# Quantum model of qualia

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1. is motivated by analogy

    (a) physical states states of subsystem are labelled by quantum numbers

    (b) Qualia associated with quantum jump are labelled by quantum number increments for sub-system in state state function reduction

2. assumes ZEO and the proposal for how arrow of time is generated implying that the generation of qualia means flow of quantum numbers between subsystem and environment in repeated quantum jumps at changing the WCW wave function assignable to the moduli of second boundary of CD (nothing happens at second boundary) which also assumed in the model for sensory receptor

3. classifies qualia according to the character of quantum number increments:

    (a) the increments of standard model quantum numbers should correspond to basic sensory qualia.

    (b) increments in zero modes should correspond to "geometric qualia": such as position of the object.

4. suggests that geometric qualia could be realized as chart maps at magnetic flux tubes of magnetic body using frequency coding.

    (a) Frequency would code for position at the flux tube carrying varying magnetic field strength defining cyclotron frequency as resonance frequency.

    (b) Magnetic body would provide representation of biological body.

    (c) During OBEs and hallucinations the sensory in put allowing updating of this representation would not be present.

5. suggests a model of visual colors:

    (a) Visual colors correspond to increments of quark color! This would give actual content for the jokingly introduced term "quark color"

    (b) This is allowed in TGD predicting hierarchy of scaled up variants of QCD like physics: in particular four of them for Gaussian Mersennes with p-adic length scales in the range 10 nm (cell membrane thickness) 2.5 $\mu$m (size of cell nucleus)

    (c) This conforms also with the finding of topologist Barbara Shipman that the mathematics of quark color pops up in the model for honeybee dance