

## Radius of Point's Position and Cycle Time of Point's (Non)-Existence

(From Presocratic Well)

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**Abstract:** *In this paper according to pseudo-Heracleatan dynamics on double surface the radius of the point's position  $r = 0.6 \times 10^{-11}m$  and the cycle time of the point's (non)-existence  $t = 1.2 \times 10^{-18}s$  is introduced.*

**Keywords:** *Pseudo-Heracleatan dynamics on double surface, imaginary self-mass of the point, imaginary mass-radius product, the most preferable inverse spin, three-dimensional spinning, path-translation ratio, Compton wavelength, imaginary speed of the point, real radius of the point's position, real cycle time of the point's (non)-existence*

### 1. PREFACE

The subject of interest in this paper is with the help of the most preferable inverse spin to find out some new characteristics of the point as a physical entity possessing the imaginary self-mass and speed[1].

### 2. THE MOST PREFERABLE INVERSE SPIN OF THE SELF-MASS OF THE POINT

Heracleatan world[2] is inhabited by real as well as imaginary self-masses both spinning around with the spin determined by the mass-radius product to inverse spin relation as follows[3]:

$$\frac{mrc}{h} \approx \sqrt{\frac{1}{\left(\frac{1}{2-spin^{-1}}\right)^2 - 1}} \times \frac{spin^{-1}}{2}. \quad (1)$$

Here  $\frac{mrc}{h}$  is mass-product expressed in  $\frac{h}{c}$  units and  $spin^{-1}$  is dimensionless number of the inverse spin.

Let us propose that the relation (1) is valid for the imaginary self-mass of the point being available after the point's disintegration[1], too. To deal with the imaginary masses more convenient is the next form:

$$\frac{mrc}{hi} \approx \sqrt{\frac{1}{1 - \left(\frac{1}{2-spin^{-1}}\right)^2}} \times \frac{spin^{-1}}{2}. \quad (2)$$

It can be examined that in the above case the next minimal value of  $\frac{mrc}{hi}$  is achieved:

$$\left(\frac{mrc}{hi}\right)_{\text{minimal}} = 2.28454289711128 \dots \quad (3)$$

It happens at the next inverse spin:

$$(spin^{-1})_{\text{preferable}} = 3.7692924 \dots \quad (4)$$

The above dimensionless number(4) should be taken as the most preferable inverse spin belonging to the self-mass of the point.

### 3. THE RADIUS OF THE POINT'S POSITION

Knowing the self-mass of the point  $m = \frac{\sqrt{k}\sqrt{1-lnk}}{c} i[1]$  and applying the relation (3) the finding of the point in the next radius is expected:

$$r = 2.28454289711128 \dots \times \frac{h}{\sqrt{k}\sqrt{1-lnk}}. \quad (5)$$

The unpredictable point's position is thus of Planck constant  $h[4]$  and the dynamic constant  $k[5]$  dependent. Inserting the needed values ( $h = 6.62607004 \times 10^{-34} \text{kgm}^2\text{s}^{-1}[4]$  and  $k = 6.2723515 \times 10^{-46} \text{kg}^2\text{m}^2\text{s}^{-2}[5]$ ) the next radius of the point's position is calculated:

$$r = 0.59 \times 10^{-11} \text{m}. \quad (6)$$

### 4. THE MOST PREFERABLE PATH OF THE SELF-MASS OF THE POINT

The inverse spin equals the path-translation ratio  $\frac{s}{n}$  of the physical body on its own circumference concluded curved motion on double surface[6]. The same holds true for the self-mass of the point[1]:

$$\text{spin}^{-1} = \frac{s}{n} = 3.7692924 \dots \quad (7)$$

And for the path-translation ratio in three dimensions[7] we have:

$$\text{spin}^{-1}(3) = 3 \times \left( 2 - \frac{1}{\sqrt{1 + \frac{\pi^2}{n^2}}} \right). \quad (8)$$

Then for the  $\text{spin}^{-1}(3) = 3.7692924 \dots$  the most preferable translation of the self-mass of the point  $n$  expressed in the units of Compton wavelength is calculated:

$$n = 3,4935469 \dots \approx 3 \frac{1}{2}. \quad (9)$$

Applying the equation (7) the most preferable path of the self-mass of the point  $s$  (being also expressed in the units of Compton wavelength) is given:

$$s = \frac{s}{n} \times n = 13.1681997 \dots \quad (10)$$

Since Compton wavelength  $\lambda_{\text{Compton}} = \frac{h}{mc}$  of the imaginary self-mass is imaginary, the path expressed in meters  $s \times \frac{h}{mc}$  is imaginary, too.

### 5. THE TRANSLATION CYCLE OF THE SELF-MASS OF THE POINT

The most preferable translation  $n$  of the self-mass of the point is approximately odd integer-multiple of the half wavelength ( $7 \times \frac{1}{2} = 3 \frac{1}{2}$ ) of that self-mass what means that the concerned wave almost annihilates at each even cycle and steps into existence at each odd cycle again.

### 6. THE TIME CYCLE OF THE SELF-MASS OF THE POINT

Since the point after the disintegration[1] alternately exists and almost does not exist anymore the cycle time can be regarded as the time of existence as well non-existence of the self-mass of the point:

$$t_{\text{cycle}} = t_{\text{existence}} = t_{\text{non-existence}} = t_{(\text{non})\text{-existence}}. \quad (11)$$

The imaginary path of the point expressed in meters  $s = 13.1681997 \times \frac{h}{mc}$  (10) is passed by the imaginary speed  $v = \frac{\sqrt{k}}{m}$  [1] in the real time cycle  $t = \frac{s}{v}$ :

$$t_{\text{cycle}} = 13.1681997 \times \frac{h}{\sqrt{k}c}. \quad (12)$$

Then with the help of the data from the literature[4],[5] the next value of the time cycle of the self-mass of the point is calculated:

$$t_{cycle} = 1.16 \times 10^{-18} s. \quad (13)$$

According to the relation(11)that time is at the same time the point's (non)-existence time:

$$t_{(non)-existence} = 1.16 \times 10^{-18} s. \quad (14)$$

### 7. CONCLUSIONS

Heracleatean world is unpredictable in space as well as in time.

### 8. THE ADDENDUM

The relation (2) could be valid for the other imaginary self-masses  $0 < m < \frac{\sqrt{k}\sqrt{1-lnk}}{c} i$ [8], too. The radius of finding such imaginary self-mass is in inverse proportion with that self-mass(3). For instance, the zero self-mass could be found in principle elsewhere on the infinite radius given by the relation(3)what enables the discrete communication between real self-masses[5]. But the time cycle of (non)-existence is of the self-mass independent (12) and thus remains for all imaginary self-masses the same.

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This fragment is given on light on the eve of the 25<sup>th</sup> Slovene Statehood day. Gratitude to the light and dedication to the day

### AUTHOR'S BIOGRAPHY



**Janez Špringer**, is an independent scientist born on the third of March 1952 in the city of Maribor, Slovenia.