Pollack's findings about exclusion zones and fourth phase of water

1. Pollack's observations
   (a) Experiment: feed energy into water bound by gel phase. Visible or IR light. For instance, solar radiation induces the phenomenon. Surface blood circulation is stimulated. Red blood cells receive metabolic energy.
   (b) A negatively charged layer is formed at the surface of gel and has thickness of few micrometers. The layer consists of water molecule layers. Stoichiometry is $H_{3/2}O$ instead of H_2O. 2-D hexagonal lattice structure.
   (c) The region outside the layer becomes positively charged.
   (d) All inpurities in the layer are transferred to outside. One could purify water: for instance, remove salt from sea water.
   (e) A voltage develops between outside and the layer. Electric battery providing energy
   (f) The water is gel like. Pollack postulates the existence of a fourth phase of water, which is gel like.
2. Brown's gas
   (a) In the splitting of water to hydrogen and oxygen similar phase is formed. Known as Brown's gas and has many other names. Brown's gas was discovered long time ago but main stream refuses to take it seriously (see Wikipedia article).
   (b) Also now one feeds energy to water. This is achieved by putting the water in strong electric field, by irradiating it, by feeding acoustic waves producing cavitation.
   (c) Negatively charged bubbles are formed. The regions outside bubbles must be positively charged.
   (d) Brown's gas has magic looking properties. It does not affect living matter but melts metal although its temperatures is of order 100 Celsius and the melting temperature of metals are measured in thousands of Kelvins.
3. Anomalies of waterThe behavior of water involves a large number of anomalies. Just two examples.
   (a) $H_{3/2}O$ stoichiometry in attosecond time scale. Every fourth proton is dark in electron scattering and neutron diffraction. Are these protons dark matter?!
   (b) Water memory forms basis of homeopathy. Despite the fact that HIV Nobelist Montagnier reported this kind of phenomenon, main steam refuses to even discuss about the possibility of the phenomenon.
   (c) These findings lead to ask
      i. What happens to every fourth proton? Does it transform to dark matter? Is dark matter something very different from what we have speculated?
      ii. Could ordinary particles be in dark phase and is this kind of phase generated in the above described phenomena?
   (d) The findings of Pollack can be understood in TGD framework.
      i. Every fourth proton is dark and is transferred to the regions outside the layer.
      ii. Dark matter corresponds in TGD Universe to a phase with large Planck constant: $h_{eff} = n \times h$ phases at the "magnetic body" of the system (negatively charged region now). Magnetic body corresponds in Maxwell's theory to the magnetic fields generated by the system. Magnetic body consists of flux quanta (flux tubes and -sheets).
      iii. If dark protons with say size scale of atomic size reside at flux tubes, one can assume that they form strings forming dark atomic nuclei. Also ordinary nuclei consist of strings of dark protons and strings of neutrons.

iv. The quantum states of dark protons consist of 3 quarks and simple model involving rotational symmetry around the axis of dark proton string predicts that the states of dark proton can be arranged into groups which correspond to DNA, RNA, amino-acids and possibly also tRNA molecules. Vertebrate genetic code can be realized as a natural correspondence between DNA/ RNA and amino-acids.

v. Negatively charged regions could define prebiotic cell and water would be primitive prebiotic life-form. The voltage would be the analog of the resting potential in cell. The transformation of dark protons to ordinary ones would liberate metabolic energy so that primitive metabolism and photosynthesis would be realized.

vi. The strings of dark protons would be analogous to basic biopolymeers serving as the basic fuel of metabolism hydrolyzed in metabolism.

vii. Tajmar et al explain the finding that the mass of Cooper pair in rotating super computer is by a fraction of order 10^{-4} larger than it should be in terms of huge gravimagnetic effect 10^{28} times larger than in GRT. The Thomson magnetic field is proportional h_{eff}^2 and assuming $h_{eff} = h_{gr} = 2GMm_e/v_0$ for flux tubes connecting pair to Earth space-time sheet one obtain the needed value. Cyclotron energy spectrum would be universal and independent of ion and in the range of biophoton energies conforming with the hypothesis that dark EEG photons decay to biophotons. The generalization $h_{eff} = h_{em} = Z_1Z_2/v_0$ would apply to exclusion zones.

(e) These considerations suggest that also ordinary metabolism should contain transformations of ordinary protons to dark protons and vice versa as basic step. The rest would be chemistry.

i. The basic goal of the metabolism is to transform the metabolic energy contained by glucose to the electro-magnetic energy stored by the proton gradient over the inner mitochondrial membrane. Citric acid cycle takes care of this. Same happens also in photosynthesis in storage of photon energy to ATP.

ii. This takes place by electron transport chain involving several times generation of NADP and proton as the electron goes down the chain and loses its energy. Proton is transferred through the inner mitochondrial membrane. This is analog for what happens when fourth phase of water is formed. Ordinary protons would become dark in the process.

iii. In ADP-ATP transition three protons flow back trough the cell membrane. They force the shaft of the ATP synthase motor to rotate and phosphorylate three ADP:s to ATP per turn. Dark protons transform to ordinary ones and membrane potential is reduced slightly. Metabolic energy would thus generate dark protons and perhaps negentropic entanglement.

iv. In case of cell membrane one must generalize the notion of Josephson energy E_J by factor of order 10 smaller than metabolic energy quantum of order .5 eV. The assumption is that protons are at flux tube going through cell membrane such that magnetic field strength is different at the two sides. Cyclotron energy adds to the ordinary $E_J$and dominates over it for large enough h_{eff}.