

$$^{148}_{79}\text{Au} \quad Z = 79$$

$$A = 148$$

$$r = 108 \text{ m}$$

$$p = 1280 \text{ A} \cdot \text{MeV/c} \quad (?)$$

$$r_{\text{Larmor}} = A \cdot p, \quad Q_{\text{elbony}} = Z \cdot e$$

$$B = \frac{p}{q r} = \frac{Z \cdot e \cdot A \cdot p}{Z \cdot e \cdot r}$$

$$\text{po dosazení: } B = 0,62 \text{ T}$$

$$E = p c m_0 c^2$$

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$$v = \frac{p c^2}{E} = \frac{p c^2}{\sqrt{p^2 c^2 + E_{\text{kin}}^2}}$$

$$E_{\text{kin}} = A \cdot E_0, \quad E_0 = 937,5 \text{ MeV}$$

$$\Delta v = p c^2 \left(\frac{1}{E_1} - \frac{1}{E_2} \right) = 370 \text{ m/s}$$

$$\Delta f = \frac{\Delta v}{\lambda} = 3,42 \text{ Hz}$$

$$\vec{F} = e \vec{v} \times \vec{B}$$

$$F_D = \frac{v^2}{r} m$$

$$\text{přičemž } F_D = \frac{v^2}{r} m_0, \text{ tedy } F_D = \frac{v^2}{r} m_0 =$$

$$= \frac{v}{r} v$$

$$e v B = \frac{v}{r} v$$

$$B = \frac{v}{e r}$$