

Laser Experiment with Prisms

Report and proposal for further testing

Erich Wanek, Salzburg

E-Mail: erich.wanek@aon.at

Abstract

Smoot and the COBE have an anisotropy in the CMB - found microwave background radiation. This one has a motion of the solar system with 370 km / s calculated at coordinates near Tau Leonis in the constellation Leo. On its orbit around the Sun, the Earth moves at about 30 km / s.

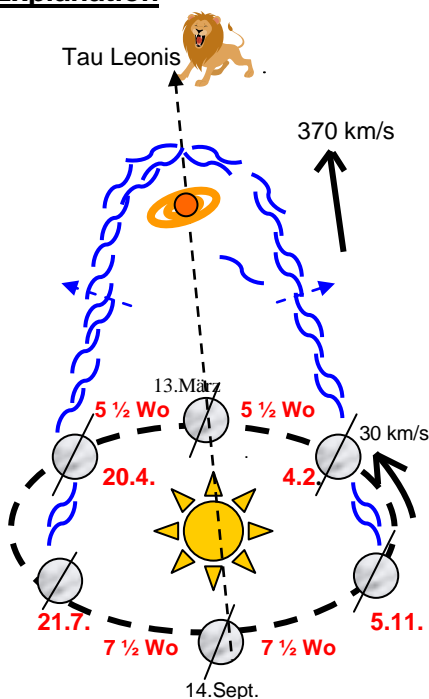
A laser beam is perpendicular to the other towards the lion or the direction of Earth's orbit moving wall is directed, despite many attempts no delay of the laser light spot is observed, because either the carried light from the motion of the solar system or the lag due to the change in direction by the moving Mirror compensated.

Despite this, four times a year, u.zw. a few days in early February, late April, late July and early November, a slight shift depending on the time of the observed through a prism redirected laser beam at a greater distance.

Now, on Mar 13, Tau Leonis in opposition to the sun, so sun-earth-lion on a line, so that pushes the sun on this day the Earth in the direction of Leo himself. The observed shifts in early February and late April were just 5 1 / 2 weeks before and after the opposition point, that in late July and early November just 7 1 / 2 weeks before and after the conjunction of Tau Leonis on 14.Sept.

This suggests that the movement of the solar system towards lion in the cosmic background radiation is a disturbance in the manner of a "bow wave" caused. The Earth crosses on its orbit around the Sun four times a year this fault zone. (Fig. 1) The laser beam could it short of that failure may be slowed in a medium, so that the light spot falls depending on the movement of the wall, an effect not from the velocity of wall motion results, but only because of the slowdown in Laser beam.

Explanation



Direction perpendicular to the axis of the earth

Abb.1

If the speed of the earth with about 370 km / s would have towards lion or 30 km / s impact in orbit around the sun on a laser beam, such an effect to be felt throughout the year. A shift of the laser light spot but could only be 4 times each observed in a few days.

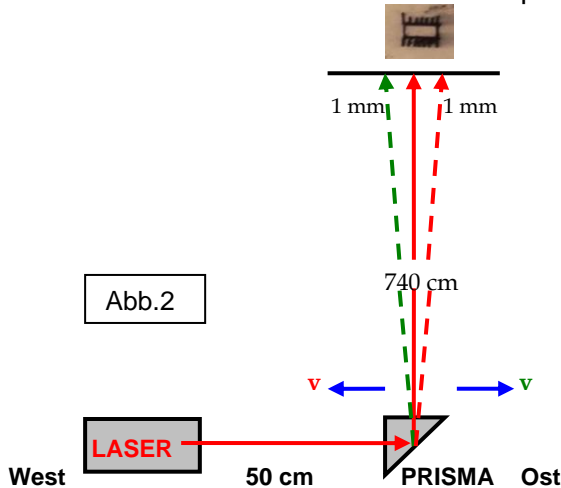
On March 13, Tau Leonis is in Leo in opposition to the Sun, ie there are sun-earth-lion on a line. The sun pushes the earth that is before them in the direction of the lions (Fig. 1). Since the observed shifts are 5 1 / 2 weeks before and after the opposition constellation, or 7 1 / 2 weeks before and after the Konjunktionspunkt, one could assume that the motion of the solar system for the lions in the cosmic background radiation is a disturbance in the way of a "bow wave" caused. This could include the Saturn (whose period of revolution around the sun 30 years and therefore a long time in the constellation of the Lion) remains with its strong magnetic field to such circumstances cause .. The "bow wave" of a ship is seen by an observer always ride the same distance away from the ship. Therefore remains a "fault" of the CMB relative to the sun always the same distance.

The Earth crosses on its orbit around the Sun with 30 km / s this fault zone. (Fig. 1) (see Picture this: What if a boat leaves behind a ship in a circle and thus 4 x crosses the bow wave). This could have the effect that slows down in this area of the laser beam in a medium in the ratio v / c , and thus the laser beam incident perpendicular to a wall according to the direction of movement of the wall in the ratio $v / c = 1 / 10000$ (at 7,5 m 0.75 mm remains).

As the lion in mid-March to early spring in opposition to the sun is, at this time is the line perpendicular to the earth-lion's axis and thus the whole year on the direction of the lion, depending on time of day each perpendicular to the slope of the Earth's axis.

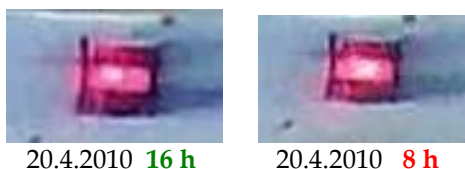
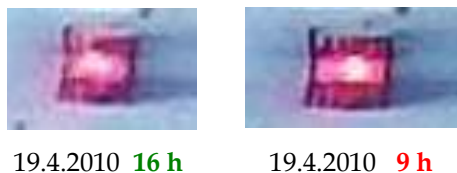
Experiment

Although I have only time in April 2007 and again in April 2008, a shift was able to observe the laser light spot, I then installed for better documentation in April 2009, the following experiment in a shielded basement with a constant temperature and humidity fix: (Figure 2)



In The laser is equipped with two clamps on a massive metal rack mounted stable and fixed, as an external switch to it. The prism is 50 cm at this distance also rack mounted fixed and mounted so that it acts like a mirror and thus redirects the laser beam vertically. At right angles to it in 7 ½ m from a small drawing with lines attached at a distance of 1mm. This drawing to the point where visible laser light was photographed with a digital camera in short time intervals and storing the photos on the computer, enlarged the drawing and then copied to Word, so that the shift of the light spot could be documented.

Ergebnis April 2007 bis 2010



(MESZ)

(Abb.3)

In April 2007 and April 2008, although already a shift of the light spot observed but not documented. From 18.4. to 22.4.2009, (always 5 ½ weeks after the opposition point of Tau Leonis at 13.3. (Fig. 1)) was then with the above experimental arrangement, the same image in each case (Fig. 3, lines within 1mm), also at 19.4. 04/20/2010 and the same shift could be observed around ca.1mm. (Fig. 3)

This would be consistent with the assumption that the laser beam in the fault zone in proportion to the speed of the Earth's orbit by 30 km / s is slowed

With 30 km / s $1 / 10000$ of the speed of light, appear to remain the light spot of the laser beam at 7.5 m distance corresponding to vt / ct back by $1 / 10,000 = 0.75$ mm.

In late April, no shifts were more. The point of light remained all day in the same place.

Results February 2010



2.2. 2010 9,20 h



2.2. 2010 13,30 h



2.2.2010 18,20 h

(Abb.4)

From 2.2. to 6.2. 2010 resulted in five days, the same effect (Fig. 4) (CET), as shown in Figure 1 at time 5 ½ weeks before the opposition point of Tau Leonis 13.3.)

To see how far the prism affects the shift of the light spot, I have installed in February 2010, immediately adjacent to the recent experiment a second laser with a beam of light without prism directly from south to north. (Right light point figure 5) where by 9 h of 6. Strich from the left is obscured by the point of light, visible at 18 h, however. Since the lines are drawn in the right drawing at a distance of 2 mm, should be available here only a shift by 1 / 2 mm. not so much as with the left over the prism directed beam. Therefore, the comoving prism. a special, yet to be resolved effect.

Because of the small direct effect of the laser beam in the series were no longer used.

Results July 2010



20.7.2010 7,30



20.7.2010 13,15



20.7.2010 15,30



22.7.2010 8,40



22.7.2010 13,20



22.7.2010 15,40

(Abb.5)

As shown in Figure 1, the earth passes through on its orbit around the Sun about the end of July and again in early November the suspected fault zone.

Indeed, it was of 20 be observed until 22 July 2010 (7 ½ weeks before the conjunction of Tau Leonis on 14.Sept.) a shift of about 1 mm. (Fig. 5)

Results November 2010



5.11.2010 5,45



5.11.2010 mittags



5.11.2010 15,40



6.11.2010 5,50



6.11.2010 mittags



6.11.2010 17,10

(Abb.6)

According to Fig.1, the earth passes through on its orbit around the sun in early November once the suspected fault zone. Indeed, it was again on the 5th and 6th November 2010 (7 ½ weeks after the conjunction of the Tau Leonis 14.Sept.) shifts the point of light to be detected by about 1mm. (Fig. 6) In the days before and after it was nothing to see.

This results in four times at each crossing of the assumed fault zone is a match between shifts, depending on time of day and direction of movement of the wall, that is, the laser beam.

Summary

Four times a year, u.zw. in a few days around the 4th February, 20th April, 1st July and November 5, was conducted with a laser beam through a prism observed depending on time of day to a distance of 7.5 m is a shift of the light spot of about 1 mm be, the influence of the prism is to be clarified.

A causation solely by the movement of the wall at 370 km / s towards Leo, and with 30 km / s towards Earth orbit is ruled out because this would be felt throughout the year and an effect is compensated.

Now, on Mar 13, Tau Leonis in opposition to the sun, which pushes the earth and all the planets in front of them in the direction of Leo. As those data 5 ½ weeks before and after the March 13, and 7 ½ weeks before and after the conjunction at 14.Sept.liegen, one could assume that the motion of the solar system in the cosmic background radiation is a disturbance in the way a "bow wave" created (Fig. 1). If the laser beam at the four-time crossing this fault zone as a medium in the ratio of the speed slows down the Earth's orbit of 1 / 10000, then the light spot is only by this slow (and not by the rate of wall motion) at a distance of 7.5 m to 0.75 back.

Since I lack even the technical means for a more accurate observation, should such an experiment on the mentioned days will be carried out under laboratory conditions .. That would not be costly because it uses only one prism, a laser beam and to a greater distance from a detector with photo-diode needs, which records the light point over 24 hours long running.

Salzburg, in November 2010

Erich Wanek

E-Mail : erich.wanek@aon.at