

ALL REFERENCE FRAMES ARE STATIONARY RELATIVE TO THEIR DETECTION AND PERCEPTION OF INCOMING LIGHT AT  $c$ . OUTGOING LIGHT IS UNDETECTABLE.

NO REFERENCE FRAME CAN DETECT OR PERCEIVE OTHER REFERENCE FRAMES DIRECTLY, ONLY THEIR OWN DETECTION AND PERCEPTION OF INCOMING LIGHT FROM THOSE OTHER FRAMES.

THEREFORE DETECTION AND PERCEPTION OF LIGHT IS A REALITY PROCESSING PHENOMENON AND THE EXISTENCE OF CLASSICAL MOTION IN REALITY CANNOT BE CONFIRMED.

[process this for several hours or just stare at it and meditate on it. contemplate it. then tell me if you think you understand:](#) RELATIVISTIC QUANTUM MECHANICS.

[This theory is applicable to massive particles propagating at all velocities up to those comparable to the speed of light  \$c\$ .](#) this last definition is a tricky one though since all sub- $c$  velocities compared to  $c$  differ by exactly  $c$ , thus confirming,  $c$  is a reality processing rate, not a true velocity in classical space. [in relativistic quantum field theory particles are interpreted as field quanta.](#) thus the appearances of particle motions are field phenomena and perhaps may not be confirmable as classical motions. this is similar to the common knowledge that waves of water on the ocean are not water moving horizontally but rather undulating up and down. thus all of the perceived change and motion in reality may be merely caused by undulations propagating, not classically moving substance. if a proton in a collider is actually just a propagating wave it can be said that there is no actual linear classical motion of anything of substance. even if fields have some subtle undetectable substance to them, the appearance of motion could be perceived without that subtle substance actually changing location. undulation of the subtle substance would be enough to produce the perception of motion.

the appearances of particle annihilations are not annihilations at all but rather transfer of energy to another field. it is not known what is the actual substantiality of fields. fields are detectable only by interactions within a field or with other fields which release detectable energy. the existence of undetectable fields can never be ruled out. any claim of absolute insubstantiality of any field is irrational if interaction with it is to be considered possible. fields have properties of behavior. nothing truly insubstantial can have properties. though the term viscosity is usually applied to liquids easily detected by the senses, no subtle field or otherwise can be even said to be a field without a kind of viscosity describing its behavior. light cannot exceed the speed of light. a field cannot by nature separate from itself. if it could it would then be considered made of physical parts, having a kind of atomic structure which fields do not. fields behave as pure liquids, not to be thought of like water which is made of parts of something else, hydrogen atoms and oxygen atoms.

since each field has its own viscosity-like properties like molasses compared to water, it is irrational to rigidly assume absolute limits on wave propagations, the appearances of classical velocities. and since the term energy does not refer to anything of actual substance, but rather the undulations of substance, subtle or gross, energy is infinitely fungible. it can be transferred to any field which can contain it. thus, superluminal propagation in subtle fields cannot be ruled out. thus it follows that superluminal propagation, rather than being assumed to involve causality violations, can be thought of rather as participating in overall causality in the cosmos.

further, it cannot be assumed that all real entities need include the subluminal fields. neither can it be assumed that subluminal entities, which are field interaction phenomena, cannot transfer their harmonic field interaction patterns to superluminal fields without loss of information. difficulty in achieving this of course can be assumed since it is obvious.

thus human potential for superluminal propagation spacecraft is not ruled out. classical methods certainly are. in the reasoning of this paper, classical velocities do not exist in nature. that is all appearances. the inviolability of  $c$  along with the non-additive nature of classical velocities in the neighborhood of  $c$  is irrational apart from the concept of this paper or some nearly identical concept. all appearances of classical motion is propagation of interacting field phenomena which could extend indefinitely up into realms of subtler field interactions. no arbitrary limits should be placed on human potential until or unless we encounter a decisive hard-SKY limit.