

The Michelson-Morley Experiment with the relative motion to earth and the corrected ether theory

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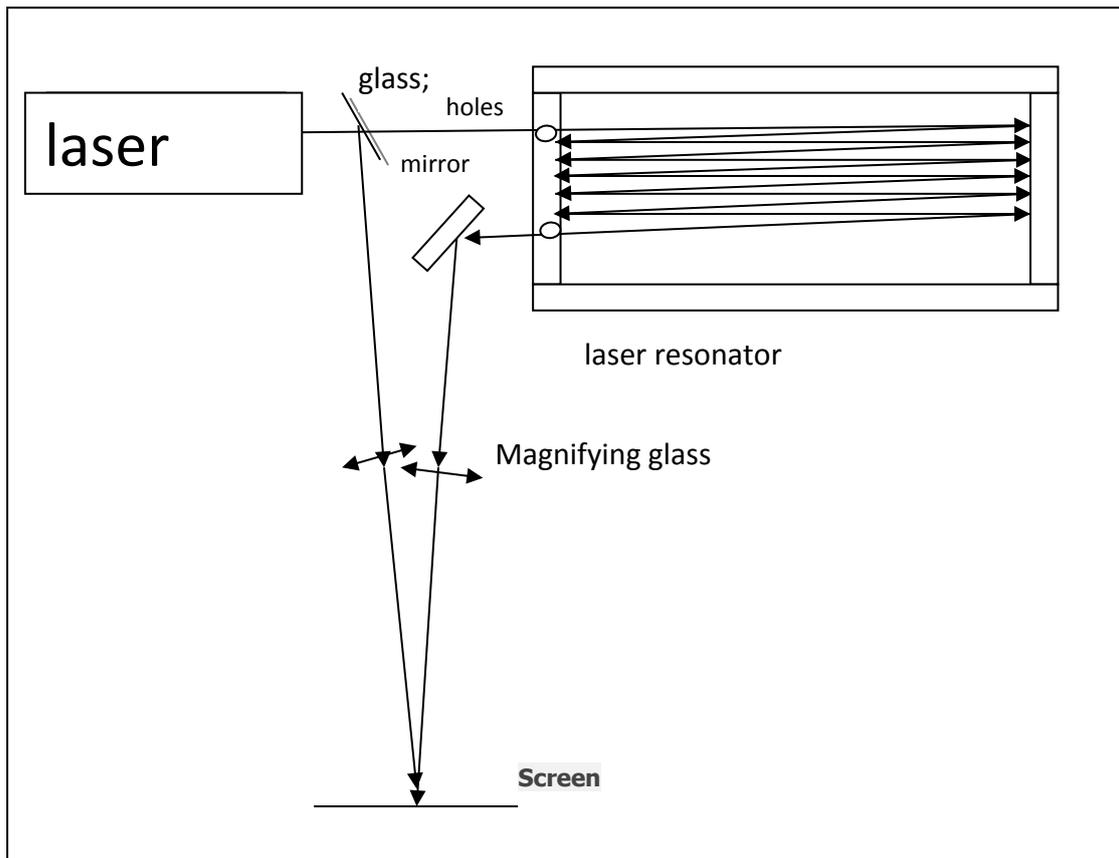
the Michelson-Morley Experiment on the relative motion to the earth:

The light source is the green laser, with its wavelength 532nm. Compared to the original Michelson-Morley Experiment, the installation of this experiment is improved in two ways (as is seen in figure 1): Firstly, a parallel plane optical resonant cavity is added to the optical path in order to improve its sensitivity. As the times of the reflex in the resonant cavity is unknown, the sensitivity cannot be measured; Secondly, the stationary relative to the earth is changed to the rectilinear motion. The installation is placed horizontally on the high-speed train carriage with the shock cushion installed, which is made of multiple layers of sponges and slates. When the installation works in uniform linear motion, relatively to the earth surface at a speed of over 260km per hour, rotate it horizontally, and the move of optical interference fringe can be observed.

Key words: Ether Theory Michelson-Morley Experiment Sagnac Effect

First, the Michelson-Morley Experiment with the relative motion to earth:

the light source is the green laser, the wavelength is 532nm and the experiment facility is of the improved Michelson-Morley Experiment (Refer to figure 1) , which contains of two points in the improvements: Firstly, add a parallel plane optical resonant cavity on the optical path, but as the times of the reflex in the optical resonant cavity is unknown, the sensitivity cannot be counted; Secondly, the stationary relative to the earth is changed to the motion relative to the earth. The experiment facility is placed horizontally on car with the shock cushion installed, made with multiple layers of sponges and slates. When the facility works in uniform linear motion, relatively to the earth surface and over 260km per hour, rotate horizontally the experiment facility and the move of optical interference fringe can be observe.



(figure 1)

Second, the analysis of the experiment result:

This can be easily explained by Sagnac Effect and the like, in that as the high-speed train carriage moves forward, the distance that the forward laser covers becomes longer and the backward laser goes less. However, it can also be explained in another way : Given that this installation of Michelson-Morley Experiment is stationary and the ground goes backward, and plus the high-speed train carriage is stationary and the earth rotates backwards, this experiment actually resembles the Lodge' s (Oliver W. F. Lodge, 1851—1940) rotation test of steel plate in 1892, except that it is the earth that rotates instead of the steel plate. And compared with the mass of the earth, the mass of steel plate is so small that the finally derived result is zero, while in my experiment, the move of optical interference fringe can be observed. According to the Theory of Relativity, the speed of light does not change with the move of the observers, and relative to this experiment installation, the light velocity should be constant with no movement of the interference fringe. The result of the current experiment illustrates that on the surface of the earth, it's the earth traction that the ether moves along with. The earth cannot drag all the ether in the whole universe because of the light aberration phenomenon, which happens on the border area between the ether traction district and ether none-traction district, rather than the lens of telescope. In other words, only its surrounding ether can the earth drag. In the two-way satellite time-transfer (TWSTT) experiment via the geostationary satellite between China and Japan, the back

and forth path of the electromagnetic wave transmission is identical but the time consuming of it is unique. When the geostationary satellite, the transmission station and the receipt station are all relatively stationary to the ground and move along with the earth rotating, if mainly use the Sagnac Effect to explain the equal path and unique time in TWSTT, it can be found that though all subjects in the Michelson-Morley Experiment are also relatively stationary to the ground and move along with the earth rotating, which indicates the Sagnac Effect would be available and the light interference fringe would move, the time consuming of the light transmitted westwards and eastwards is not measured unique. The above phenomenon can be explained by the Ether Traction: since the height of the satellite overtakes the height of the ether traction district of earth, it's the high altitude ether wind that causes the unique time consuming of the electromagnetic wave transmission between both the equal back and forth path. The Michelson-Morley Experiment illustrates that there is no relative velocity available at the ether on the ground and earth, and this experiment with the relative motion to earth also illustrates that the ether approaching the ground is dragged by earth.

The delayed radar echo experiment indicates that when the electromagnetic wave approaches the sun, the velocity of the wave decreases and when not the velocity increases. Further, this indicates that the ether density is distributed with the universal gravitation, higher density close the sun and lower density far from the sun. Hence, ether has mass.

The Relativity Theory holds that the light passing around the sun is curved by the gravitational-lens effect. However, in the Ether Theory, it's not by the curved space-time but by the ether density distribution with the universal gravitation around the sun.

Third, the mistakes in the deduction to the Relativity Theory:

1st: there is the assumption available without proof in the deduction of the Relativity Theory: at the middle point in the moving carriage, two beams of light is launched simultaneously and for the observer in this carriage both beams is seen as reaching both the back and forth ends of this carriage at the same time. But this is wrong that for this observer in this carriage both beams could not be seen as the simultaneous arrival to the backward and forward carriage ends because the light velocity is only relatively constant to the ether dragged by earth as the forward light relatively slows to this observer and backward light relatively speeds up to this observer. Actually Sagnac Effect has demonstrated the not same-time arrival, in whose experiment the optical ring path would be equivalent to this train carriage if the ring path was stretched straight and there would be no interference fringe available if the arrival was simultaneous.

2nd: the deduction of the Relativity Theory is as the following: when a beam of light in a moving carriage is launched upwards vertically and then is reflected back to the origin, the velocity of this light is constant C relatively to the observer in this carriage and this beam is vertical to the carriage floor. In fact, if in a moving carriage a beam of light

launched upwards is going to be reflected back to the origin point, this beam have to be launched in a forward angle, not absolutely vertically. Besides, the light slows relatively to this carriage and the light velocity is only relatively constant to the ether dragged by earth. As above two points, it can be deduced that on object moving these theories of Relativity are obviously wrong, such as time dilation or length contraction.

Fourth, the analysis about the exploring to Gravitational waves

What the Relativity Theory are based on: LIGO and aLIGO interferometer can detect the gravitational wave because the movement of the laser between the 2 arms of the interferometer has the time difference. And the reason of this time difference available is that the light velocity is constant and if the length of both arms increases or decrease, this will be bound to result in the time difference in both the arms.

If the light velocity is constant, when on the space shrinking the arm length of the interferometer is shortened, the light velocity will exceed itself comparatively to the shortened arms of the interferometer. However, the superluminal velocity is not available in the Relativity Theory so that the laser interferometer cannot detect the gravitational wave because in order not to be superluminal the light velocity has to speed up or down with the expanding or shrinking space.

In fact, the gravitational wave is the fluctuation of the ether density that the light velocity is slower in higher ether density and faster in lower ether density. And this variation of the light velocity contributes to the detection to the gravitational wave by the LIGO and aLIGO interferometer, rather than the space compression which causes the length of the interferometer arms shortened does.

Fifth, the correction to the Ether Theory as the following:

- 1) A star drags its surrounding ether to move together. Ether has mass and can be the dark matter.
- 2) The density of ether is distributed on the degree of the universal gravitation, the higher ether density closer to one star.
- 3) The light is only in constant velocity relatively to the ether it passed through and an object can move in faster speed than the light velocity C .
- 4) Higher the density of ether, slower the velocity of ether, the transmission speed of light can exceed the velocity C and also the movement speed of object does.
- 5) Higher the ether density is, lower the reaction rate of the chemical reaction and nuclear physics is.
- 6) There is no time dilation, length contraction, and mass addition available for the moving object. Faster the particle moves relatively to ether, more the ether in the particle traction area it passes through per unit time, equivalent to higher ether density around the particle. Higher the ether density is, slower the rate of the chemical reaction and nuclear physics reaction is, and the time is measured to be expanded. The mass of moving objects increases because the moving particle drives

the ether moving with particle in the same way as a car collides on wall and the air following the car does, too. The mass of the air is included when the mass of the car is calculated with the crash impact and thus the mass of the particle is gauged to increase.