# Path Taken by the Particle Between Singularity and Final Matter

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### ABSTRACT

Based on the functioning of the mechanism of the anharmonic oscillator, the particle would oscillate between singularity and final matter. The path of the particle which therefore travels between singularity and final matter, passes through different steps and physical stage. Indeed the probability of presence of the particle is very high at the two edges of its well of potential (singularity and final matter), and where between two, its acceleration would be then almost instantaneous. In this case of the almost instantaneous displacement of the particle, this one becomes a flow, expressed in the quantum vacuum. The convergence of the energy of the quantum vacuum, in a smaller space, close to the singularity, then becomes in turn dark matter. At its opposite is the divergence of matter, expressed by quantum chromodynamics.

#### **1 INTRODUCTION**

The choice of the particle path was made according to the technical evidence of a high frequency anharmonic oscillator. Indeed the particle becomes energy mass flow at very high speed. At the extremized, at its poles of A and B Figure 1 the particle is of the static type, with a high probability density. One of its poles, position A in, is that of the point of origin which remains fixed (singularity), and where, on the other hand, the other pole represents the removable part in relation to the rotation of the axis (example radius of Schwarzschild Figure 2).



## **2** PATH OF THE PARTICLE

Here Figure 3, is the path taken by the particle between singularity and final matter:





The diagram comes from according to the principle of the anharmonic oscillator with the particle that oscillates between singularity and correlated matter. Between two is the flow of the particle which is only the quantum vacuum. Dark matter is only an addition of the convergence of the quantum vacuum at a point (an area). The density of dark matter is proportional to the convergence of space towards this singularity. Dark matter is then only an addition of all the quantum vacuum space to a smaller area.

The speed of the particle according to the potential energy. Figure 4.







# **REFERENCES:**

[1] <u>https://arxiv.org/abs/1507.00460v10</u> The de Broglie universal substratum, the Lochak monopoles and the dark universe

[2]<u>https://arxiv.org/abs/1802.08317</u> Lambda, the Fifth Foundational Constant Considered by Einstein

[3] https://www.scienceforums.net/topic/120416-anharmonic-oscillator/

[4] <u>https://www.scienceforums.net/topic/120749-quantum-chromodynamics-with-a-single-particle-in-motion/</u>

[5] <u>https://www.scienceforums.net/topic/116040-hologram-with-only-one-particle-in-motion/</u>