RELATIVE ATOMIC MASSES OF THE ELEMENTS

The particular solutions of the wave probabilistic equation $\hat{} - \frac{1}{c^2} \frac{^2 \hat{}}{t^2} = 0$ [1-3]

$l = m = 0$

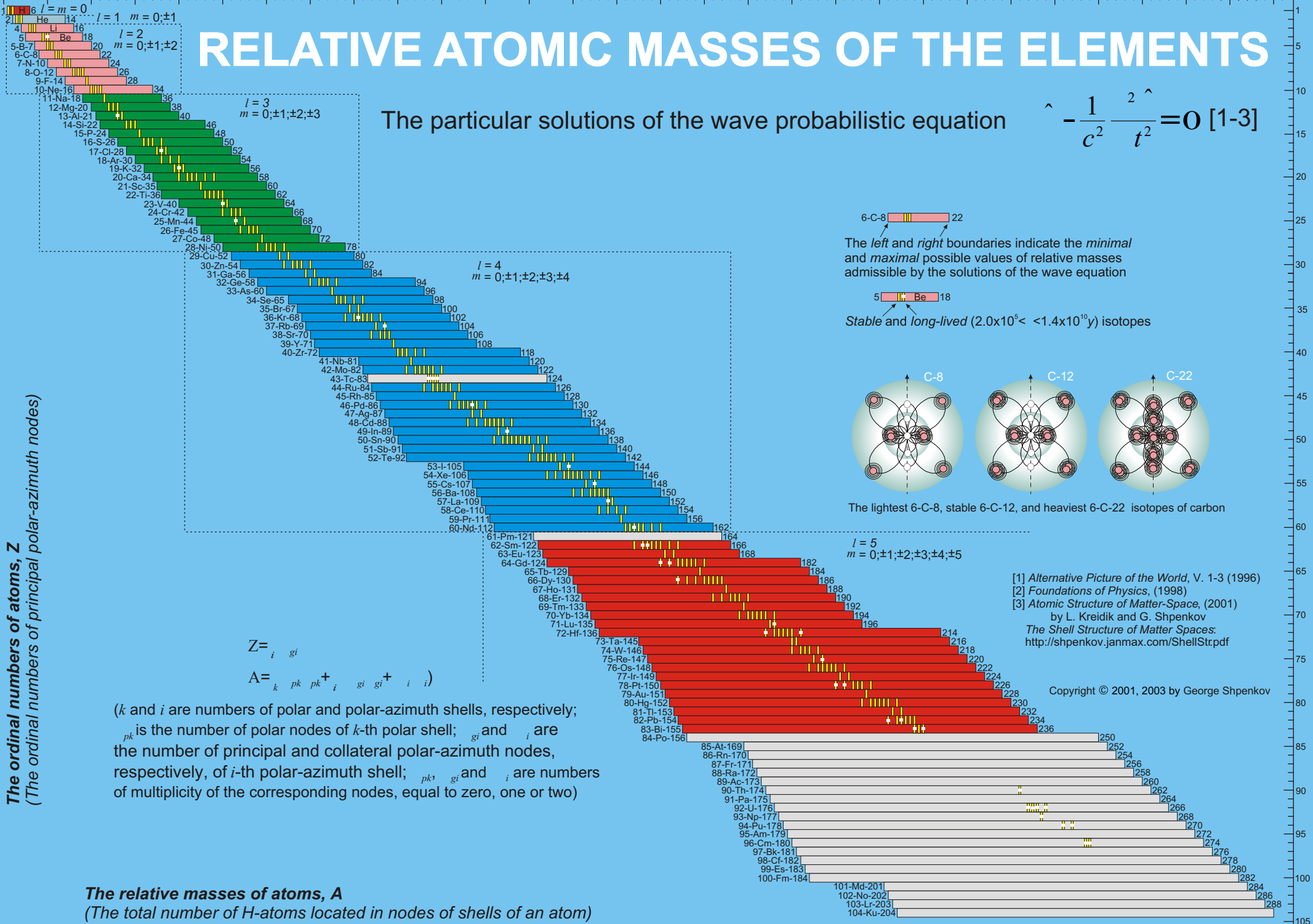
$l = 1$ $m = 0;\pm1$

$l = 2$ $m = 0;\pm1;\pm2$

$l = 3$ $m = 0;\pm1;\pm2;\pm3$

$l = 4$ $m = 0;\pm1;\pm2;\pm3;\pm4$

$l = 5$ $m = 0;\pm1;\pm2;\pm3;\pm4;\pm5$



6-C-8 22

The *left* and *right* boundaries indicate the *minimal* and *maximal* possible values of relative masses admissible by the solutions of the wave equation

5 Be 18

Stable and *long-lived* ($2.0 \times 10^5 <$ $< 1.4 \times 10^{10}$ *y*) isotopes

The lightest 6-C-8, stable 6-C-12, and heaviest 6-C-22 isotopes of carbon

$Z = {}_{i}\ {}_{gi}$

$A = {}_{k}\ {}_{pk}\ {}_{pk} + {}_{i}\ {}_{gi}\ {}_{gi} + {}_{i}\ {}_{i})$

(k and i are numbers of polar and polar-azimuth shells, respectively; ${}_{pk}$ is the number of polar nodes of k-th polar shell; ${}_{gi}$ and ${}_{i}$ are the number of principal and collateral polar-azimuth nodes, respectively, of i-th polar-azimuth shell; ${}_{pk}$, ${}_{gi}$ and ${}_{i}$ are numbers of multiplicity of the corresponding nodes, equal to zero, one or two)

The ordinal numbers of atoms, Z
(The ordinal numbers of principal polar-azimuth nodes)

The relative masses of atoms, A
(The total number of H-atoms located in nodes of shells of an atom)

[1] *Alternative Picture of the World*, V. 1-3 (1996)
[2] *Foundations of Physics*, (1998)
[3] *Atomic Structure of Matter-Space*, (2001)
by L. Kreidik and G. Shpenkov
The Shell Structure of Matter Spaces:
http://shpenkov.janmax.com/ShellStr.pdf