News

Groundbreaking New Results in Consciousness, Quantum Brain & Nonlocality Research

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ABSTRACT

Michael Persinger's Group at Laurentian University, Canada, have obtained groundbreaking new results in consciousness, quantum brain & nonlocality research which are published in this Special Issue. These new results together with what have already been achieved in these fields in the past such as the results of Hu & Wu, Persinger's team and some of other researchers have important implications for further advancements of these fields.

Key Words: photon emission, biophoton, brain, magnetic field, nonlocality, potential entanglement.

The above photograph shows most people in Professor Michael Persinger's Neuroscience Research Group involved with consciousness research on site at Laurentian University: Top row (left to right): Joey Caswell, Brendan Lehaman, David Vares, Blake Dotta, Andrew Lapointe; Second row (left to right): Nirosha Murugan, Lukasz Karbowski, Kevin Saroka, Mandy Scott; Bottom row (left to right): Lucas Tessaro, Michael Persinger, Paula Corradini, Constance Reed, Lyndon Juden-Kelly; Absent: Ryan Burke, Mark Collins, Linda St-Pierre, Stanley Koren, Rob Lafrenie, Trevor Carniello.

Michael Persinger has been a pioneer in the field of experimental studies of mystical experiences and is known together with his research team for the "God Helmet" [e.g., 1-2]. Now Persinger

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and his team have obtained groundbreaking new results in consciousness, quantum brain & nonlocality research which are published in this Special Issue of Journal of Consciousness Exploration & Research [3-5]. These new results together with what have already been achieved in these fields in the past by Hu & Wu [6-12], Persnger's team [13-19] and some of the other researchers in these or related fields (e.g., 20-39, some of which were scorned and/or alleged to be pseudoscientific or unreproducible) have very important implications for further advancements of these and related fields.

Congruence of Energies of Several Quantitative Measurements in the Brain Supports Spin-Based Consciousness

Persinger's Group first reported in this journal in December 2011 significant increases in biophoton emissions along the right side but not the left when subjects imagined white light in a dark environment [13]. The Group reported that the increased biophoton emissions did not occur when the same subjects thought about mundane experiences [13].

In the first new experimental study published in this Special Issue [3], Persinger and his team have explored the hypothesis by Hu & Wu that networks of nuclear spins in neural membranes could be modulated by action potentials by measurements of the quantitative changes in photon emissions, electroencephalographic activity, and alterations in the proximal geomagnetic field during successive periods when a subject sitting in the dark imagined white light or did not.

Persinger and his team found that during brief periods of imagining white light the power density of photon emissions from the right hemisphere was about 10-11 $W \cdot m^{-2}$ that was congruent with magnetic energy within the volume associated with a diminishment of ~7 nT. Their spectral analyses showed maxima in power from electroencephalographic activity within the parahippocampal region and photon emissions from the right hemisphere with shared phase modulations equivalent to about 20 ms. They further found that beat frequencies (6 Hz) between peak power in photon (17 Hz) and brain (11 Hz) amplitude fluctuations during imagining light were equivalent to energy differences within the visible wavelength that were identical to the intrinsic 8 Hz rhythmic variations of neurons within the parahippocampal gyrus.

These quantitative measuements plus quantitative analysis by Persinger and his team strongly suggest that spin energies similar to what was discussed by Hu & Wu [6-8] can accommodate the interactions between protons, electrons, and photons and the action potentials associated with intention, consciousness and entanglement.

Demonstration of Entanglement of "Pure" Photon Emissions at Two Locations That Share Specific Configurations of Magnetic Fields Have Important Implications for Translocation of Consciousness

In the Journal of Biophysical Chemistry [14], Dotta and Persinger first reported their finding of the doubling of local photon emissions when two simultaneous, spatially separated, chemiluminescent reactions share the same magnetic field configurations. As demonstrated by

Persinger and his team, the experimental demonstration of non-locality for photon emissions has become relevant because biophotons are coupled to conscious activity and cognition.

In the second new experimental study published in this Special Issue [4], Persinger and his team applied the experimental condition that produces doubling of photon emissions from two loci during simultaneous chemical reactions when exposed to a sequence of circular rotating magnetic fields with differential phase and group angular velocities to photons from light-emitting diodes (LEDs). They found a significant but weaker enhancement of photon emissions as measured by photomultiplier tubes occurred when the two LEDs were activated simultaneously within two loci separated by several meters. If alternative explanations can be excluded, the observed effect suggest that under optimal conditions photons emitted from two, magnetic field congruent, loci become macroscopically entangled and that the two loci display properties of a single space. This effect in turn may have implications for the transposition of consciousness over large distances as suggested by Persinger's team.

Potential Entanglement of Brain Activity Over 300 Km for Pairs of Subjects Sharing the Same Specific Configuration of Magnetic Fields Is Demonstrated as Measured by s_LORETA and QEEG

In Brain Research [15], Persinger and his team first reported that light flashes delivered to one aggregate of cells evoked increased photon emission in another aggregate of cells maintained in the dark in another room if both aggregates shared the same temporal and spatial configuration of changing rate, circular magnetic fields. They also reported that increased photon emissions occurred beside the heads of human volunteers if others in another room saw light flashes during the presentation of the same shared circumcerebral magnetic fields. They further reported that when the shared magnetic fields were not present, both cellular and human photon emissions during the light flashes did not occur.

In the third new experimental study published in this issue [5], pairs of subjects separated by 300 km were either exposed or not exposed to specific configurations of circular magnetic fields. Persinger and his team found that when one person in the pair was exposed to sound pulses within the classical electroencephalographic band, there were discrete changes in power within the cerebral space of the other person even though they were not aware of the stimulus times and separated by 300 km. However, the intracerebral changes that only occurred if the magnetic fields were activated around the two cerebrums simultaneously were discrete and involved about single, punctate volumes of about 0.13 cc (125 mm^3). Their calculations show that the potential energy from the applied magnetic field within this volume was about $6 \cdot 10^{-14}$ J and with an average brain power frequency of 10 Hz would result in $6 \cdot 10^{-13}$ W. Further assuming $\pi \cdot 10^{-2}$ m^2 for the surface area of the cerebrum, this is equivalent to $\sim 2 \cdot 10^{-11}$ $W \cdot m^{-2}$ which is in the same order of magnitude as that associated with photon emission during cognition.

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