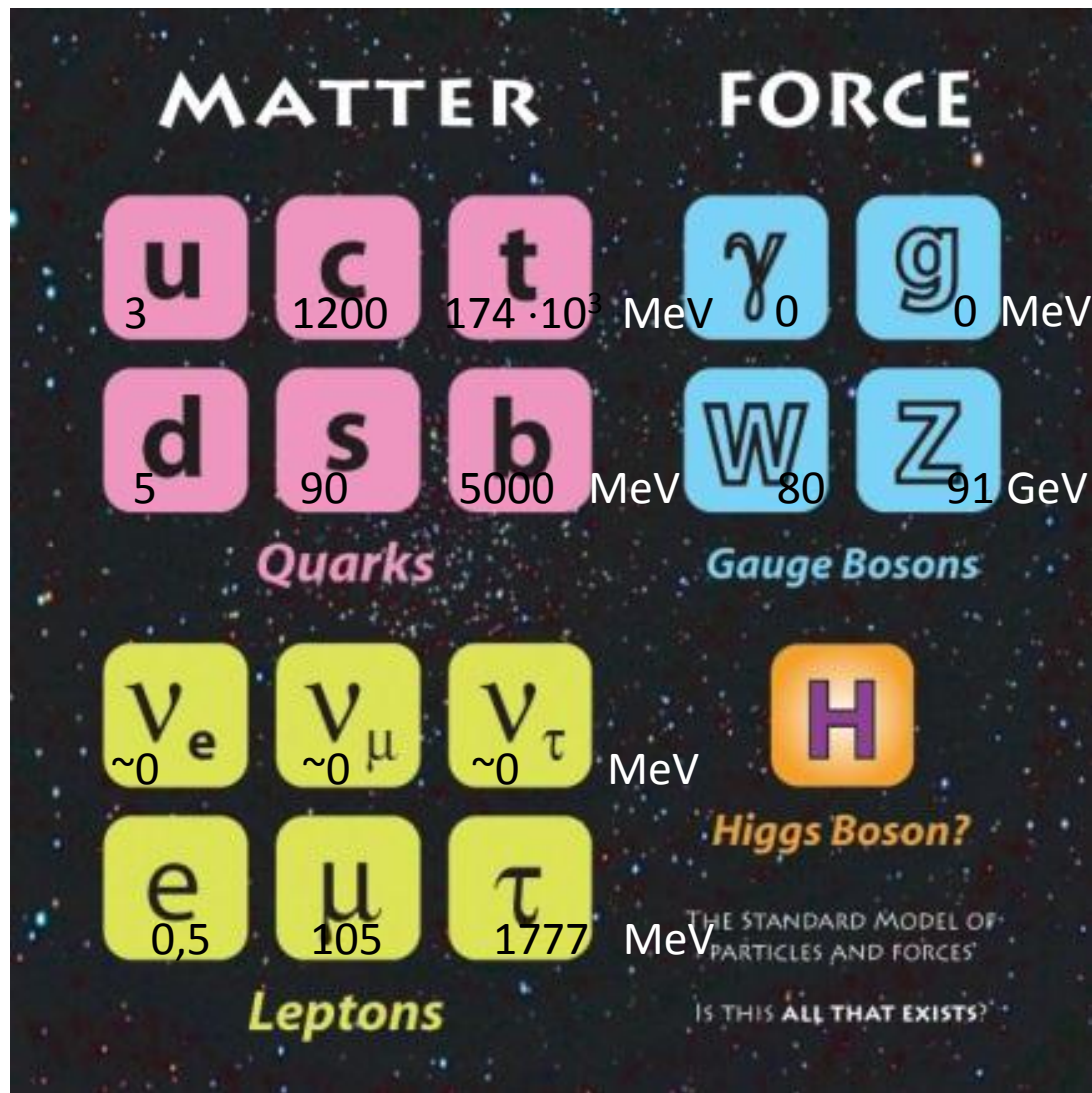


Osnovni delci v Standardnem modelu



Osnovne interakcije

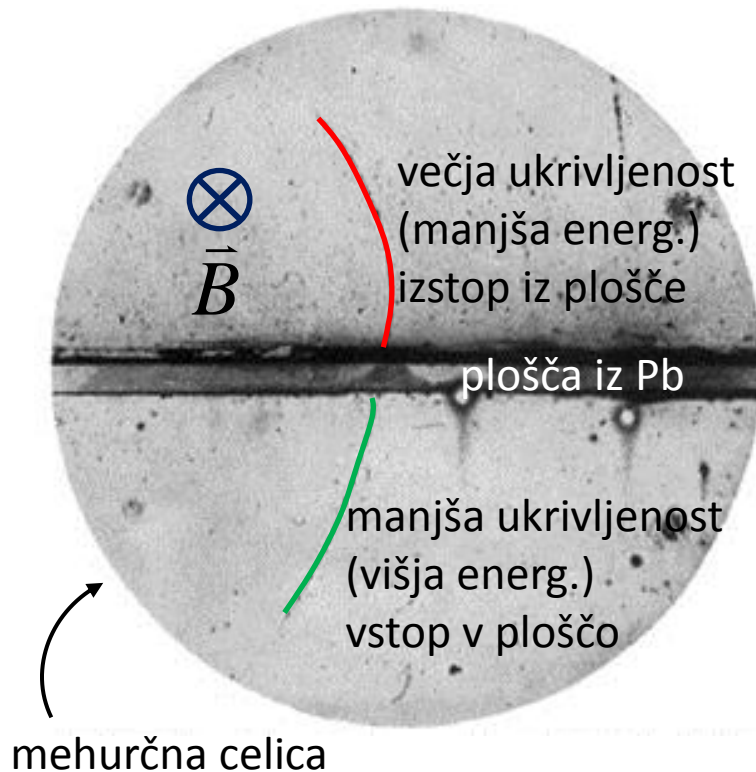
interakcija	brezdim. sklop. konst.	doseg	posrednik	komentar
EM	$\alpha_{EM} \cong 1/137$	∞	γ	
šibka	$\alpha_W \cong \alpha_{EM}$	$O(10^{-2} \text{ fm})$	W^\pm, Z^0	„šibka“ zaradi $m(W,Z)c^2 \sim O(10^2 \text{ GeV})$
močna	$\alpha_S \cong 20 \alpha_{EM}$	$O(\text{ fm})$	g	„omejen“ doseg zaradi $V_S(r) \propto r$
gravitacija		∞	?	zanemarljiva v svetu osn. del.

Antidelci

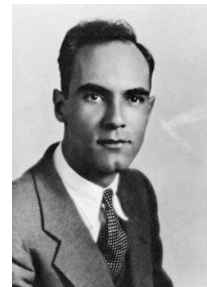
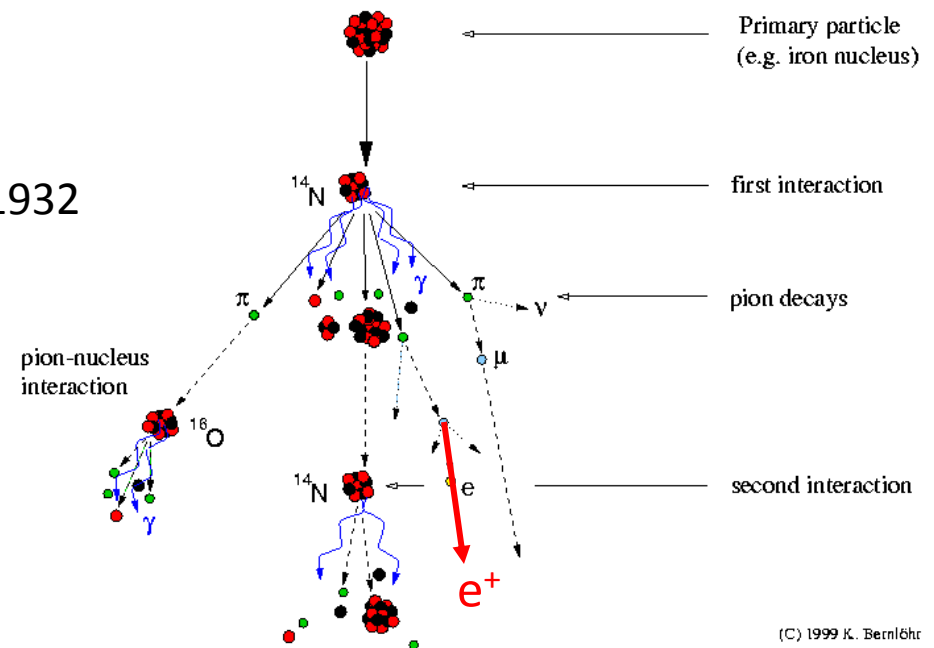
$$\hat{C}\psi = \bar{\psi}$$

\hat{C} : operator konjugacije naboja

odkritje pozitrona: Carl D. Andersen, 1932



Development of cosmic-ray air showers



Nobelova nagrada
1936 (skupaj z
V.F. Hessom za
okritje kozmičnih
žarkov)