

$$\int\limits_0^{t_c} i(t)dt=Q, \; U(t)=\frac{1}{C}\int\limits_0^t i(t')\exp\left(\frac{t'-t}{RC}\right)dt', \; H\equiv U_{\max}=\frac{Q}{C}, \; N(H_1<H<H_2)=\int\limits_{H_1}^{H_2}\frac{dN}{dH}dH, \; G(H)=\frac{N_0}{\sigma\sqrt{2\pi}}\exp\left(-\frac{(H-H_0)^2}{2\sigma^2}\right), \; R=\frac{\Delta H}{H_0}=\frac{\Delta E}{E_0}, \; Q=N_{\rm c}e, \; H=KN_{\rm c}, \; \sigma_H=K\sqrt{N_{\rm c}},$$

$$\Delta H=2,35\sigma, \; F\equiv \frac{D_{N_{\rm c}}}{\overline{N}_{\rm c}}, \; E_{\rm f}=h\nu-\varepsilon_{\rm r}, \; E_{\rm C\;max}=\frac{h\nu}{1+\frac{m_0c^2}{2h\nu}}, \; h\nu'_{\rm min}=h\nu-E_{\rm C\;max}, \; E_{\rm C}(\theta)=h\nu\frac{\frac{h\nu}{m_0c^2}(1-\cos\theta)}{1+\frac{h\nu}{m_0c^2}(1-\cos\theta)}, \; h\nu=\frac{E_{\rm C}}{2}\left[1+\sqrt{1+\frac{4m_0c^2}{E_{\rm C}(1-\cos\theta)}}\right], \; i=\frac{Q{\bf E}v}{U_0}, \; i_0^{\pm}=N\frac{ev^{\pm}}{d},$$

$$U_{\max}\approx U_{\max}^-\approx \frac{Ne\,v^-}{C}\,t^-=\frac{Ne\,x_0}{C}\,\frac{1}{d}, \; {\bf E}(r)=\frac{U_0}{r\ln\frac{r_{\rm k}}{r_{\rm a}}}, \; \frac{{\rm d}N}{{\rm d}r}=-\Sigma_{\rm jon}(r){\rm d}r, \; \Sigma_{\rm jon}=\frac{p\sigma_{\rm sm}}{kT}\exp\left(-\frac{E_{\rm jon}\sigma}{kTe}\cdot\frac{p}{{\bf E}}\right), \; K=\frac{N}{N_0}=\exp\left[\int\limits_{r_{\rm a}}^{r_0}\Sigma_{\rm jon}(r){\rm d}r\right]\approx\exp\left[\int\limits_{r_{\rm a}}^{r'}\Sigma_{\rm jon}(r){\rm d}r\right], \; \sigma\sim\frac{1}{v},$$

$$^{10}_5\text{B}+^1_0\text{n}\rightarrow\left\{\begin{array}{ll} ^7_3\text{Li}+^4_2\alpha & +2,792\text{ MeV} \\ ^7_3\text{Li}^*+^4_2\alpha & +2,310\text{ MeV} \end{array}\right. \text{d}n=np(v)\text{d}v, \; \text{d}j=v\text{d}n, \; R=\sigma Nj, \; R\sim Nn. \; m_{\text{Li}}v_{\text{Li}}=m_{\alpha}v_{\alpha}, \; \sqrt{2m_{\text{Li}}E_{\text{Li}}}=\sqrt{2m_{\alpha}E_{\alpha}}, \; E_{\text{Li}}+E_{\alpha}=Q, \; E_{\text{Li}}=0,84\text{ MeV}, \; E_{\alpha}=1,47\text{ MeV};$$

$$E_{\rm at}=E_{\rm n}\frac{2A}{(1+A)^2}(1-\cos\Theta)=E_{\rm n}\frac{4A}{(1+A)^2}\cos^2\theta, \; P(\Theta){\rm d}\Theta=P(E_{\rm at}){\rm d}E_{\rm at}=\frac{\sigma(\Theta){\rm d}\Omega}{\sigma_{\rm s}}=2\pi\sin\Theta{\rm d}\Theta\frac{\sigma(\Theta)}{\sigma_{\rm s}}, \; P(E_{\rm at})\sim\sigma(\Theta), \; \sigma(\Theta)=\frac{\sigma_{\rm s}}{4\pi}=const, \; H=kE^{3/2}, \; \frac{{\rm d}N}{{\rm d}H}\equiv\frac{{\rm d}N/{\rm d}E}{{\rm d}H/{\rm d}E},$$

$$\Delta E=E_{\rm R1}+E_{\rm R2}-E_{\rm R}, \; U(R)=\frac{1}{4\pi\epsilon_0}\cdot\frac{Z_1Z_2e^2}{R}, \; E_R=\alpha A-\beta A^{2/3}-\gamma Z(Z-1)A^{-1/3}-\eta(N-Z)^2A^{-1}+C, \; ^{235}\text{U}+\text{n}\rightarrow ^{93}\text{Rb}+^{141}\text{Cs}+2\text{n}, \; k_{\infty}=\eta\varepsilon pf, \; \eta=\nu\frac{\sigma_{\rm d}}{\sigma_{\rm d}+\sigma_{\rm p}}, \; p=\exp\left[-\frac{2,73}{\langle\xi\rangle}\left(\frac{N_{238}}{N_{\rm L}\Sigma_{\rm s}}\right)^{0,514}\right],$$

$$f=\frac{\varSigma_{\rm a}({\rm K})}{\varSigma_{\rm a}({\rm K})+\varSigma_{\rm a}({\rm L})+\varSigma_{\rm a}({\rm S})}, \; \frac{{\rm d}N}{{\rm d}t}=\frac{(k-1)N}{\tau}, \; 1<k<\frac{1}{g}, \; Q=E_{\rm R}-E_{\rm R1}-E_{\rm R2}, \; \text{d}+\text{t}\rightarrow ^4\text{He}+\text{n}, \; \frac{m_{\rm x}v_{\rm x}^2}{2}+\frac{m_{\rm Y}v_{\rm Y}^2}{2}\approx Q, \; m_{\rm x}v_{\rm x}=m_{\rm Y}v_{\rm Y}, \; \sigma=\pi(R+\hat{\lambda})^2, \; \sigma\sim\frac{1}{v^2}\text{e}^{-2G}, \; G\sim\frac{1}{v},$$

$$\Phi=n_1n_2\langle\sigma v\rangle, \; \langle\sigma v\rangle=\int\limits_0^{\infty}p(v)\sigma(v)v{\rm d}v, \; p(v)\sim v^2\exp\left(-\frac{mv^2}{2kT}\right), \; W=\Phi VQ, \; E_{\rm r}=\Phi Q\tau=n_1n_2\langle\sigma v\rangle Q\tau, \; E_{\rm p}=3nkT, \; \Phi(t_{\rm a})=\lambda N(t_{\rm a})=\sigma N_0j(1-e^{-\lambda t_{\rm a}}),$$

$$N_{\rm c}=\frac{\sigma N_0j}{\lambda}(1-e^{-\lambda t_{\rm a}})e^{-\lambda t_{\rm tr}}(1-e^{-\lambda t_{\rm m}})f\varepsilon, \; E_2(180^{\circ})=E_1\left(\frac{M-m}{M+m}\right)^2, \; \sigma_{\Omega}=1,296\left(\frac{zZ}{E_1}\right)^2\left[\frac{1}{\sin^4(\theta/2)}-\left(\frac{m}{M}\right)^2+...\right], \; R_{\rm X}=I\sigma_{\rm X}nd, \; \mu_z=g_Jm_J\mu_{\rm N} \; (m_J=-J,-J+1,...,J-1,J),$$

$$\Delta E=g_J\mu_{\rm N}B, \; v_{\rm L}=\frac{\Delta E}{h}, \; \delta=10^6\,\frac{v-v_0}{v_0}, \; p(r,\phi)=\int\limits_{\rm A}^{\rm B}f(x,y){\rm d}l, \; \ln\left(\frac{I_{\rm A}}{I_{\rm B}}\right)=\int\limits_{\rm A}^{\rm B}\mu{\rm d}l$$