The origin of the relativistic effect

At high speeds and in the vicinity of gravity it comes to relativistic effects, which are described in the theory of relativity and calculated with the Lorentz transformation.

Lorentz factor:

$$k = \sqrt{1 - \left(\frac{v}{c}\right)^2}$$

The Lorentz transformation is based on space geometry and the constant of speed of light. The theory of relativity is based on the constancy of the speed of light, and according to this theory, there is no absolute space. In the general theory of relativity it is even explained the gravity as a geometric property of space.

We will not discuss this comprehensive theory in individual items and will only explain the relativistic effects with the new world model in this Chapter.

The new world model is based on the world's absolute space, and the first signs of Max Planck, to create a basis for the base units with quantized sizes, was implemented with the new world model.

As we have seen in the previous Chapters, the universe is composed of space, time and energy and, if you look at it from a different perspective is built up in an unprecedented form.

According to the new world model, dynamic physical processes depend directly on the time, or more precisely on the universal timing cycle. The time is thus not a neutral measure magnitude that is measured outside the process, but it makes additions itself for the sequence of events according to a determined timing cycle. Besides space, time is also a fundamental quantity. This could be recognized quiet well in the derivation of the speed of light at the beginning of this Chapter. How much space points the light passes during its movement in space is namely defined by a timing cycle.
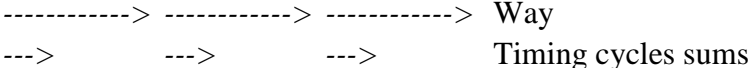
The origin of the relativistic effects is based on the three-dimensional absolute space and universal timing cycle. The theory of relativity also shows that space and time are very similar. Relativistic effects are directly caused by quantized timing cycle which occurring at high speeds, and which are also included in the gravitational constant.
In the new world model the relativistic effects are based on absolute space and time and/ or here, the proper time is variable. Speeds are movements in space, and therefore in absolute space, time is variable.
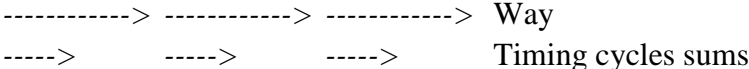
$$Speed = \frac{Way}{Time}$$

Since the space and therefore the route/ distance is an absolute quantity, the relativistic effects occur at high speeds, because the change of the relations between distance and time only occurs through the proper time variable, which consists of quantized timing cycles.

high speed:
------------> ------------> ------------> Way
--->   --->   --->   Timing cycles sums

low speed:
------------> ------------> ------------> Way
----->   ----->   ----->   Timing cycles sums

As you can see from this diagram, the space is absolute, and thus the distance is constant. However, depending on the speed the sum of the quantized timing scales do change, that are shown in the picture with different arrow lengths.

The relativistic effects are a consequence of the quantized time cycles, the sum of which results in the measured proper time. Thus, at every event, anywhere in the space there is its own quantized time as proper time. Therefore, we can measure other time sums in the rest frame as in the moving system. Moving clocks run slower, because the "per quantized timing cycles" become lower. Since each physical process can occur by a timing scale, and a movement in space is a physical process, the relationship between distance and time changes at high speed, wherein the path is constant and the proper time is variable.

The speed in this case indicates the events in the absolute space rate of the "per quantized timing cycle". Based on the speed we get to know how much quantized events may take place according to the universal timing cycle. At high speeds, for each section of the space there is less quantized timing scale and the upper speed limit for physical processes is normally the speed of light.

The speed of light determines the possible per quantized timing scale interactions between the space balls. W-We have seen in the relationship of charge interactions and the speed of light in the derivation of the speed of light. The light travels in a vacuum exactly with the possible highest interaction rate and in accordance to the quantized timing cycle. In other media (water, glass, etc.) it has a lower speed, because the interactions slow down the light with the medium.

The time for events measured by us is the sum of the quantized timing cycles, and with our watches we measure the total stroke. Since a moving clock has a speed, and the speed is the ratio between the distance and time, at high speed at an absolute way, this ratio only changes by changing the sum of the timing cycle. And the less time cycles for physical processes are available, the fewer processes can take place.

The measured time as the sum of the timing cycles is a smaller value at high speeds, and accordingly, moving clocks run slower, because the sum of the individual constant timing cycles becomes smaller. This situation is referred to as time dilation, and it can be better

described with the variable proper time than the curved space with the absolute time of the speed of light and variable.

As we discussed in the Chapter in the derivation of the gravitational constant, the gravity of the relation between mass and charge is created by a specific timing cycle. Relativistic effects caused by gravity are due to interactions with charges after the universal timing cycle. The gravitational constant contains, as well as any other force that triggers dynamic processes, the universal time factor. By this time factor, the clocks on towers go faster than on Earth's surface. Time dilation has thus directly influence on gravitation.

In direction to the center of gravity of the earth increases, the gravitational force increases, but the quantized timing cycle in the gravitational interaction between the mass and charges decreases in the direction of the center of gravity, and fewer processes per timing cycle take place. I.e. the greater the greater the gravitation, the higher the influence of the time dilation. This effect will be less influent on the earth than for larger masses and the special celestial objects like black holes.

The relativistic mass is strictly speaking, the effects of time dilation on the mass, because the mass is on the time factor in the speed of light through the relation $E = m \cdot c^2$.

The relativistic effects at high speeds, such as the length contraction and relativistic mass increase, are results of varying proper time, and thus a consequence of the time dilation. By high speeds, the proper time, as the sum of the quantized timing cycles is less, because space is absolute. Thus, all relativistic effects in absolute space are caused by universal timing cycle and are based on time dilation. The relativistic effects are basically time effects. Therefore, in measurements of the quantized timing cycle as sums as proper times we obtain different values at high speeds and under gravitational influence.