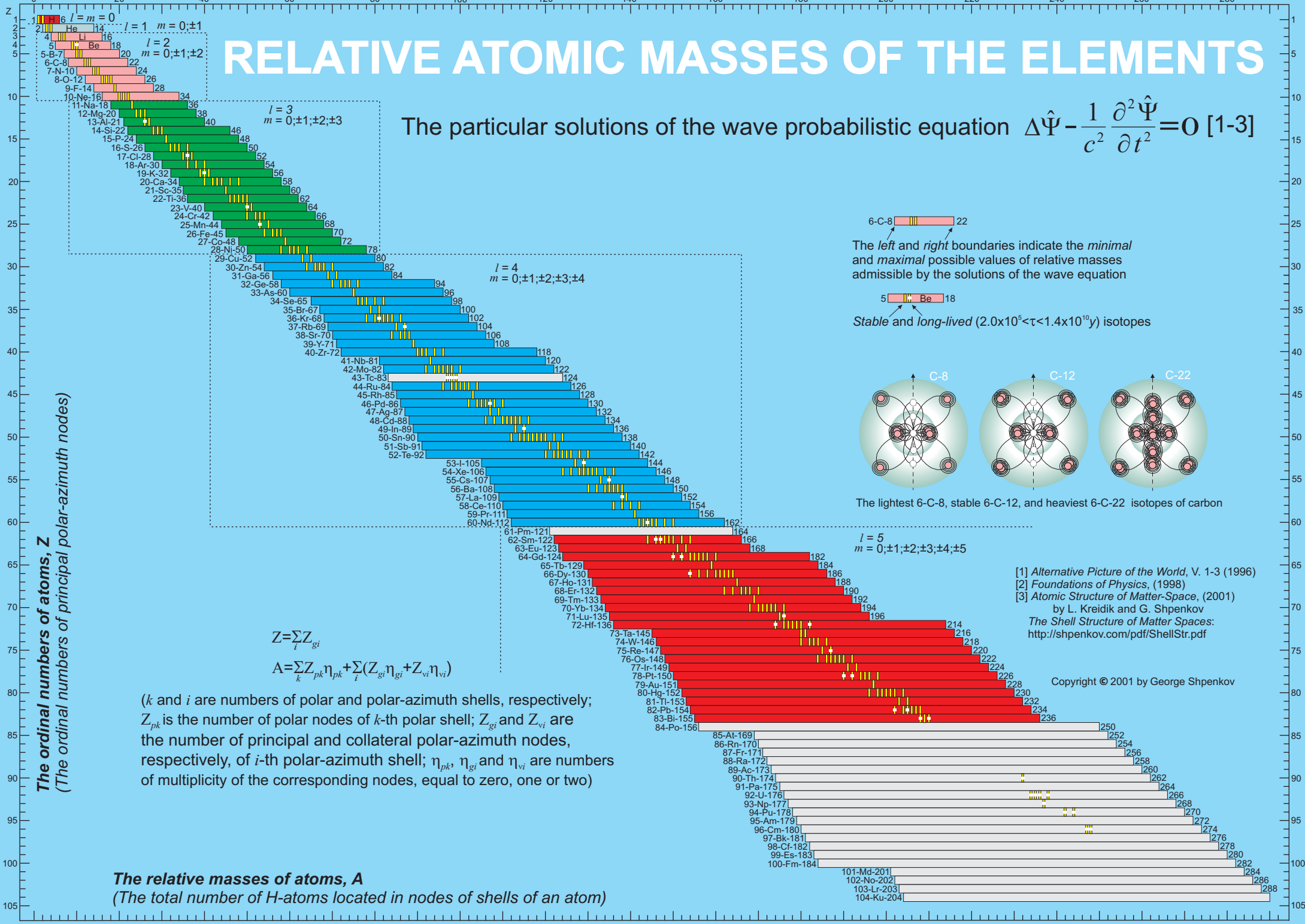


# RELATIVE ATOMIC MASSES OF THE ELEMENTS

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



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

$$Z = \sum_i Z_{gi}$$

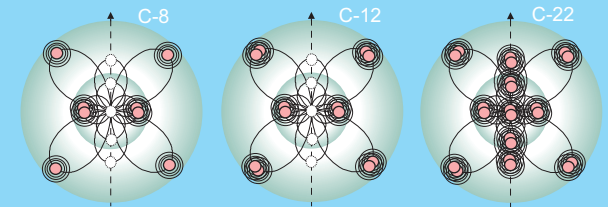
$$A = \sum_k Z_{pk} \eta_{pk} + \sum_i (Z_{gi} \eta_{gi} + Z_{vi} \eta_{vi})$$

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

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

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 ( $2.0 \times 10^5 < \tau < 1.4 \times 10^{10} y$ ) isotopes



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

- [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.com/pdf/ShellStr.pdf>

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