

Objection against bio-harmony

Objection: Is it is **not possible to emit 3 dark photons simultaneously!** Extremely unprobable process.

Number theoretical physics (<http://tinyurl.com/zy1rd7w>) is central part of quantum TGD and quantum biology and provides physical correlates for cognition. It explains dark matter as $h_{eff} = nh_0$ phases of ordinary matter with n identified as order of Galois group of extension of rationals and as dimension of extension. Number theoretical physics suggests a solution of the problem.

1. Analogy with **color confinement**. Protons consist of 3 quarks. Free quarks do not appear in final states. Color symmetry and color confinement. There must be a symmetry such that dark photons have new quantum numbers which vanish for physical states such as dark photon triplets.
2. What these quantum numbers could be? The only candidate, which comes in mind are discrete quantum numbers related to the Galois group of extension of rationals defining number theoretic symmetry. For ordinary $h = 6h_0$ Galois group has $n = 6$ elements and equals to $Z_6 = Z_2 \times Z_3$.

It appears as subgroup of higher Galois groups for which $h_{eff} = n \times h = 6nh_0$ one would have extension of extension. Z_3 confinement would require 3-photon states, which are Z_3 singlets with number theoretic colors summing up to zero. One would obtain only 3-chords. Ordinary photons would Z_3 singlets.

3. Also the 3 protons of **DDNA codon** could form Z_3 triplet. Number theoretic color confinement would allow only 3-proton triplets. Genetic code is predicted correctly and the number letters in the codons is predicted to be 3.

Number theoretical confinement for larger Galois groups suggests **new hidden discrete symmetries** implying new selection rules. The larger the degree n (h_{eff}) the larger the scale in which confinement holds true. For instance, **genes** could be analogs of color singlet many particle states for a larger subgroup.