1 QUESTIONNAIRE

INITIAL HERE	QUESTION 1: WHAT IS THE DEFINITION/STRUCTURE OF A PHOTON?	initial here	QUESTION 2: NATURE OF ELECTROMAGNETISM (QUANTIZED, NON- QUANTIZED, WAVE VS PHOTON, ETC)?
АМ	A photon is a self-generated soliton (a long-lived resonance) in 4-space. Its orthogonal E- and B -fields are distortions in the space.	AM	EM radiation is orthogonal oscillations of spacetime It can be quantized (photonic) or not. Maxwellian radiation is not necessarily photonic

2 QUESTIONNAIRE

initial here	QUESTION 3: INTERNAL STRUCTURE OF THE ELECTRON?	initial here	QUESTION 4: WHAT IS CHARGE?
АМ	An electron is a mono-energetic photon that is twisted and wrapped into a closed structure to provide outgoing E lines of only one type. It is co-created with a positron having oppositely directed E lines.	AM	Charge is a concentration of electric field lines. It can be quantized (e.g., by resonance of a photon or an electron) or unquantized (as in EM radiation).

initial here	QUESTION 5: WHAT IS REST MASS? (WHY IS PHOTON'S REST MASS ZERO? IS RESTMASS INVARIANT?)	initial here	QUESTION 6: WHAT IS SPIN? (QUANTUM NUMBER, ANGULAR MOMENTUM, ETC)
АМ	Rest mass is a long-term distortion of space into time. A photon can only exist in motion therefore it has no rest mass. Matter consists of elementary particles that are resonances giving stability to the distortion.		Spin is a result of resonant vortices in spacetime (about the time axis?) that are the basis of fundamental particles and of QM wave motion.

initial here	QUESTION 7: WHAT IS QUANTIZATION? (RESONANCE, JARGON, ETC?)	initial here	QUESTION 8: FORMATION OF THE ELECTRON
AM	Quantization is another name for resonance.	AM	Electrons are formed (along with the positrons necessary to maintain charge balance) from an energetic photon that is 'twisted' & 'split' (rectified) in the strong field gradient of a nuclear Coulomb field. Stability is provided by the potential of a wormhole (vortex in 4-D) connecting the electron and positron.

initial here	QUESTION 9: CAN A PHOTON BE CHARGED?	initial here
AM	If a photon is twisted so that all E -lines are facing in one direction, then it is unstable, but appears to be charged. If it is curled with all lines out (or in), then it is stabilized and is a single charge as seen from either space or time.	AM

QUESTION 10: BY WHAT MECHANISM IS THE PHOTON TWISTED?	initial here	QUESTION 11: WHAT IS SPACE? (EMPTY, DIELECTRIC, ETC.?)	initial here
A portion of a circular-polarized photon, in the presence of a very strong E , is prevented from rotating; therefore it is 'untwisted'. A linear-polarized photon must be twisted (by a torque on the photon's spin) at 180 deg/1/2 wavelength to keep the oscillating E facing outward to form the charge of an electron.	A N 4	We exist in a 3-space 'membrane' that has a minor extention into time. Its distortions are the source of the electrical, nuclear, and gravitational properties we observe. The full nature of this 'space' is still to be determined.	АМ
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7 QUESTIONNAIRE

QUESTION 12: WHAT IS TIME (4TH DIMENSION, UNIQUE, ETC)	initial here	QUESTION 13: IS THE SPEED OF LIGHT IN SPACE A CONSTANT?	
Time is a 4th dimension that differs from those of 3-space in which our existence is more limited or 'confined' (a shockwave?) in some manner.	AM	Yes! It depends on the propagation velocity of waves ('small' deformations) in 4-space.	