

Directed Energy Beam (DEB) Systems: Contrasting Static Field Matter-Wave Defense Shields with Propagating *Phaser* Waves

Richard L Amoroso^{1,2}, Salvatore Giandinoto^{1,3} and Sabah E Karam^{4,5}

¹Noetic Advanced Studies Institute, Hogan's Wash, Escalante Desert UT 84714 USA

²amoroso@noceticadvancedstudies.us, ³salgino20@yahoo.com

⁴Morgan State University, 1700 E Cold Spring Ln, Baltimore, MD 21251 USA

⁵sabah.karam@morgan.edu

Abstract. Current DOD Directed Energy Solutions saliently consist of high-powered lasers and hypersonic projectiles, soon to become trailing edge programs. The interim provides prudence to prepare for an imminent paradigm shift to new classes of Vacuum Energy Based DEB (VEBDEB) technology. Utility of vacuum energy, like the discovery of electricity leads to numerous VEBDEB technologies; we contrast two here, Static Field Matter-Wave Defense Shields, and Phased-Array Pulsed Energy Projectile Weapons. Key to implementation is understanding the cellular automata-like Least-Cosmological Unit (LCU) tessellating space sufficiently, allowing access to *higher dimensions* by utilizing the LCU basis of the inherent Dirac hypertube Randall-Sundrum warped-throat – a space-antispac correspondence of cyclic wormhole XD-LSXD duality. Also mandatory is bulk universal quantum computing (UQC). Modeling DEB technology, inspired by Einstein's long quest for a final unified theory, is based on a Unified Field Mechanical (UFM) Ontological-Phase Topological Field Theory (OPTFT) derived from modified M-theory, parameters of the Wheeler-Feynman-Cramer Transactional Interpretation, with combined extensions of a de Broglie-Bohm Implicate Order super-quantum potential as a Unified Field *force of coherence* control factor. DEB devices are multiphasic. Operationally, vacuum energy transfer occurs by nonlocal UF phase adduction/subduction interference nodes in dynamic-static Casimir-Polder resonant interactions pertinent to bumps and holes within a covariant polarized Dirac vacuum as the most salient feature of cyclical harmonic coupling to mirror symmetric *nonlocal antispac* (vacuum), rather than currently employed semiclassical quantum phenomena in *local* 3-space as will be demonstrated in experimental studies of antispac incursive resonance. Additionally, beam emission requires a new dual class of nonlocal OCHRE (Oscillation Coupled Helicoid Resonance Emission) in tandem with localized OCRET (Optically Controlled Resonance Energy Transfer) to produce ballistic-like conduction of vacuum energy by the summation of cyclical resonant incursive oscillations within the structure of cellular LCU tessellating spacetime as a means of mediating the additional dimensionality (XD) of brane topological phase transitions in the *Bulk*. Finally, device operation requires an M-theoretic form of scalable UQC, a paradigm shift beyond confines of the locality-unitarity basis of presently standard Copenhagen quantum theory. Note: QED is now formally violated at the Sigma-6 level, in anticipation of new physics.

References

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