

**ΕΙΣΑΓΩΓΗ ΣΤΗΝ ΠΥΡΗΝΙΚΗ ΦΥΣΙΚΗ ΚΑΙ ΤΑ ΣΤΟΙΧΕΙΩΔΗ ΣΩΜΑΤΙΑ**  
**ΤΥΠΟΛΟΓΙΟ**

$m_e = 0.511 \text{ MeV}/c^2$		<hr/> <hr/>
$m_p = 938.27 \text{ MeV}/c^2$		$\pi$ $\nu$
$m_n = 939.57 \text{ MeV}/c^2$		<hr/>
$m_W = 80.4 \text{ GeV}/c^2$		$1s_{1/2}$ $1s_{1/2}$
$m_Z = 91.19 \text{ GeV}/c^2$		<hr/>
$m_\pi = 0.140 \text{ GeV}/c^2$		$1p_{3/2}$ $1p_{3/2}$
$c = 299792458 \text{ m} \cdot \text{s}^{-1}$		$1p_{1/2}$ $1p_{1/2}$
$e = 1.602177 \times 10^{-19} \text{ C}$		<hr/>
$N_A = 6.022 \times 10^{23} \text{ mole}^{-1}$		$1d_{5/2}$ $1d_{5/2}$
$\hbar c = 197.327 \text{ MeV} \cdot \text{fm}$		$2s_{1/2}$ $2s_{1/2}$
$1 \text{ u} = 931.494 \text{ MeV}/c^2$		$1d_{3/2}$ $1d_{3/2}$
$\alpha = \frac{e^2}{4\pi\epsilon_0\hbar c} = \frac{1}{137.036}$		$1f_{7/2}$ $1f_{7/2}$
$B(A, Z) = a_v A - a_s A^{2/3} - a_c \frac{Z^2}{A^{1/3}} - a_{sym} \frac{(A - 2Z)^2}{A} - \delta a_p \frac{1}{A^{1/2}}$		$1f_{7/2}$ $2p_{3/2}$
$a_v = 15.6372 \text{ MeV}$		$1f_{5/2}$ $1f_{5/2}$
$a_s = 17.2819 \text{ MeV}$		$2p_{3/2}$ $2p_{1/2}$
$a_c = 0.70877 \text{ MeV}$		$1f_{5/2}$ $1g_{9/2}$
$a_{sym} = 23.19 \text{ MeV}$		<hr/>
$a_p = 12.839 \text{ MeV}, \quad \delta = 0 \pm 1$		$2p_{1/2}$ $2d_{5/2}$
$\mu = \mu_N \left[ \frac{1}{2}(g_l + g_s)j + \frac{1}{2}(g_l - g_s) \frac{(l - s)(l + s + 1)}{(j + 1)} \right]$		$1g_{7/2}$ $1g_{7/2}$
$g_s(p) = +5.59$		$1g_{9/2}$ $1h_{11/2}$
$g_s(n) = -3.83$		$3s_{1/2}$ $3s_{1/2}$
$\mu_N = \frac{e\hbar}{2m_p}$		$1g_{7/2}$ $2d_{3/2}$
$\lambda(E1) = 1.0 \times 10^{14} \text{ A}^{2/3} \text{ E}^3$	$\lambda(M1) = 0.56 \times 10^{14} \text{ E}^3$	$2d_{5/2}$ $2f_{7/2}$
$\lambda(E2) = 7.3 \times 10^7 \text{ A}^{4/3} \text{ E}^5$	$\lambda(M2) = 3.5 \times 10^7 \text{ A}^{2/3} \text{ E}^5$	$1h_{9/2}$ $1h_{9/2}$
$\lambda(E3) = 34 \times \text{A}^2 \text{ E}^7$	$\lambda(M3) = 16 \times \text{A}^{4/3} \text{ E}^7$	$3p_{3/2}$ $3p_{3/2}$
$\lambda(E4) = 1.1 \times 10^{-5} \text{ A}^{8/3} \text{ E}^9$	$\lambda(M4) = 4.5 \times 10^{-6} \text{ A}^2 \text{ E}^9$	$1h_{11/2}$ $1i_{13/2}$
		$2d_{3/2}$ $2f_{5/2}$
		$3s_{1/2}$ $3p_{1/2}$
		<hr/>
		$2g_{9/2}$ $2g_{9/2}$
		$1h_{9/2}$ $1i_{11/2}$
		$2f_{7/2}$ $2g_{7/2}$
		<hr/> <hr/>

