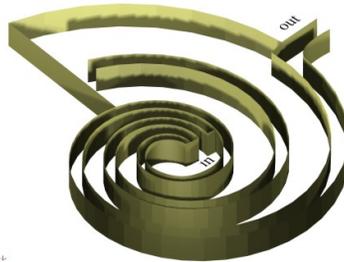


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EX SPIRA AQUA MUNDA

In memory of my son Giovanni

DATE: 2021/03/30



To my wife FRANCESCA

and my daughter AMANDA

Origins of measures in UDS and A. Avogadro's mole as forerun of the discovery of [Ether/ESF]

Is not to be excluded that different forms of life could be present in the Universe but coincidences on Earth are convincing me that it could not be the case.

a) geometric coincidences

1) measure of unit of length 1m related to Earth equatorial circumference and to π at the same time. $E_{Circ} = 2\pi R_E = 4 \cdot e^7 [m]$

2) Note: $e^7 = 10.000.000$ is a mysterious constant that appears again and again in physical transformations and measurements and whose presence apart the fact that is there I could not Justify.

b) Round numbers

3) Distance Earth-Sun $R_{orbital} = 150e^9 [m]$

4) Square of orbital velocity of Earth in orbit

around Sun $v_{orbit}^{2Earth-Sun} = 888.888.888 \left[\frac{m}{1''} \right]$

$$v_{orbit}^{E-S} = \sqrt{8888888888} = 29814 \frac{m}{1''}$$

5) gravity on Sun surface $274 \left[\frac{kJ}{m^2 m \cdot 1''} \right]$

absolute temperature “Kelvin degrees” on Earth surface at Equator: $273.6\text{ }^{\circ}K$

6) Temperature of fusion of Ice on Earth
 $\sim 273.6\text{ }^{\circ}K = 0\text{ }^{\circ}C$.

Advantageous characters respect to other systems:

1) Measures of Molecular entities present in the Microcosm compatible with measures in $[m^3]$ in the Macrocosm.

ex: c^3 Water molecules in status of Gas at STP are contained inside a cubic volume of $1[m^3]$ whereas the meter in appearance is a measure completely disconnected with the granular nature of the quanta in the Microcosm, result in effects, that when determined the number of molecules inside $1[m^3]$ and the quanta inside a molecule, both “meter and quantum” are connected in marvelous precision in terms volume and density whilst the meter as basic measure is a fraction of Earth dimensions results that we only have a system of measures

2) Gravitational transformations, then, are compatible with quanta measurements and with macrocosmic ones through transformation based

on a basic entropic degradations of fixed repeatable nature (the measure of the time through orbital movement around the Sun and spin around its axis).

3) What then is needed is the establishment of a system using the unit of mass in units of $[kJ]$ as quanta connected to the plethora of masses deriving their definition in numbers (their multiples, fractions of quanta and their density of presence in space) and connecting their presence in space with the physical reaction with the substance (*Ether/ESF*) surrounding and coexisting with them.

4) Movements in space over a measure of time related to Earth on orbit (almost circular) and spin almost invariable for objects which maintain densities are associated to the concept of velocity, but:

5) Movements associated to internal transformations/degradations concerning densities of masses permit to measure physical phenomena, in various fields of Science and from their study is slowly coming out a better perception of the phenomena releasing the Energy present in the Universe in potential status.

6) God plays with numbers:
ex: in the Gas formula of A. Avogadro a number that he discovered “the mole” $\mu=22.36...$ to be

treated like $\pi = 3.14 \dots$ or like $e = 2,7182\dots$ (base of natural logarithms) up to date has shown determinant presence within metric interpretations of chemical transformations....

“The mole” of A. Avogadro was discovered during studies concerning water at STP, since density of Water as Gas was in (metric units) :

$$\rho_{W-Gas} = 0.000894454 \left[\frac{Ton}{m^3} \right]$$

and to fill 1 $[m^3]$ of Water was necessary to precipitate inside it :

$$\rho_w = 1 = 1118 \cdot 0.0008944_{W-Gas} = 1 \left[\frac{Ton}{m^3} \right]$$

the “mole”, in chemical research, was at the time the smallest unit of measure of mass defined by:

$$1\mu = 22.36 \left[\frac{gr}{Ton} \right]$$

in these times resulted from observations that one molecule of Hydrogen contained 4moles and one Oxygen had a mass of 32 moles therefore a Water molecule:

$1W_{molecule}(H_2O) = 40\mu$ and since to reach density of water was necessary to have :

$$\tilde{n} = 1118 \cdot 40\mu = 1e^6 \left[\frac{gr}{Ton} \right] = 1 \left[\frac{Ton}{m^3} \right]$$

meaning presence of the Water molecule based on the subdivision of the molecules of water present in a volume of space occupied in full at density of mass in “virtual” $[Ton]$

Note: here above I wrote “virtual” Ton but at the time this was an unknown notion and no one had figured existence of composite particles and a deeper division of Universal Space occupied in elusive status by substance in virtual status as is the case for the Ether/ESF.



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