

## Einstein and Eddington's Failed Starlight Bending of 1919

**In an attempt to validate his idea of equivalent gravitation motion, Einstein imagined the paths of photons would be curved by gravity when passing the sun or any other large body of mass. He predicted that stellar photons passing very close to the sun's surface would be deflected about 1.75 arc-seconds by the sun's gravity when viewed from Earth.**

This predicted effect was measured by Arthur Eddington in 1919 and in a couple of his 33 photos a deflection close to Einstein's prediction was measured. This result created a sensation and newspapers around the world claimed that Einstein new gravity theory containing the principle of equivalence was validated.

However, while Eddington mistakenly thought he was measuring the Sun's downward gravitational attraction, he was actually measuring Earth's upward gravitational momentum. Had he brought an accelerometer along with his telescope, he would have been able to measure that in the 8 minutes it took for the photons to reach him after passing the sun, Earth's surface had accelerated upward a distance of 1262 km at right angles to the paths of the photons. This created an apparent angle of deflection of 1.74 arc-seconds even though the paths of the photons remained perfectly straight.

It was thus Einstein's falsely substantiated and extremely complex theory that each photon's path was slightly deflected by the gravity of each star it passed as well as the multiple gravitational attractions between photons that traveled close to one another for billions of years.

### **The Einstein Angle Coincidence**

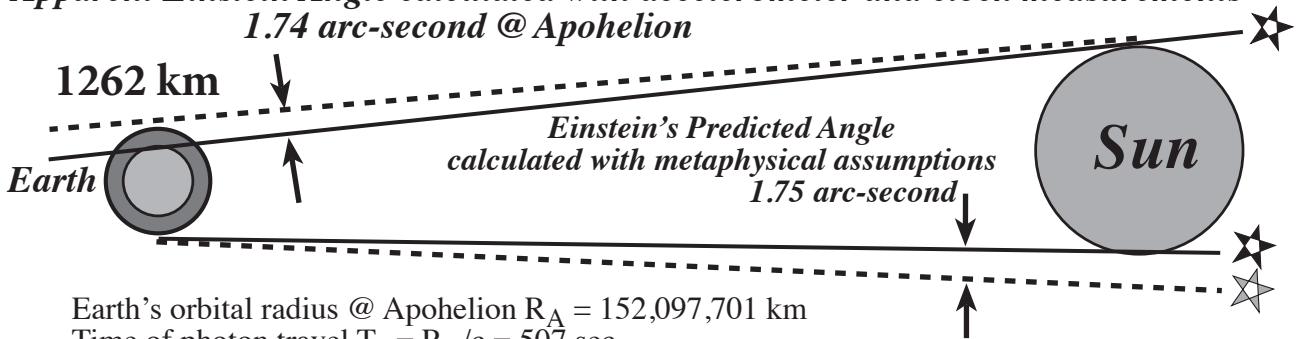
At first glance, it would seem a remarkable coincidence that when I calculate and measure the apparent Einstein angle of starlight deflection, I arrive at nearly the same value (1.74 arc second) as Einstein's calculated value. This would seem to be quite remarkable since we are each using completely different physical parameters to reach our results. I use only Earth's surface gravity ( $g = 9.807 \text{ m/s}^2$ ), Earth's escape velocity ( $V_E = 11,200 \text{ m/s}$ ), Earth's radius ( $R_E = 6,378 \text{ km}$ ) and the radius of Earth's solar orbit  $R_A = 152,097,701 \text{ km}$ ). These four parameters can all be calculated from direct physical measurements made here on Earth.

In contrast, Einstein calculated the same tiny angle by using the sun's mass and its acceleration of gravity, while not even considering Earth's gravity. How is it that these two completely different calculations using different parameters are able to produce to same value of apparent starlight curvature measured by Eddington? The physical reason that these seemingly opposite calculations produce identical results is that they are virtually the same calculations that are upside down, backwards and inside out from one another.

The only real dynamic measurement that both Einstein and I use in our calculations is the downward deceleration at Earth's surface ( $9.807 \text{ m/s}^2$ ) that Einstein perceived as equivalent upward acceleration. Einstein imagines this acceleration to be caused by a downward force and then uses it to calculate Earth's mass. He then extrapolates this value to calculate the mass of the sun relative to Earth's mass and the sun's gravity based on Earth's gravity. Our values for the measured starlight displacement are the same in both of our calculations because the only temporal measurements made are the speed of Earth's gravity and the speed of light. All spatial measurements are the same for both of our calculations.

# The Apparent Solar “Bending” of Starlight

*Apparent Einstein Angle calculated with accelerometer and clock measurements*  
**1.74 arc-second @ Apohelion**



Earth's orbital radius @ Apohelion  $R_A = 152,097,701$  km  
 Time of photon travel  $T_a = R_A/c = 507$  sec  
 Mean Earth's orbital radius  $R_M = 149,600,000$  km  
 Time of photon travel  $T_M = R_M/c = 499$  sec  
 Earth's orbital radius @ Perihelion  $R_p = 147,098,074$  km  
 Time of photon travel  $T_p = R_p/c = 490$  sec

Earth gravity  $g = 9.807$  m/s<sup>2</sup>  
 Fall distance @ Apohelion  $D = gT^2/2 = 1262$  km    725 km per arc-second

Einstein angle @ Apohelion = 1.74 arc-second = Distance 1262 km  
 Einstein angle @ Mean  $R_m$  = 1.68 arc-second = Distance 1221 km  
 Einstein angle @ Perihelion = 1.62 arc-second = Distance 1180 km  
 **$360^\circ = 1,296,000$  arc-second**

## Eddington Got It Backwards

If we look at the above drawing and assume that the actual starlight deflection is caused by the sun's gravity, then we would calculate the same angle of deflection for each photon passing close to the sun no matter where on the facing disk of Earth the measurement was made. However, if we measure that the deflection is only apparent and caused by the upward decelerating Gravitational Momentum of Earth's surface, then the measured angles of displacement would be different for each star measured on different locations on Earth's surface and also for each star's location on the sun's circumference. Measurements made at the center of Earth's sun facing disk would show no displacement but those made at the edge of Earth's disk from stars at the adjacent edge of the sun would show Einstein's predicted angle of 1.75 arc-second. However, stars from the opposite side of the sun's disk would show the same angle but deflected in the opposite direction and measurements made of stars from 90 degrees on the sun's disk would show transverse displacements. Measurements made from all other locations on Earth's disk would show different apparent deflections for each star on the sun's circumference.

In reality, all starlight deflections are apparent rather than real. All measured deflections of starlight are the result of transverse motions (Gravitational Momentum) of Earth's surface in the eight minutes between the time the photons pass the sun and are then measured on Earth. The laws of Electrodynamics do not allow photons to be altered in any way as they travel at exactly (c) on straight momentum vectors relative to the imaginary Zero Momentum Rest frame. There is no such thing as a spacetime continuum producing gravitational energy capable of altering the paths of photons.

When Eddington and his colleagues examined the 33 eclipse photos from the expeditions, they found many different positive, negative, and transverse deflections of starlight. Since Eddington was a personal friend of Einstein and wanted to prove his theory correct, he rejected most of the photos as observational errors. Among the many different deflections, he found a couple of stars that were bent by an amount similar to that predicted by Einstein. He then rejected all the rest of the data as errors and declared to the world that Einstein's Equivalence Principle along with his General Theory of Relativity had been proven correct.

### **Eddington's Starlight Bending Hoax**

*"There can be no clearer scientific fraud than what went on in the tropics on May 29, 1919. Eddington was in no way interested in testing Einstein's theory, but only in confirming it. He fudged the data correspondingly. Some stars were indeed displaced in the required direction. But others were displaced in a transverse way and still others in the opposite direction to that predicted. Non-conforming data, 85% of the total, were simply discarded as due to 'accidental error'. By a strange coincidence the remaining 15% 'good' data were those consistent with Einstein's theory. This was surely one of the biggest scientific hoaxes of the 20th century. Thanks to this fraud, based on a handful of data points massaged more thoroughly than a side of Kobe beef, Einstein became a world celebrity surrounded by an aura of scientific infallibility."*

Maurice Allais (1911–2010), French physicist and economics Nobel laureate.

These same starlight measurements were performed a few times during subsequent solar eclipses but the results were always the same with many different deflections and none precisely matching Einstein's 1.75 arc-second prediction. Soon, the pseudoscientists, who much preferred metaphysical assumptions over experimental measurements to explain their theories, made these solar eclipse observations taboo because they might continued to cast doubt on their pet gravity theories that they knew in their hearts had to be absolutely correct.

Instead, these Gravitational Energy enthusiasts turned to such experiments as the measurements of Time Dilations with GPS satellite clocks and the Pound-Rebka measurements of Decelerating Gravitational Momentum between the top and bottom of the Jefferson Tower. While these experiments did not validate Einstein's Relative Energy theories of curved Gravitational Space and Gravitational Energy that was Equivalent to Momentum, they did produce measured values that were compatible with some but not all of Special and General Relativity's calculated dynamics.

However, popularizers of scientific theories and Relativity enthusiasts continued to use the failed starlight bending experiments as one of the "definitive" proofs of General Relativity. One such example is the following quote by Steven Hawking who declared himself to be an expert on General Relativity and made his reputation presenting metaphysical assumptions about gravity that were far beyond the reach of any verifiable experimental measurements or observations. He used equations to predict gravitational phenomena rather than rely on experiments or observations. While these equations may well have duplicated the results of gravitational interactions, they were backwards, upside-down, and inside-out from any true description of what was actually happening. His unmeasured Gravity Energy Paradigm was in stark contrast to the many measurements of conserved Gravitational Momentum.

***"The curvature of spacetime was confirmed in spectacular fashion in 1919 when light was bent as it passed the Sun, giving direct evidence that space and time are warped."*** **Steven Hawking**

This quote shows Hawking's pure disdain for experiments of Accelerometer Physics. Like Einstein, Hawking believed in the metaphysical assumption of Gravitational Potential Energy and totally rejected all accelerometer measurements of decelerating Gravitational Momentum. His knowledge of gravitational experimentation was so poor that he didn't even seem to know that Eddington's experiment completely failed to validate Einstein's Gravitational Energy Theory and instead virtually confirmed the Principle of Gravitational Momentum that he steadfastly refused to ever acknowledge.

## John Archibald Wheeler's Gravity Paradoxes

*“Spacetime tells matter how to move; matter tells spacetime how to curve.”*

John Archibald Wheeler

This is a metaphysical assumption that reverses the experimental principle of Cause and Effect. Wheeler imagined that “curving spacetime” was the cause of Gravitational Momentum and then paradoxically that Gravitational Momentum was the cause of spacetime curvature. Wheeler imagined that Gravity had two causes and no effects.

Most pseudoscientists seem to have a perverse delight in using this unintelligible and contradictory quote to begin their discussions of the gravitational interaction. They then conclude that these two opposite gravitational assumptions explain all physical interactions of Mass, Space, and Time with Wheeler's next quote.

*“There is nothing in the world except empty curved space. Matter, Charge, Electromagnetism, and other fields are only manifestations of the bending of space. Physics is geometry.”*

John Archibald Wheeler

These two Wheeler quotes are based completely on metaphysical assumptions for which there are no validating accelerometer measurements or conceptual descriptions of the mechanical processes involved. The idea that each of the complexities of our physical reality is nothing more than a distinct little bend, twist, and twirl in the infinite and eternal void of space and time is the greatest absurdity of all of human thought. **Accelerometer Physics** demonstrates that all physical interactions are measured as conserved exchanges in Momentum and calculated as Kinetic Energies. The “substance” of Spacetime has been imagined by many theorists but never detected in any experiment.

After a long career of working on Gravitational Energy theories without much success, Wheeler made the following statement that summed up his failures to describe Gravity in an experimentally meaningful way.

**“To my mind, there must be at the bottom of it all, not an equation but an utterly simple idea. And to me that idea, when we finally discover it, will be so compelling, so inevitable, that we will say to one another “Oh how beautiful. How could it have been otherwise?”**

John Archibald Wheeler

What Wheeler is describing here is *Accelerometer Physics* and its *Principle of Gravitational Momentum* but to the very end, he could never bring himself to reject Newton and Einstein's metaphysical Gravitational Energy theories and accept the experimentalist's simple and basic accelerometer measurements of Decelerating Gravitational Momentum.

For More Information go to Page 227 of *THE GREAT EINSTEIN ENERGY HOAX*