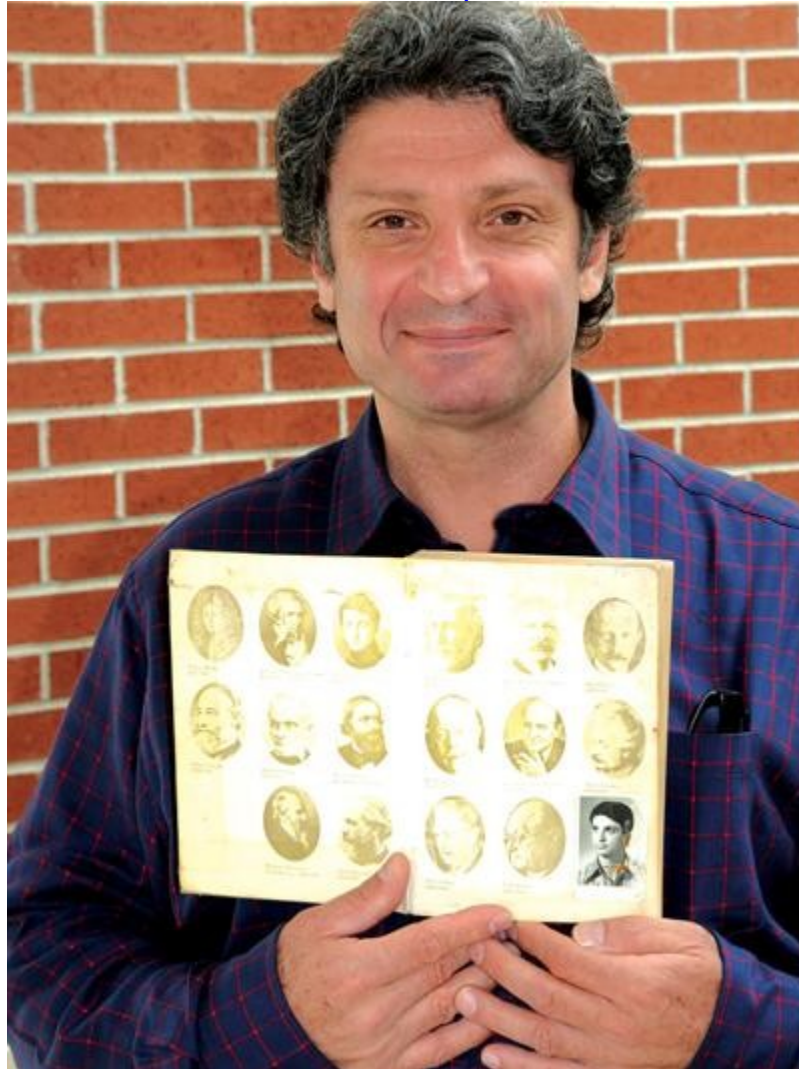


Johann Georg Von Soldner 1801 Light Bending Historical Mistake

Soldner's and Lord Eddington, Einstein's and Alfred Nobel Physicists
Confusions of light aberrations with light bending
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Abstract: Newton proposed $F = - GmM/r^2$ as gravitational law

In 1801 Johann Georg Van Soldner was the first person to calculate the gravitational bending of light using Newtonian Mechanics and he got:

Johann Georg Van Soldner ζ (Johann) = $2 \{ \cos^{-1} [v^2 / (-c^2 + v^2)] \} - \pi \approx 2 (v/c)^2$

With $v^2 = GM / R$ where G = gravitational constant = 6.673×10^{-11} ; $C = 3 \times 10^8$ m/sec

And M = Sun mass = 2×10^{30} kg; R = sun radius = 0.695×10^9 m; $v = 437.89$

Einstein said if make - believe time travel and new forces added:

Then: ζ (Einstein) = $4 (v/c)^2$; ζ (Johann) = 0.8789 arc sec; ζ (Einstein) = $2(0.8789)$
 Johann Georg Van Soldner derivation was incomplete and when completed and approximated it produces Einstein's formula without Einstein's space – time fiction and as light aberration and not light bending.

Proof:

Johann Georg Van Soldner wrong derivation of angle of light aberration around the Sun

With $d^2 r/d t^2 - r \theta'^2 = -GM/r^2$ Newton's Gravitational equation (1)

And $d (r^2\theta')/d t = 0$ Kepler's force law (2)

Assuming mass $m = \text{constant}$

Proof:

With (2): $d (r^2\theta')/d t = 0$

Then $r^2\theta' = \text{constant} = h$

Differentiate with respect to time

Then $2rr'\theta' + r^2\theta'' = 0$

Divide by $r^2\theta'$

Then $2(r'/r) + \theta''/\theta' = 0$

And $2(r'/r) = - (\theta''/\theta') = 2[\lambda (r) + i \omega (r)]$

And $2(r'/r) = 2[\lambda (r) + i \omega (r)]$

And $(\theta''/\theta') = - 2[\lambda (r) + i \omega (r)]$

Solving for $r = r (\theta, t) = r (\theta, 0) r (0, t) = r (\theta, 0) e^{[\lambda (r) + i \omega (r)] t}$

With $r (0, t) = e^{[\lambda (r) + i \omega (r)] t}$

Then $\theta'(\theta, t) = [h/ r^2 (\theta, 0)] e^{-2[\lambda (r) + i \omega (r)] t}$

And, $\theta'(\theta, t) = \theta' (\theta, 0) \theta' (0, t)$

And $\theta' (0, t) = e^{-2[\lambda (r) + i \omega (r)] t}$

Also $\theta'(\theta, 0) = [h/ r^2 (\theta, 0)]$

And $\theta'(0, 0) = [h/ r^2 (0, 0)]$

With (1): $d^2 r/d t^2 - r \theta'^2 = - GM/r^2$

Let $r = 1/u$

Then $d r/d t = -u'/u^2 = - (1/u^2) (\theta') d u/d \theta = (- \theta'/u^2) d u/d \theta = - h d u/d \theta$

And $d^2 r/d t^2 = - h\theta'd^2u/d\theta^2 = - h u^2 [d^2u/d\theta^2]$

And $- hu^2 [d^2u/d\theta^2] - (1/u) (hu^2)^2 = - G Mu^2$

$[d^2u/ d\theta^2] + u = G M/ h^2$

And $u = G M/ h^2 + A \text{ cosine } \theta$

And $du/ d \theta = 0 = - A \text{ sine } \theta; \theta = 0$

Then $u (0) = 1/ r (0) = GM/h^2 + A; h = RC$

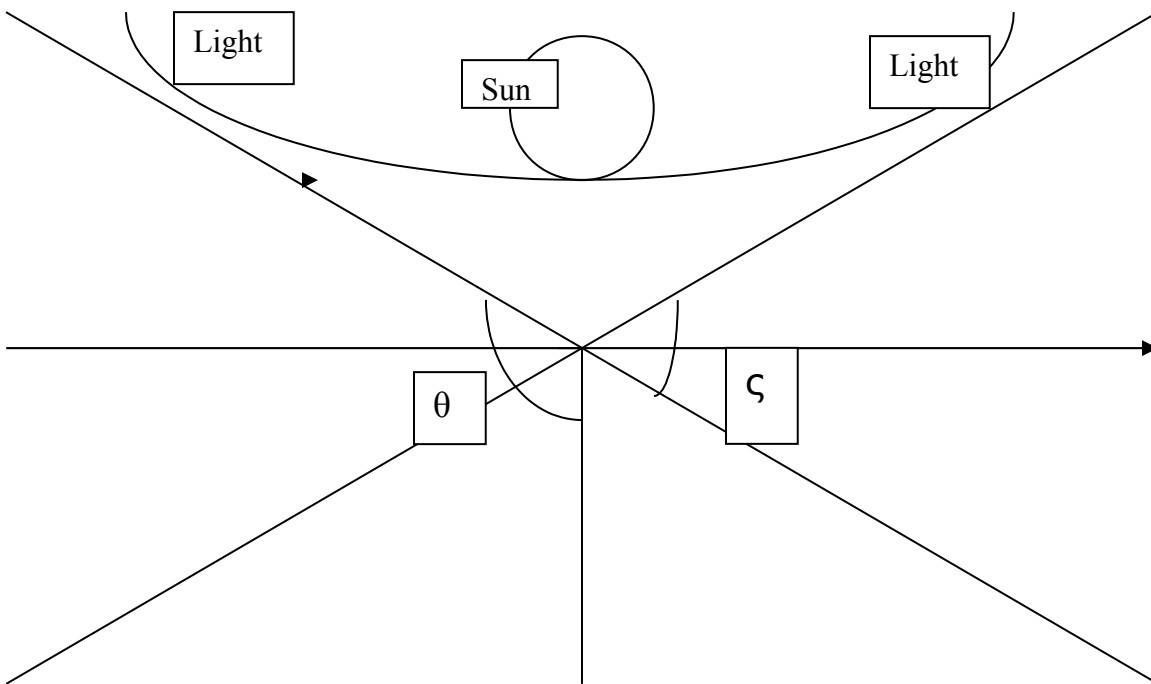
$C = \text{light velocity of } 300,000\text{km/sec}; \text{ And } A = 1/R - GM/ (RC)^2$

And $u = G M/ h^2 + A \text{ cosine } \theta = GM/ (RC)^2 + [1/R - GM/ (RC)^2] \text{ cosine } \theta$

And $r = 1/u = 1/ \{GM/ (RC)^2 + [1/R - GM/ (RC)^2] \cos \theta\}$
 If $r \rightarrow \infty$; $GM/ (RC)^2 + [1/R - GM/ (RC)^2] \cos \theta = 0$
 Divide by $GM/ (RC)^2$

Then $1 + [R^2 C^2/ GM R - 1] \cos \theta = 0$
 And $\cos \theta = -1/ [C^2/ (GM/ R) - 1]$
 Or $\cos \theta = 1/ [1 - (C^2/V^2)]$; $GM/R = V^2$
 Or $\cos \theta = v^2/ (v^2 - c^2)$
 And $\theta = \cos^{-1} [v^2/ (v^2 - c^2)]$

And ζ (Johann) = $2 \{ \cos^{-1} [v^2/ (-c^2 + v^2)] \} - \pi \approx 2 [\pi/2 + (v/c)^2] - \pi = 2 (v/c)^2$; $v/c \ll 1$



Einstein invented many things to come up with double the amounts:
 Or, ζ (Einstein) = $4 (v/c)^2$

Here is Johann Georg Van Soldner 1801 Historical mistake

We have $u(\theta) = GM/h^2 + A \cos \theta$

And $r(\theta, t) = r(\theta, 0) r(0, t) = r(\theta, 0) e^{[\lambda(r) + i \omega(r)] t}$

And $r(\theta, 0) = 1/u(\theta, 0) = 1/[GM/h^2 + A \cos \theta]$

Or, $r(\theta, 0) = (h^2/GM)/ [1 + (h^2/GM) A \cos \theta]$

Or, $r(\theta, 0) = (h^2/GM) / [1 + \epsilon \cos \theta]$

Real time orbit: $r(\theta, t) = [a(1-\epsilon^2) / (1 + \epsilon \cos \theta)] e^{[\lambda(r) + i\omega(r)]t}$

This equation is real time Universal mechanics solution

This: $r(\theta, t) = [a(1-\epsilon^2) / (1 + \epsilon \cos \theta)] e^{[\lambda(r) + i\omega(r)]t}$ ----- I

It is the math formula that matches a physical experiment

If time is frozen that is $t = 0$

Then $r(\theta, t) = [a(1-\epsilon^2) / (1 + \epsilon \cos \theta)]$ we get the classical or event time solution ----- II

Relativistic is the difference between I and II

And it is the visual illusion between motion II and Visual motion I
The difference between an event and its measurement in real time

With $\theta'(\theta, t) = [h / r^2(\theta, 0)] e^{-2[\lambda(r) + i\omega(r)]t}$

With $(\theta'' / \theta') = -2[\lambda(r) + i\omega(r)]$

Then $\theta''(\theta, t) = -2[\lambda(r) + i\omega(r)] [h / r^2(\theta, 0)] e^{-2[\lambda(r) + i\omega(r)]t}$

With $\lambda(r) = 0$

Then $\theta''(\theta, t) = -2i\omega(r) [h / r^2(\theta, 0)] e^{-2i\omega(r)t}$

Or, $\theta''(\theta, t) = -2i\omega(r) [h / r^2(\theta, 0)] [\cos 2\omega(r)t + i \sin 2\omega(r)t]$

The real part or along the line of sight

Is Real $\theta''(\theta, t) = 2\omega(r) [h / r^2(\theta, 0)] \sin 2\omega(r)t$ (t/t)

Or, Real $\theta''(\theta, t) = 2t\omega(r) [h / r^2(\theta, 0)] \sin 2\omega(r)t$

Or, Real $\theta''(\theta, t) / [h / r^2(\theta, 0)] = 2t\omega(r) \sin 2\omega(r)t$

At $t = T$; light aberration angle in real time is confused for light bending. With $\omega T = \arctan(v/c)$

Then $\psi = \text{visual illusion angle} = \theta''(\theta, T) / [h / T r^2(\theta, 0)]$

Or, $\psi = 2T\omega(r) \sin 2\omega(r)T$

Johann Georg Van Soldner 1801 historical mistake

Is: $\psi = [2 \arctan(v/c)] \sin [2 \arctan(v/c)]$

With $(v/c) \ll 1$; $2 \arctan(v/c) \approx 2(v/c)$

And $\sin 2 \arctan(v/c) \approx \sin 2(v/c) \approx 2(v/c)$

And $\psi = [2 \arctan(v/c)] \sin [2 \arctan(v/c)]$

$\approx [2(v/c)] [2(v/c)]$

Or $\psi \approx 4 (v/c)^2$ radians
 Or, $\psi \approx 4 (v/c)^2 \times (180/\pi)$ degrees

Or, $\psi \approx 4 (v/c)^2 \times (180/\pi) \times 3600$ seconds

With $v^2 = GM/R$

Then **$\psi \approx 4 GM/R c^2 \times (180/\pi) \times 3600$ seconds**

Einstein with the help of others rigged eternity to come up with $4 (v/c)^2$ and not $2 (v/c)^2$ to justify experimental illusions or $2[2(v/c)^2]$

$$\begin{aligned} \Psi &= 7200 [\text{arc tan } (437.89 / 300,000)] \text{ sine } 2 [\text{arc tan } (437.89/300,000)] \\ &= 1.757855865 \text{ arc second} \end{aligned}$$

This multiplication by 2 is the difference between classical mechanics and relativity like the energy definition of classical mechanics $E = mc^2/2$ and the 2 multiplication of $E = mc^2/2$, $E = 2 [mc^2/2] = mc^2$

1- The illusion of length contraction:

Length contraction is just a visual effect of projected light aberration and it is an "apparent" visual effect and not real

An object located at \mathbf{r} ----- light sensing ----- measured as $\mathbf{S} = \mathbf{r} \exp [i \omega t]$

With $\omega t = \text{arc tan } (v/c)$; $\tan (v/c) = \text{light aberrations angle} = \omega t$

$\mathbf{S} = \mathbf{r} \text{ Exp } [i \omega t]$ caused by light aberrations visual effects as follows:

$\text{Exp } [i \omega t] = [\text{cosine } \omega t + i \text{ sine } \omega t]$; From $\mathbf{S} = \mathbf{r} \text{ Exp } [i \omega t]$

$$\begin{aligned} \text{It changes to: } S &= r \{ \sqrt{[1 - \text{sine}^2 \text{ arc tan } (v/c)]} - i \text{ sine arc tan } (v/c) \} \\ &= r \{ \sqrt{[1 - (v/c)^2]} - i (v/c) \}; v/c \ll 1 \\ &= S_x + i S_y \end{aligned}$$

Where $S_x = \sqrt{[1 - \text{sine}^2 \text{ arc tan } (v/c)]}$; And $S_y = \text{cosine arc tan } (v/c)$
 With $v/c \ll 1$ then; Where $S_x = \sqrt{[1 - \text{sine}^2 \text{ arc tan } (v/c)]}$; And $S_y = \text{cosine arc tan } (v/c)$

In absolute value $S = r$

Along the line of measurement: $S_x = \sqrt{[1 - \text{sine}^2 \text{ arc tan } (v/c)]} \approx r \sqrt{[1 - (v/c)^2]}$; $v/c \ll 1$

This the equation for length contraction of Lorentz's used in Einstein's theories

But it is the light aberrations visual effects and it is "apparent and not real"

2 - Constant velocity of light leading to Time Dilations

Projected light aberrations

$$S_x = r \cos \omega t$$

$$\text{Hypotenuse} = S_x = [c t_x] = c t_x \sqrt{[1 - \sin^2 \arctan(v/c)]}$$

$$S_x \approx c t \sqrt{[1 - (v/c)^2]}; \text{ from constant velocity of light}$$

and c is constant in all reference frames

Where t = local self time; t_x = time by observer

$$t_x = t \sqrt{[1 - (v/c)^2]}; \text{ and}$$

$$t = \{1/\sqrt{[1 - (v/c)^2]}\} t_x \text{ absolute math}$$

These are time dilatation equations given by Einstein's special relativity theory.

$$t_{x'} = t' \sqrt{[1 - (v'/c)^2]}; \text{ and}$$

$$t' = \{1/\sqrt{[1 - (v'/c)^2]}\} t_{x'} \text{ absolute math}$$

Two observers observing the same thing the time dilations are

$$\text{Then, } t_x = t \sqrt{[1 - (v/c)^2]}; t = \{1/\sqrt{[1 - (v/c)^2]}\} t_x \text{ absolute math;}$$

Lab purposes

$$\text{And, } t_{x'} = t \sqrt{[1 - (v'/c)^2]}; t' = \{1/\sqrt{[1 - (v'/c)^2]}\} t_{x'} \text{ absolute math;}$$

Lab purposes

However; two observers looking at each other

$$\mathbf{S(A)} = \mathbf{r} \exp [i \omega t]$$

$$\mathbf{S(B)} = \mathbf{r} \exp [-i \omega t]$$

$$S_x(A) = S_x = c t_x \approx c t_{x'} \sqrt{[1 - (v/c)^2]}$$

$$S_x(B) = S_x = c t_{x'} \approx c t_x \sqrt{[1 - (v/c)^2]}$$

$$\text{And } t_x \approx t_{x'} \sqrt{[1 - (v/c)^2]}$$

$$\text{And } t_{x'} \approx t_x \sqrt{[1 - (v/c)^2]}$$

That is why there no twin Paradox except on science fictions books because it is all about aberrations and nothing real.

3 - Momentum

$$S_x = \text{Visual location along the line of sight} = r \sqrt{[1 - (v/c)^2]}$$

$$P_x = v \sqrt{[1 - (v/c)^2]}; v = \text{constant}; P_x = d[S_x]/d t$$

$$\text{And } m P_x = m v \sqrt{[1 - (v/c)^2]} = m(0) v$$

$$4 - \text{Mass Then } m = m(0) / \sqrt{[1 - (v/c)^2]}$$

$$\text{Also; } m = m(0) / [1 - 1/2(v/c)^2]$$

5- Energy

$$mc^2 = m(0) c^2 / [1 - 1/2(v/c)^2]$$

$$E = m(0) c^2; v = 0$$

$$\text{Also } m \approx m(0) [1 + 1/2(v/c)^2]$$

$$\text{Hence } mc^2 \approx m(0) c^2 + m v^2/2$$

I am not only saying Lorentz Einstein and the 100,000 dead physicists and the 100,000 living physicists are wrong I am adding that the collective value of relativity theory special and general and all of more than three dimensions based physics is 1/2 rotten onion stinking onion.

Space – time stupidity is $E = mc^2$

This is how $E = mc^2/2$ ended being $E = mc^2$

$E = mc^2/2$ and

$E = mc^2$ is the visual illusion of $E = mc^2/2$

Visual $E = mc^2$

Proof: E (total) = T (kinetic) + U (potential) = $T + [U = 0] = [T = 0] + U$

With $E = T = mv^2/2 = mc^2/2; v = c$

With $\mathbf{r} = \mathbf{r}(0) e^{[\lambda(r) + i\omega(r)]t}$

$\mathbf{P} = \{[\mathbf{v}(\mathbf{0}) + \mathbf{r}(\mathbf{0}) [\lambda(r) + i\omega(r)]]\} e^{[\lambda(r) + i\omega(r)]t}$

With $\lambda(r) = 0, \mathbf{P} = [\mathbf{v}(\mathbf{0}) + i\omega(r) \mathbf{r}(\mathbf{0})] e^{i\omega(r)t}$

$(\mathbf{P} \cdot \mathbf{P}) = [v^2(\mathbf{0}) - \omega^2 r^2(\mathbf{0}) + 2i\omega \mathbf{r}(\mathbf{0}) \cdot \mathbf{v}(\mathbf{0})] e^{2i\omega(r)t}$

$E = m(\mathbf{P} \cdot \mathbf{P})/2 = (m/2) [v^2(\mathbf{0}) - \omega^2 r^2(\mathbf{0}) + 2i\omega \mathbf{r}(\mathbf{0}) \cdot \mathbf{v}(\mathbf{0})] e^{2i\omega(r)t}$

$E = (m/2) [c^2 - c^2 + 2ic^2] e^{2i\omega(r)t}$

With $\omega r(\mathbf{0}) = c$

$E = (m/2) [2ic^2 e^{2i\omega(r)t}]$

$|E| = (m/2) |2ic^2| |e^{2i\omega(r)t}|$

$E = (m/2) (2c^2) = mc^2$

$E = mc^2$

In experiments we can only find 1/9 of the energy that the formulas say there is energy. Scientists are wasting their efforts for all of past century on trying to find the other 8/9 energy the formulas says they exist but we can not find.

How did that happen?

We have $E = [mc^2/2]$ and in nuclear reaction they say when mass is changed to energy then change in energy $\Delta E = mc^2$ and total energy is $= E + \Delta E = mc^2/2 + mc^2 = 3mc^2/2$ and in experiment we can only find $E = mc^2/2$ and the other $2 [mc^2/2] = 2E$ are missing.

With $E (\text{total}) = 3 (mc^2/2) = 3 E = E (\text{total})/3$ can be found and $2E = 2 E (\text{total})/3$

Or $E (\text{total})/3$ found

And $2 E (\text{total})/ 3$ missing

Then scientists added that also $(1/3)$ of energy that we found might have $2/3$ missing too.

Then $2/3 (1/3) = 2/9$ missing of energy that we found

And $2/3 = 6/9$ already missing and the total missing is $6/9 + 2/9 = 8/9$ missing wow!

Wow! Let us find $8/9$ missing energy and get rich and for a century scientists are making all others day dream of $8/9$ dark energy missing and the only things that have had happened is scientists got money and humanity received "University" stupidity called space - time.

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