

## Dark proton strings and genetic code

1. Predictions of the model.
  - (a) Outcome of a model for dark nucleus as nucleon string requiring a model of nucleon (p/n) as 3-quark state forming a string like entity itself.
  - (b) The size scale of dark quark should be about atomic length scale from which one can estimate the value of  $h_{eff}$ .
  - (c) Model assumes breaking of rotational symmetry to subgroup of rotations around the axis of the nuclear string identified as magnetic flux tube.
  - (d) The 3 quark states are built as tensor products of representations of rotation group and weak  $SU(2)_L$  and are color singlets. Also colored states could be considered.
2. Connection with the genetic code.
  - (a) The 3-proton states can be arranged into multiplets such that the numbers of states inside multiplets correspond to numbers of DNA and RNA (64), aminoacids (20) and tRNA.
  - (b) The states inside "DNA" and "RNA" multiplets can be mapped to the states of "amino-acid" multiplets in a natural manner and the numbers of "DNA"s/"RNA"s mapped to a given amino-acid are same as for vertebrate genetic code.
3. This suggests following:
  - (a) dark protons realize genetic code at the level of dark nuclear physics prebiotically.
  - (b) chemical realization and possible realizations based on electromagnetic radiation have emerged later.
4. The findings of Pollack provide additional support for the notion.
  - (a) The feed of energy to water bounded by gel say as visible or IR radiation leads to a formation of negatively charged region of thickness of few micrometers and consisting of water molecule layers obeying  $H_{3/2}O$  formula are formed. The outside region becomes positively charged. All impurities in the region are cleared and a voltage is generated so that the system be used as battery. Solar light induces the phenomenon. Pollack he explains by postulating fourth phase of water.
  - (b) Very similar phase results from the splitting of water as "Brown's gas" (discovered long time ago but not taken seriously by mainstream)
  - (c) Pollack's findings can be understood if 1/4:th of protons goes to the flux tubes of magnetic body assignable to the negative charged region and form dark proton sequences realizing genetic code. This kind of regions would define prebiotic cell.
  - (d) The transformation of dark protons to ordinary would liberate metabolic energy so that one would also have primitive forms of photosynthesis and metabolism.
5. This inspires the proposal that water represents primordial life form with biomolecules replaced with dark proton sequences.
  - (a) Water is known to obey the formula  $H_{3/2}O$  in attosecond time scale in the sense that 1/4:th of protons are invisible in neutron diffraction and electron scattering. As if these protons were dark. The proposal was that they correspond to protons with large  $h_{eff} = n \times h$ .
  - (b) Water memory and homeopathy could be understood in terms of the polymer-like structures formed by dark proton sequences. The process giving rise to homeopathic remedy would feed metabolic energy creating cell-like regions discovered by Pollack and realizing genetic code.

- (c) These regions could mimic bio-active molecules. In particular the cyclotron frequencies associated with their magnetic body could become same as for the bio-active molecule and allow to mimic the molecule and actually replace it in biological body so that there would be no harmful effects.
  - (d) Immune system could rely on this basic mechanism and also the purifying effect of the fourth phase of water.
6. Since 99.9 per cent of molecules in living matter are water molecules, the idea that this primordial life is in symbiosis with chemical life.
- (a) Dark analogs of basic bio-molecules could define R&D laboratory allowing to test various variants of DNA.
  - (b) This would require transcription of dark DNA to ordinary one and vice versa. Maybe same for other basic biomolecules.