

## PROPOSED LINK BETWEEN THE PERIODIC TABLE AND THE STANDARD MODEL

**John O Roberts**

Freelance and former Open University Tutor, United Kingdom

**T**he patterns of stable quantum states in the periodic table are inverted and extended to infinity in both directions to accommodate spatial variation relative to the nucleus. The upper end leads to a cut off point for white matter. The lower end represents quantum states in plasma. At  $10^{-15}$  m to  $10^{-20}$  m the interaction between weak and strong gravity forces results in suitable boundary conditions for the production of elementary particles. Chemical classification of the elements requires convergence of chemical properties and quantum states. By defining group number as the maximum number of electrons in any one shell, Hydrogen and Helium are moved to the first set of  $2(1)^2$  states first proposed by Janet. The atomic numbers are adjusted and mass number removed as it is an average of isotopes of each element produced in every supernova. This produces the Roberts Janet Nuclear Periodic Table which proposes two zero states, a cut off and start point, of the electric field in attractive than repulsive modes. By symmetry of these fields energy states emerge in plasma with the counter intuitive property that the nearer the nucleus the greater the number of energy states. Fusion results and the consequential recycling implies a more rapid collapse than supernovae given sufficient energy density that could create an as yet unobserved interaction at  $10^{-50}$  m to  $10^{-65}$  m between the strong and gravity forces. String theory and extra dimensions may be required to explain such mechanisms and multiverses.

### Biography

John Owen Roberts has been an Open University Science Tutor for 30 years having attended Rutherford-Appleton Lab and CERN as a Summer School Student. He has been a freelance tutor of Maths, Physics and Chemistry for many years and wrote the book "Those Infinities and the Periodic Table" over a period of 5 years from an idea in December 2010.

[johnroberts048@gmail.com](mailto:johnroberts048@gmail.com)