Kha – a new Theory of Relativity

by Finn Rasmussen

The Kha theory implies a radical upheaval of Einstein's Theory of Relativity. The Kha field is normally in equilibrium which means that the average velocity of the Kha field is the same as the velocity of the local particles and bodies in the Kha field (Rasmussen, 2019). The Kha field is a gravitational field present around all particles, and the Kha field follows these particles. The speed of light (photons) is always of the same magnitude *c* in relation to the Kha field through which it moves. The condition for Einstein's Special Theory of Relativity was that the speed of light *c* is the same with respect to all observers. This is only right if the observer actually receives the light.

The Michelson-Morley experiments in 1887 showed that the speed of light in laboratories is the same in all directions and at all times. These experiments lead to Einsteins theory. The experiments were meant to show that light does not move through an ether; however, they show only that the ether or Kha field follows Earth.

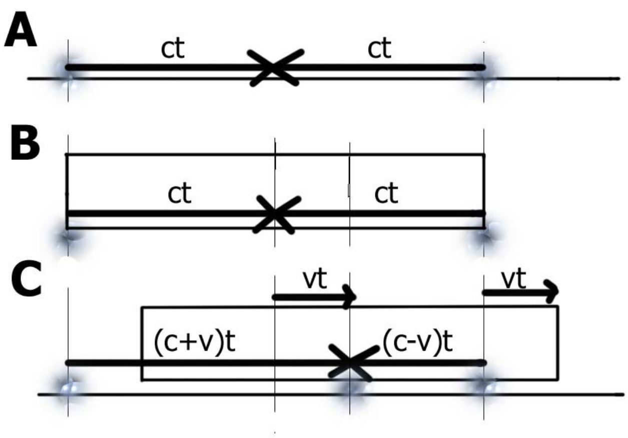

Figure 16

In order to illustrate the difference between the Kha theory and Einstein's theory we will examine one of Einstein's "thought experiments" from 1917 with train and rail road. On figure 16 A we see a rail road track. A light signal is emitted in two places on the track and after a time *t* the two signals are observed simultaneously in the middle. The two light signals have velocity *c* and have moved the same distance *ct.* The two emissions are simultaneous.

When the two light signals were emitted a train passed by with velocity *v* . The train had a length equal to the distance between the two places of emission. Figure 16 B. The people in the train do not observe the rail road track and do not care about the movement of the train. They observe the two light signals simultaneously in the middle of the train, and as the velocity of light is *c* , they conclude that the two emissions were simultaneous. Einstein assumed that the light in the train had the velocity *c* relative to an observer on the track and erroneously argued that the two emissions were not simultaneous as seen from the train.

At figure 16 C we see how the people at the rail road track observe the train. They have asked the personnel on the train to send a signal from the place, where the two light signals meet (the middle of the train) at the time of the meeting. At this time *t* the train has moved *vt*. The observers from outside the train can not directly measure the velocity of light in the train. However they have to conclude that the velocity in the forward direction is (*c+v)* and in the backward direction is (*c – v).*

The aberration of light is an offset of a stars position in the direction of the movement of the Earth and this phenomena played a role in the discussion of Einstein's theory of relativity. The aberration can be easily explained by the Kha theory of relativity.

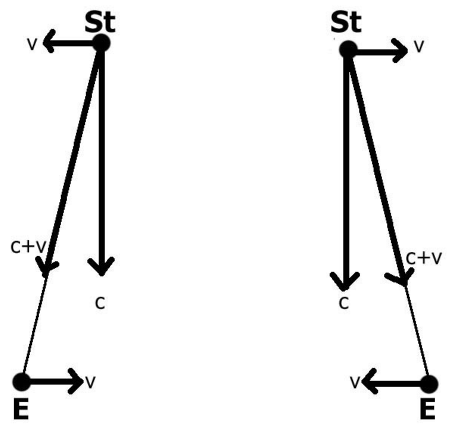

Figure 17

At figure 17 left we see the earth E at one time of the year. The earth has velocity *v* relative to the Sun. The star St is not moving, but in relation to the earth we must say that the star has the velocity *v* in the opposite direction. In order to find the velocity of the light from the star relative to the earth we have to add the velocity of the star to the velocity *c.* This procedure is similar to the thought experiment figure 16 C, except that we now add the velocity vectors. After half a year the earth has the opposite velocity relative to the Sun (figure 17 right). Using the same arguments the observernow sees the star in a new position. The star apperently moves around on the sky in the period of a year. The offset of the position is very small, because *v* is much less than *c*.

Einstein's special theory of relativity does not seem to be based on experiments and should be rejected. Some strange consequences of the theory such as time dilation and length contraction consequently have to be rejected too.

Figure 18

To the right at figure 18 we see a galaxy moving with velocity v away from the Milky Way to the left. Light has the velocity c relative to the local Kha. When light is emitted from the galaxy, it moves at velocity c relative to the galaxy, but with velocity *c - v* relative to us. When the light reaches us, it has velocity *c* relative to us.

In the Kha theory a photon is a double helix with a length *L* called wavelength. When the photon passes a point in space the passing time *T is* called the period. The photon moves with velocity *c-v* in the Kha field near the galaxy where the wavelength is *L1.* Near the Milky Way the velocity is *c* and the wavelength *L2.*

$$c - \mathrm{v} = \frac{L1}{T} \qquad \mathrm{c} = \frac{L2}{T}$$

The period T is the same seen from the Milky Way . From these equations we get

$$\frac{c}{c-v} = \frac{L2}{L1} = 1 + \mathrm{z}$$

The wavelength is "stretched" and increased by a factor known as the red shift, 1 + *z*. When the wavelengths are measured, the red shift can be used to find the velocity *v* of the galaxy

Kha theory : $$v = \frac{\mathrm{z}}{\mathrm{z}+1} c \qquad (4)$$

The corresponding formula in Einsteins Special Theory of Relativity is

Special theory: $$\mathrm{v} = \frac{(1+\mathrm{z})^2 - 1}{(1+\mathrm{z})^2 + 1} c$$

The red shift from some super novas has been measured to be $z = 0.5$. From the Kha theory formula we find the velocity of these super nova to be $v = 0.33c$. The formula from the Special theory gives the velocity $v = 0.38c$, which is higher than velocity from the Kha theory. This higher velocity is the reason researchers (Permutter 2003) erroneously found that the expanding universe is accelerating. This achievement was awarded with the Nobel Prize.

Some formulas in the theory of relativity are correct. That applies to the formula for kinetic energy of a particle. But the same formula is deduced from the Kha theory. Kinetic energy of a particle is energy of some extra Kha field inside the particle. (Rasmussen,2019)

The most famous formula is the relation between mass and energy

$$E = mc^2$$

This formula was proved for charged moving particles (Poicare 1900), which is no surprise since the electromagnetic field is part of the Kha field. The formula has not been proved for neutral particles not even by Einstein, who tried in vain.

We will prove the famous formula with the help of Kha theory. The Kha field like black-body radiation obeys simple relations between (attractive) pressure, *p* (Newtons/m^2); energy density, *e* (Joules/m^3) and emission power, flux, *f* (Joules/sec/m^2).

$$f = {}^{c}/_{4} * e \quad , \quad p = {}^{1}/_{3} * e$$

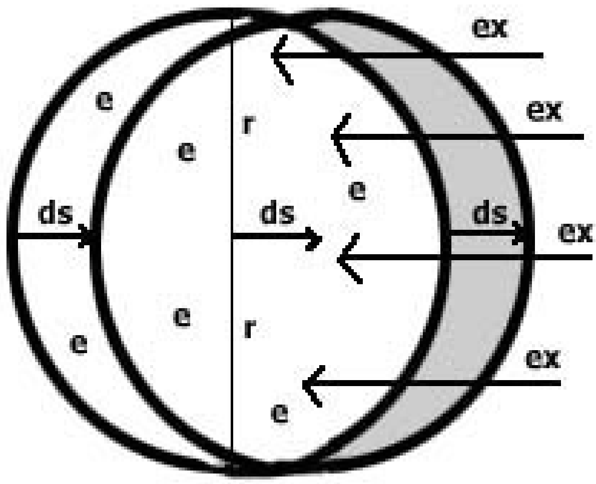

Figure 19

At figure 19 we see a particle with energy density *e* and radius *r* . The Kha field at the edge of the particle has the density *e* but the density to the right of the particle is increased with an amount *ex*. In a period *dt* there is a flow of energy *dE* from the right side through the edge of the particle.

$$dE = {}^{c}/_{4} * ex * \pi r^2 * dt$$

The incoming energy dE will be preserved in the particle as kinetic energy of the particle. Since the Kha field tries to eliminate discontinuity in energy density, some of the Kha field from the particle will move across the edge to the right. This Kha field has energy *dE* and energy density *e* and it is represented by the grey area at figure 19. *dE* will move across the particle in the time period 2*r/c.* In this period the whole particle will move to the right a distance *ds*=2*r/c**1/2**dv,* where *dv* is the final velocity of the particle after the period 2*r/c*. The energy of the grey area is

$$E * \pi r^2 * 2r/c * 1/2 * dv = {}^{c}/_{4} * ex * \pi r^2 * dt$$

$$\frac{e * 4/3 \pi r^3}{c^2} = \frac{1/3 ex * \pi r^2}{\frac{dv}{dt}}$$

Here we recognise the energy *E* of the particle, the force *F* and the acceleration *a.* We now introduce the mass *m.*

$$\frac{E}{c^2}=\frac{F}{a}= m$$

$$E = mc^2$$

Finn Rasmussen: *Kha – a new Theory of the Universe, 2019.* (www.finse.dk/Kha.htm)