Innovative Energy Standard of Curative Cupping/Hijama

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Abstract: Objective: Cupping therapy (CT) is a therapeutic technique that has proved to be beneficial in array of human diverse plethora of ailments, has recently regained a significant gravity in present day medical practice. ACT (Asif Cupping Theory) of cupping therapy has been new therapeutic mold that explains the occult scientific dimensions of Cupping Therapy.

Material & Methods: In the human physical body fundament electrical potentials generates from cell membranes. The ACT proposed that the application of negative vacuum pressure over the skin dot of low resistance or Quantum Orifice through the myofasical anatomical structure provides a meaningful access of cellular and organ energies that result in reorientation and dielectric relaxation.

Results: Application of negative suction over specific Quantum Orifices over skin offers the access of specific organ in address. Additionally use of cuts over skin provides chance to filter out energies through evacuation of blood that itself contains water molecules as dielectric constant on one side and is physical molecular structure as condense energy on the other hand thus establish a linked to specific organ in address that results in the alleviation of pathogenic insult.

Conclusion: ACT is novel quantum based energy model that successfully gives details that CT is a meaningful route based on electrical connectivity of deeper structure with quantum orifices present over the skin and application of negative vacuum and bloodletting facilitates the therapeutic expulsion of stagnated and intoxicated energy.

Keywords: Cupping-Hijama Therapy, Asif Cupping Theory-ACT, Energy Medicine, Quantum Orifices, Material Physical Diseases, Aural Dust Diseases, Consciousness Diseases.

INTRODUCTION

Cupping therapy (CT) is an oriental, ancient, traditional, time-honored therapeutic technique that has proved to be beneficial in array of human diverse plethora of ailments, has recently regained a significant gravity in present day medical practice [1-6]. Therefore it is the high time to expand our level of understanding about the scientific dogmatic aspects of this therapeutic tool. The base line belief of CT is centered that human pathologies that are either superficial or present in deeper organs has connection with skin at specific points. These pathologies can be extracted by the application of negative pressure vacuum through the superficially inflicted clean cuts or abrasions with the flow of blood. The explanatory cupping model must answer that; the nature of human pathologies, organs connectivity with skin, relevance of extraction of blood and finally how negative vacuum suction over superficially inflicted clean bleeding cuts extract the pathology.

Many theories in the past had been proposed that how cupping therapy works such as ideation in traditional Chinese medicine-TCM revolves that stagnation or blocking the of vital energy of life (Qi) is central in pathogenesis and cupping therapy works by unblocking obstruction of Qi and restores health [7,8]. Another belief stands that CT may bring deformation or injury to the skin that stimulates neural fibers in the painful region and distal skin regions that causes inhibition multi-receptive field in dorsal horn neurons at the level of the spinal cord that may also simulate special naturopathic relaxation and comfort of the patient [9, 10]. Gao et al. proposed that cupping on selected acupoints over the skin induce therapeutic hyperemia and homeostasis [11, 12]. Taibah theory suggest that cupping therapy seems to be related in principle governing excretory functions of the kidney to the extent that cupping may be regarded as an artificial kidney that performs skin capillary filtration and size-dependent excretion of particles from the skin similar to renal glomeruli [13]. Hong et al. stated that cupping therapy works via creating specific changes in local tissue structures that causes increase in blood circulation and auto-hemolysis [14]. It is quite evident that all proposed cupping therapy theories except TCM that is centered on energy all postulated hypothesis revolves around molecular & anatomical model. These cupping theories are focused that all diseases are molecular in origin and every disease has to be treated with the extraction of molecule though negative suction and bloodletting. The molecular models are insufficient to explain all relevant quires mention above that is adhered to CT.
METHOD

In this research report at the methodological state an integration of recent quantum understanding has been used to develop the novel model of remedial cupping/Hijama. The Quantum awareness has been erected new standards about universe that equally applies to human corpus too. This new research is based on the development of newer and more scientific stakes that involves energy, atom, molecule and organs.

Model Shift

In this context “ACT - Asif Cupping Theory” based on Quantum Energy Model has been powered to answer relevant questions that will enhance the scientific clarity of Cupping Therapy. At the elementary level ACT is based on the pivotal fact that basic physical unit of the manifested physical body is not molecule but is “Quanta”. Therefore any scientific dogma of CT must address base line therapeutic conviction of cupping therapy.

RESULTS

The integrated results based on the modern research spectrum the ACT is composed on following subheads that are mention below.

1. Phenomenal Relation of Energy with CT
2. Energy Pathogenesis
3. Governing Science of Cupping Therapy

1. Phenomenal Relation of Energy with CT

As the modern molecular health model mainly based on Newtonian Materialism therefore is devoid of etiological and pathogenic association with psychic and spiritual fractions of human existence that are the forms of energy. The basic model shift requires explanation that molecular model is insufficient to explain many aspects of humanitarian physical, psychic and spiritual illnesses that are integral and inter-related, missing one aspect means missing the whole. As a pre-requisite it is imperative to focus on evidence that fundamental substance on human corpus is energy not molecule. In the indispensable plane the ACT is proposed with the vision to integrate the physical, psychic and spiritual reality in one single tie that would not only enhance the orientation of disease pathogenesis but would augment the focus of treatment and health management.

1.1. Human Bio-Electrical Body

The living biological system is heavily dependent on electromagnetic emissions, as human brain samples contains trace amounts of magnetite or ferromagnetic material as magneto-receptors that possibly play an interactive role with external magnetic field and brain functioning therefore affects the whole human body [15-17].

1.2. Cellular Membrane Potentials

The porous membrane system is the basic sign of cellular life that is repeated continuously outside and inside the cells and contains dielectric constant [15-17]. Therefore external presence of skin represents the extension of the same cellular membrane system. Another fundamental attribute of the living tissue is the presence of many interfaces presents between electrolytes and other components of the tissues that forms counter ion layers subject to strong built-in electric fields and concentration gradients. There are specific places present within the cellular structures where the built-in field is perpendicular to the external field, the ions, under the influence of the external electric field, can move around in the counter ion layers [18-21]. These human cellular membrane bio-potentials and electrophysiological signals can be explained by Hodgkin-Huxley model, and considers cell membrane as a electrical capacitor with a constant potential difference of -50 mV to -100 mV recorded as ECG, EEG, EMG, etc [22-24]. The presence of electrical potential is required even for embryological growth [25-27].

1.3. Dielectric Tissues

The colonies of cells are called tissues and human biological tissues as whole have the dielectric properties that result from the interaction of electromagnetic radiation with its constituents at the cellular and molecular level [28]. Dielectric properties show electric charge movement inside the tissue in response to an external electric field that vary from tissue to tissue, largely characterized by three distinctly large dielectric dispersions, often referred to as δ, β and γ dispersions [20,29-32]. The practical application of this dielectric properties lies that human tissues collectively form larger functional organs that at bottom level consist of cells and an extracellular matrix in turn composed of complex network of array of macromolecules, water molecules, ions that holds cells...
and different tissues together. Water, accounts for up to 65 to 70% of the mass and contribute directly to higher-frequency dielectric response and cell membranes are relatively permeable to water molecules, which can move either in or out of cells, regulated by osmotic pressure and the structure of the extracellular matrix. Finally Blood is a unique free floating liquid tissue essentially composed of 65 to 70% of water thus share same dielectric property. It is also reported that polar molecules in materials reorient under the influence of an external electric field that contributes in polarization and dielectric relaxation [20].

1.4. Biological Filters and Windows

Effect of micro-currents on treatment of myo-facial pain suggests the presence of biological electrical filters and windows [33-34]. In the human body the presence of points have been discovered that demonstrated reduced electrical Resistance. Low resistance areas have been reported with anatomical location around small myelinated and unmyelinated nerve fibers [35-37]. Thomas Myers has defined as anatomical lines that transmit strain and movement through the body’s myofascia [38]. Langevin and Yandow showed the presence acupuncture points in cadaveric arm anatomical sections entered inter-muscular, intramuscular tissue planes and myofascial meridians [35, 39].

1.5. Bio-Electric Skin

During CT skin is a vital organ that is used as an object for application of procedural values. Conventionally the skin can be descriptively subdivided into 4 layers i.e. stratum corneum (SC), the living epidermis (E), dermis (D) and hypodermis (H). The underlying reason of this subdivision is based on the demonstration of distinctly different dielectric properties thus skin behaves as an electrical capacitor [40-41]. There is continuous transport of ions happens between upper skin layers that causes trans-epithelial potential and maintains a constant internal electrical environment, especially with respect to external perturbations [42].

1.6. Wounds and Cuts

The skin is an external organ that is exposed to wounds and cuts. Therefore skin model was developed to observe the effects of wounds over skin. Hence semi-infinite piece of epidermis in air was used to know the effects of wound on the skin dielectric value. The modeling of skin showed fringe electric field pattern where the epidermis as upper capacitor met with air whereas lower capacitor remained positive. It is reported that unperturbed capacitor showed no electric field outside and a field inside. Additionally it was recorded that there was appearance of electric field that was pointing towards the wound at the lower part of the capacitor (bottom part of epidermis). The establishment of dielectric field is the primary for giving directional signal for ions restoring the trans-epithelial potential as well as for the cell types involved in the inflammatory, proliferative and remodeling phases of wound healing [42-44]. The shift of keratinocytes and fibroblast cells noted, in the direction opposite of the dielectric field, mechanical signal, like wound edge relaxation, would tend to envelop the wound prior to be cleaned out, and attraction of lymphocytes by negative potential are important observable effects [43, 45]. This can be assumed that wound potentials are negative and act as a directional cue responsible for stimulation of ions participating in trans-epithelial potential in the right direction; to uphold it signifies a notion of electrostasis. In the simpler words one can assume that the body has a natural built-in system to maintain a potential equilibrium; and the skin acts as important electrochemical capacitor [46].

1.7. Therapeutic Negative Pressure

Moreover the negative suction is pivotal in therapeutic CT and in the late 1990s negative pressure wound therapy has been introduced to aid Healing. Later this treatment is recommended for a diverse range of lesions including open abdominal wounds, open fractures, skin graft donor sites etc [47-49].

2. ACT & Energy Pathogenesis

The ACT considers blood as a fluid of life that carries all the energies and travels everywhere in the body. The organic structure of human life is erected on atoms that release four types of energies that condense first as atoms then molecule and primary organization of molecules appears as cell. ACT assume that four major atomic structure (Carbon, Oxygen, Hydrogen & Nitrogen-CHON) that makes 96% of the apparent body although quantitatively different but qualitatively contributes 25% function in the substance of human body. The whole body is classified into four working compartments according to CHON. It is assumed that carbonic energy centered in heart whereas oxygen, hydrogen & nitrogen energies are centered in liver (representing glandular system), brain (representing neural system) and bones (representing connective tissue) respectively. The physiological clock
wise rotation of energies happens from Heart (Blood) – Liver (glands) – Brain (neural) – Bones (Connective tissues) generates homeostasis called ease or health. Whenever there appears any stagnation, deficiency, intoxication of energies happen manifest as Dis-Ease.

3. ACT & Governing Science of Cupping Therapy

The answer of governing science about CT is hidden in the discourse that how we define human life that commence with simple question, who am I? [50-51]. The ontological adherence of subject of “Self” does not originates with the process of human conception but it is a part of universal process exemplified as ripples of energy waves that manifest as living cell. Therefore ACT proposed that Energy Medicine is the governing scientific discourse of cupping therapy.

3.1. Quantum Physics

Until last century Newton Mechanics based on Material – Materialism remained main focus of scientific understanding [52]. The concept of materialism in turn depends on human perception and five senses that experience matter as clustered reality in the form of solid, liquid, gas and plasma. This perception keeps us attach in material plane reality (MPR). However, quantum physics has revitalized vision beyond Newtonian mechanism that atoms are composed of electrons, protons, neutrons & orbits. The manifestation of diverse variety of atoms is merely an alteration in the numbers of protons and neutrons e.g. carbon contains 12 & oxygen 16 protons. The atom at the essential level is a particle made up of subatomic particles and actual substance is waves of energy that creates and surround by “Field” [51, 53]. The field effect generates strong nuclear force [SNF], weak nuclear force [WNF], electromagnetic force [EMW], and gravity force [GF]. As our senses and perception cannot process the electronic movements, generation of forces therefore remains un-manifested to us, and therefore happens in Quantum Plane Reality (QPR).

At the quantum level interesting work of Zeeman, 1896 and Stark, 1913 discovered a novel effect that magnetic field and electrical activity can influence and transform stuff that constitutes matter. Moreover all universal objects and bodies including apparent human physical body share general energy fields called Quantum Hologram and establishes invisible quantum field that is present around us & within us is also known as Field of Matrix that instantaneously connects everything with everything known as Quantum Entanglement [51, 54-57]. Quantum physics unfolded that any Quantum Particle can be in attendance at two dissimilar locations and has relationship with each other. Furthermore, an electron can proceed as a wave or particle [53, 58-60]. It can be hypothesizing that Quantum Particle movement at best outside the capacity of our “Solid-State Physical Laws.” The last century double slit experiment opened a new page that concluded that electrons were fired through double slit they showed “Dual Behavior” i.e., behaved like a wave & like a particle [61-65]. Moreover the quantum physics tells us that every atom or molecules contains “Energy” and is in the state of as motion of vibration. Physical world is a condense attribute of Energy [E] that is Information [I] & is in the state of Vibration [V] that occurs in “Curved Time & Space” and governed by series of physical laws [58, 63, 65-70]. The “Delineation” that we human experience between MPR & QPR in the actual meaning “Doesn’t” exist both are in same spectrum and continuum. All visible universal items whether star, planets, mountains, flowers water, birds…… and finally humans has made of same stuff & EIV that has simple configuration differences. The activity that happens and manifest in MPR is connected to QPR. The ACT considers that these scientific physically known phenomena’s are equally applied to human physical body too. Therefore on the basis above mention science ACT considers the basic substance of human life is energy not molecule.

3.2. Conscious Beings

As humans we are the most conscious beings breathing in quantum hologram & entangled in single quantum field that have perceptible physical human body made up of energy content manifest as atomic collection, molecules, cells, tissues, organs, organ systems and finally whole organism. This human corporeal body that is our manifested and perceivable outer process that metabolize food for actions, responses, movement, repair, absorption, digestions, exchange, excretion etc. whereas the “inner” of human body is in dynamic exchange and re-cycling body molecules with the “outer” known as environment. This exchange and re-cycling means humans continuously changes physical body, exemplified that we get new coagulation proteins every six hours times, get new RBC’s every 120 days etc. If the manifested physical body is not a constant but rather a dynamic biological process then where am I?

3.3. Consciousness Locale

In 1965, non-local nature of consciousness was conceptualized, when it was observed that “eye
closure” activity of one of the two identical twins demonstrated similar “Alpha Rhythm” in recoding EEG immediately provoked alpha rhythm in the brain of the other [59]. Modern empirical scientific idea & hypothesis about consciousness spin about “Gravitational Force” that is defined as Non-Temporal & Non-Chronological “Information Medium” present among two elementary particles. Carlo Rovelli explains this gravitational field as quantum structure & consists of “Gravitational Quanta. No informational signal in fact shifts among particle A & particle B [71, 72]. Gravitational Field basically “knows” about their spinning [73-75]. Penrose & Amoroff put forward that the force of quantum gravity acting on the mass of neurons is accountable for the emergence of consciousness. Sorely & Fiscaletti also considered that consciousness is a “Basic Frequency of Gravitational Quanta.” Therefore, Consciousness’s considered as a “Structural Quality” of gravitational field [69, 70, 72, 73,76].

Therefore physicists are attempting to “Theorize” the consciousness on the basis of gravitational force & field. As identified, gravitational force & field in basic substance is “Non-Intelligent Constant, Non-Temporal & Non-Chronological” that exercises its effects “Equally.” Therefore, one may think how the “Effective Conversion” of this Non-Intelligent Constant into “Biological Command” should develop the commanding consciousness at equivalent concentration, attributes among the species & within the species. Of course the phenomenal truth is that the connection between gravitational force, field, commanding consciousness is not so “Linear,” as proposed by the Physicists. As this exhibited non-linear correlation manifest as the diverse human behavior. Every speed and velocity has its specific vector, frequencies and wave lengths that needs controlling “Operational Data Base” [77-85]. Phenomenon of wave collapse that later manifested as mind & matter that can be considered as two sides of one coin [68, 86-93]. In 1982 physicists unfolded mystery by observation that particle such as electrons can “communicate & converse” Instantaneously & straight away with each other despite of the distance (one meter or a million miles), through a route called “Quantum Entanglement that denotes no time taken & the communication occur outer of curve space-time [59, 62].

Therefore ACT proposes that both the electrons & EIV that manifest in MPR are “Non-intelligent and Indecisive”. The non-perceptional consciousness lies in non-temporal silence of vibration and forms the basic locale of Virtual Plan Reality (VPR), that is not objective locale to our perceptional capacity but it is subjective. The consciousness in basic substance is subjective that can identified through the attributes of thoughts, feeling, emotions, believe, paradigm, responses, personality, behavior.

3.4. ACT and Consciousness

On the basis of this scientific information ACT proposes consciousness is intelligent and decisive data base present outside the time and space curve-virtual plane reality [VPR] and continuously connected to lower QPR hence to MPR. Additionally ACT hypothesize the QPR is a “Transient Zone-Aural Dust, Non-Materialistic Body or simply Aura” that is from by amalgamation of physical energies (EMW, SNF, WNF, and GF) collectively called “Sprite” with virtual energies called as “Spirit” that emits out from the database-consciousness. The Spirit – Sprite interaction in the aural dust controls movements and orientation of electrons, protons & neutrons that happens in orbital’s present in the MPR.


The medical literature classifies the etiological basis of human ailments as infectious, inflammatory, autoimmune, traumatic, cancerous etc. According to ACT, etiological basis of all human ailments can be classified according to different planes of reality i.e. Material, Quantum & Virtual Planes. The ACT put forward that all manifested disease that we experience in the material plane reality has got the basis inserted in the quantum & virtual planes (Table 1). In the Table 1 a term Disorder has been used that highlight the basic change in the concept that at the primary stage the dis-order appears that at the secondary level converts into dis-ease.

The results of this research therefore clearly point out those practical scientific aspects of cupping / Hijama that proves the efficacy hidden in this treatment. As newer proposed model that has been erected on energy; that completely fulfills all the desirable facets that are essential to understand our existence, physiological states, pathological conversions and finally talks about energy based healing model. The ACT considers that human physical body majorly composed of energy that manifest as atoms and in basic essence, the human body is a condense bundle of metabolic reactions that are at the very basic level depends on acid, alkali, salt and calcium. Hence the ACT proposes the acid is related to
carbon whereas oxygen, hydrogen and nitrogen are related to salt, alkali and calcium respectively. The well known present day physical diseases such as diabetes, ischemic heart diseases, osteoarthritis, cerebrovascular accidents, malaria, and systemic lupus erythematoses all are MPD’s (Table 1). The ACT proposes that the formation of aural dust is the cumulative product of interaction of spirit and sprite that forms the psyche or mind. Therefore ADD’s are composed of Psychic diseases (Table 1). Finally the ACT proposes that that essential humanitarian control is a cumulative product of thoughts, feelings and emotions that at the basic level is the expression of our spiritual consciousness. Therefore CD’s is composed of spiritual diseases (Table 1).

**DISCUSSION**

The manifested human ailments are not simply molecular derangements but are cumulative pathogenic outcome of all fundamental stakes of life. The ACT is the scientific hypothesis that confidently opens newer avenues of orientation and research and explains that how application of cupping therapy effects the restoration of heath by eliminating the underlying unbalances by accessing the deep stakes of our life. The ACT propose extensive model that enclose values of consciousness, spirit, aura, molecular physical body and essentials of energy. The fundamentals of ACT begins with the awareness of consciousness from the virtual plane reality that descends down as a spirit where it synapse with the sprite in the quantum plane reality that emits out from the molecular structural physical body present in material plane reality. However present discussion of is more focused on the important point that how CT alleviates the pathogenic insult.

The human physical body is an energy body and electricity is the essential of life that are recorded by the presence of various electrical potentials as ECG, EEG, and EMG etc. These electrical potentials are at the fundament level generates from the cell membranes [15-17]. The presence of myofascial structures provides the routes through which the governing electrical currents passes through the whole of body and instantly controls and adjust the whole body as one through documented Zeeman and Stark electromagnetic influence. The presence of low resistance focal dots (Quantum Orifices– QO’s) over the skin provides the window where these currents connect with the outer [33, 37]. Cellular structure that are enclosed in the cell membrane got specific places present where the built-in field is perpendicular to the external field, the ions, under the influence of the external electric field, can move around in the counter ion layers [18-21]. Similarly the overlying skin can be considered as external representation of the same cellular membrane system.

The application of CT happens through skin that in the basic substance holds the dielectric properties. The skin not only provides the shielding electric cover but offers the electrical communication with outer as denoted by the presence of magnetite or ferromagnetic material as magneto-receptors in human brain tissues [15-17]. Moreover the blood is another tissue that involves in the CT. The blood is the unique tissue that contains all the energies that goes into the cells and comes out from the cells. This blood also passes though the capillaries of the skin and provides a connecting route between skin and deeply seated organs. Importantly to note that the epithelium of the skin represents a structure which is also present around the internal body organs exemplified that the electrical profiles in the corneal epithelium predated the corresponding measurements on skin. The same skin dielectric signals play a vital role in the maintenance of homeostasis and healing [42-44]. The appearance of wound or cut in the skin capacitor creates a fringing electric field extending out into the part of space where the hole or discontinuity is. The application of surgically induce clean wound is the important procedural stay with believe that this inflicted wound would shift the physiology towards a desirable site.

<p>| Table 1: |</p>
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<tr>
<th>ACT-Disease Classification &amp; Pathogenic Fundamentals</th>
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<tr>
<td><strong>Material Physical Diseases - MPD’s</strong> (Physical Diseases e.g. DM, HTN, OA, IHD, Stroke)</td>
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<tr>
<td>↑↓ Carbon (Heart-Blood) = ↑↓ Acid Disorders</td>
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<tr>
<td>↑↓ Oxygen (Liver-Glands) = ↑↓ Salt Disorders</td>
</tr>
<tr>
<td>↑↓ Hydrogen (Brain-Neural Tissues) = ↑↓ Alkali Disorders</td>
</tr>
<tr>
<td>↑↓ Nitrogen (Bones-Connective Tissues) = ↑↓ Calcium Disorders</td>
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The ACT proposed that the application of negative vacuum pressure over the skin dot of low resistance or Quantum Orifice-QO’s over the skin through the myofasical anatomical structure provides a meaningful access of cellular and organ energies. It can be assumed that application of cupping negative vacuum may causes the reorientation and dielectric relaxation [20]. Therefore CT has dual therapeutic importance that application of negative suction over specific QO’s over skin offers the access of specific organ in address. On the other side application of cuts provides chance to filter out energies through evacuation of blood that itself contains water molecules as dielectric constant on one side and is physical molecular structure as condense energy on the other hand thus establish a linked to specific organ in address. It is imperative to expand the skin model to figure out the exact holographic entanglement of dielectric connectivity of dermal-organ electrical potentials.

Before application of CT it important to figure out routes through which the energy circulates within the body. ACT proposed that physiological rotation of energies happens from Heart – glandular tissues – neural tissues – connective tissues. When the energies are in harmony and rotates clockwise this homeostasis is called ease or health. Whenever there appears any stagnation, deficiency, intoxication of energies happen manifest as Dis-Ease or pathology. Finally the ACT provides the primary insight into newer pathological classification (Table 1) and classifies therapeutic cupping therapy into four major class’ i.e.

1. Vitalize CT: To revitalize the damage human body
2. Evacuate CT: To provide a exit route of intoxicating energies
3. Restorative CT: To rehabilitate the effected organ
4. Stimulatory CT: To arouse the non-functional organ

Another aspect of CT that carries importance is the location of Quantum Orifices – QO’s and the electrical orientation of deeply seated organ and its electrical connectivity with the skin. Moreover the etiological discourse of the pathogenesis, temporal events, identification of QO’s class of treatment with the fundamental energy abnormality is equally important in the application of CT.

CONCLUSION

CT is a meaningful route of treatment that works at the basic energy unit of life. The therapy is based on electrical connectivity of deeper structure with quantum orifices present over the skin and application of negative vacuum and bloodletting facilitates the expulsion of stagnated and intoxicated energy.

REFERENCES


[16] Pethig R, Kell DB. The passive electrical properties of biological systems: Their significance in physiology,


[60] Beisert CN. Quantum Field Theory (I). ETH Zurich, HS12.


[63] Margaret Morrison. Emergence, Reduction, & Theoretical Principles: Rethinking Fundamentalism. Philosophy of Science, 2006; 73 876-887. 0031-8248/2006/7305. Copyright. Philosophy of Science Association. All rights reserved.


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