

## Communications between MB and BB

MB receives data from BB and controls using dark photon signals. In control dark photons transform to ordinary photons such as bio-photons inducing molecular transitions. The communication between levels with same  $h_{eff}$  involve both **frequency- and energy resonance**. The communication between levels with different value of  $h_{eff}$  in particular between MB and BB, involve only **energy resonance** so that frequency can change (increase) dramatically.

1. The **cyclotron frequencies** of biologically important ions (say Ca ion) seem to be involved with control by MB (<http://tinyurl.com/rqhwajb> and <http://tinyurl.com/rqhwajb>). If the system lacks these ions the communications to magnetic body fail. For instance, Lithium corresponds to a cyclotron frequency around 50 Hz and Li depletion is known to be important (depression, axonal infection). MB loses control of BB or does not get information from BB.
2. Cell membrane as **generalized Josephson junction** (<http://tinyurl.com/us6e46m> and <http://tinyurl.com/r7bxzrk>) with flux tubes serving as junctions in protein scale (ion pumps and channels) generates **generalized Josephson radiation**, whose frequency sum of ordinary Josephson frequency for  $h_{eff}$  and difference of cyclotron frequencies at two sides of the membrane. Josephson frequency is proportional to membrane voltage and its modulation carries information about electric events near the membrane communicated to MB. Whale's song is analog for **frequency modulation**.

If the communication to MB fails, MB does not know about BB and cannot control appropriately. Also the reception of control signals from MB can fail. This would define a very general class of **diseases as communication problems**.

1. The reason could be **lack of flux tube antennas** provided by water. One should somehow restore them. Could the irradiation of water at frequencies involved with the communications with MB generate these antennas as water memory.
2. It can also happen that **MB cannot produce dark photons with correct energy**,  $h_{eff}$  and thus cyclotron energy could be too small so that the ordinary photons generated by dark photons would not be in energy-resonance with say bio-molecules. The **feed of metabolic energy by (say) irradiation** could increase  $h_{eff}$  at MB and cure the situation.
3. Schumann frequencies and dark photons at these frequencies might be important for the communications with the MB of Earth responsible for coherence in the scale of collective consciousness. The findings of Callahan suggests that weak Schumann resonances correlate with social problems. Also plants grow faster when paramagnetic substance is added to the soil. The reason could be that flux tube dipoles coupling to Schumann resonances get stronger as cyclotron Bose-Einstein condensates get more coherent. Increase of the coupling to Schumann resonances by **increasin the dipole strengths of dark flux tube dipoles** could help.