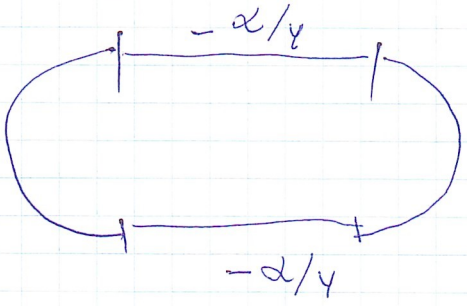
Структура с 2 мя аркаш:



$$\alpha_\Sigma = 2\gamma G \pi$$

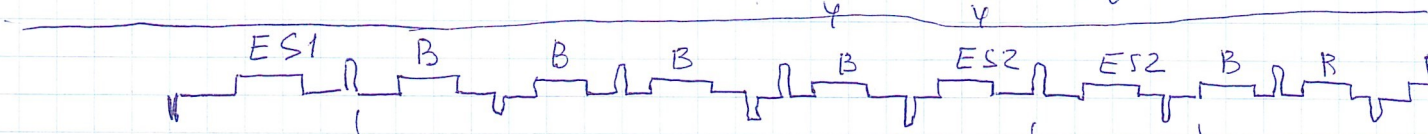
$$\gamma G \pi = \alpha/2$$

$$-\alpha/4 + \frac{\alpha}{2} - \alpha/4 = 0$$

1. $-\alpha/4$

2 $+\frac{\alpha}{2} - \frac{\alpha}{4} = \frac{\alpha}{4}$

3 $\frac{\alpha}{4} - \frac{\alpha}{4} = 0$



$\alpha_{B\,I}$ $\alpha_{B\,II}$

Структура Нуклотрона

$$\alpha_\Sigma = 2\pi\gamma G$$

$$\alpha_B = \alpha_\Sigma / 16$$

$$\alpha_{ES1} = -\frac{\alpha_B}{2}$$

Для ретронов
$G_r = -0{,}142$
$\gamma = 1{,}143$
$\gamma G = 0{,}162$
$360° \cdot \gamma G = 58°$

Для proton
$G_r = 1{,}792$
$\gamma G|_{W=100\,Mev} = 1{,}98$
$2\pi\gamma G_r = 413{,}8°$

1. $-\frac{\alpha_B}{2} = -\frac{\alpha_B}{2}$ после ES1

2. $-\frac{\alpha_B}{2} + \alpha_B = \frac{\alpha_B}{2}$ после $4B_I$

3. $-\frac{\alpha_B}{2} + \alpha_B - \frac{\alpha_B}{2} = 0$ после ES2

4. $-\frac{\alpha_B}{2} + \alpha_B - \frac{\alpha_B}{2} - \frac{\alpha_B}{2} = -\frac{\alpha_B}{2}$ после 2ES2

5. $-\frac{\alpha_B}{2} + \alpha_B = \frac{\alpha_B}{2}$ после $4B_{II}$

6 $\frac{\alpha_B}{2} - \frac{\alpha_B}{2} = 0$

М. о. амплитуда $\pm\frac{\alpha_B}{2} = \pm\frac{\alpha_\Sigma}{32} = \pm 22°$ при 100 МэВ для протонов

deutron: $\pm\frac{\alpha_B}{2} = \pm\frac{\alpha_\Sigma}{32} = 1{,}82°$