## Planck Spherical Units (PSU) – The 10% You Need to Know. Ver 1.0

Source: "Cosmometry – Exploring the HoloFractal Nature of the Cosmos" by Marshall Lefferts (p = page #s)

Max Planck discovered that the energy emitted from every kind of electromagnetic radiation (visible light, x-rays, infrared, radio waves, etc.) comes in discrete packets, or quanta, of action.

In quantum mechanical physics, the **quantum of action** became formalized as a physical constant, appropriately named the Planck Constant....It is correlated with the frequency of an electromagnetic wave (such as a color in the visible light spectrum) to derive the energy value of that frequency using the equation E=hf (E (energy) = h (Planck Constant) xf (the frequency)). In simple terms, every frequency across the electromagnetic spectrum has a discrete value or quanta of energy associated with it. It is this realization of the quantized nature of the energetic cosmos that kicked off the field of quantum mechanics and led to Einstein's coining the name 'photon' for the quantum energy event. p267

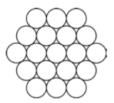
Max Planck is also known for proposing a set of units of measurement derived from properties of nature, rather than from human contrivance (such as degrees of temperature). These "natural units" (based solely upon known physical constants) define what's called the Planck scale. They are at the foundation of physics theories, including Quantum, Relativistic and Unified Physics. p13

The Planck scale is the tiniest scale of reference used in scientific analysis. p58

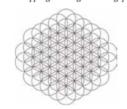
If Planck Length = size of Grain of Salt, then Grain of Salt > size of Universe! p57

The cosmos (more specifically, the vacuum of space) is quantized, and there is a primary "ground state" of quantization at the Planck scale. As such, spacetime is granular as "pixels" on the structure of space. pIX

Tangential Packing with gaps



Overlapping Packing without gaps



Both tangential and overlapping arrangements of sphere packing produce the same triangulated and hexagonal pattern that creates an isotropic vector matrix IVM (see VE). p58

Nassim Haramein imagined that at the Planck scale there are "eeentsy-weensty" little spherical energy units that are packed together in an isotropic vector matrix. In doing so, though, he made a fundamental shift in the arrangement of the little spheres. Instead of having them just touching each other tangentially as Buckminster Fuller envisioned (therefore leaving small gaps between them), he realized that they could be overlapping each other in a coherent standing wave pattern of dynamic energy in equilibrium, thus becoming all-space-filling with no gaps between them. This is because these little spheres are not solid balls, but rather they are *spherical oscillators of electromagnetic energy*. They are the same as Light energy, just at a wavelength that is extremely small. It is these little quanta of electromagnetic energy that he calls Planck Spherical Units. p56

The Planck Spherical Unit (PSU) is the very base of the universe. It is the zero phase ground state of dynamic equilibrium and the origin of quantized energy-matter-information dynamics found at all scales. p57-58

Even though the PSU-IVM field (see VE) is in equilibrium, each PSU is still oscillating and has a current of electromagnetic energy flowing through it at the speed of light. So, it is both zerophase stillness and speed-of-light motion simultaneously! p64

The world as we know it is fundamentally a standing-wave fluctuation within the underlying aetheric superfluid medium of the PSU-IVM field. p65

The Planck-scale field of electromagnetic equilibrium was historically referred to as the Aether. While physicists rejected this idea it is now being proved correct. p59

The PSU-IVM is the ground state from which all manifest form and flow arise, these being a consequence of the shift from zerophase equilibrium to dynamic disequilibrium — the fluctuations of light and sound that we know as the observable universe. p199

The fundamental voxel of our size universe is a Planck Spherical Unit — the ground state fractal scale. The next fractal scale most directly relevant to matter formation is the proton that makes up the mass of the observable universe. p69

Haramein's holographic mass solution for the proton and electron demonstrates that the atomic elements are composed of this quantized PSU field and that through this field all particles are universally entangled. p359 <u>Question</u>: In the history of the universe no proton has ever decayed. Where is the energy coming from to keep it spinning?

A proton is a torus made of Planck Spherical Units. It is because the protons are made of this superfluid aether medium that continuously supplies them with energy that they are observed to never decay. This one fact tells us about the true nature of the cosmos – it is absolutely abundant. p360

<u>Question</u>: Knowing that 1) atoms, the matter the universe is made of, are 99.9999% space and that 2) our current physics theories can only account for 4% of the universe's matter, wouldn't it make more sense to study "space" rather than "matter?"