

# Time Travel:

## An Approximate Mathematical Solution

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TIME TRAVEL: AN APPROXIMATE MATHEMATICAL SOLUTION

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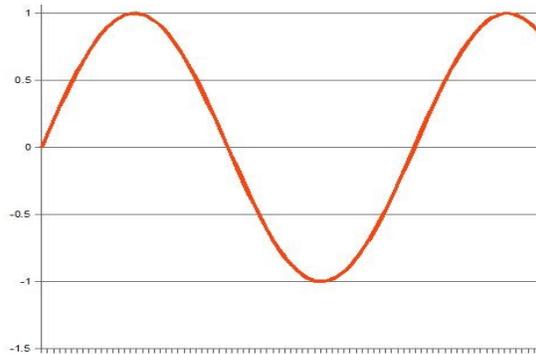
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## TIME TRAVEL: AN APPROXIMATE MATHEMATICAL SOLUTION

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### ABSTRACT

This short technical note describes an approximate mathematical solution for Time Travel involving relativity and very brief time intervals. Limitations of the solution are discussed including possible error sources. Assumptions are made for small changes in the speed of light and for the Lighthouse Frequency, which

has been described in previous papers. This paper will only be meaningful to those with a background in calculus, physics, and/or engineering. Each reader must comprehend that our universe blinks off and on, approximately 1 trillion times every second.

## Time Travel: An Approximate Mathematical Solution

Richard Lighthouse

### Background Information

Everything in a physical universe has a natural, resonant frequency – including the universe itself. That frequency might be approximately 1 THz and could be utilized as a carrier wave. [10]

This can be called a vibration, a blinking, or a frequency, but perhaps a better explanation, in our terms - the entire physical universe is newly constructed and then collapses to a single point at approximately 1 trillion times each second, IN OUR TERMS (this must be emphasized). At the moment of collapse, there is no distance between galaxies - instant communication and instant travel are possible. (In larger terms, all of time is simultaneous, and there is no blinking. )

This resonant frequency is named the "Lighthouse Frequency."

By applying a precise electric charge to a vehicle (such as a spacecraft) while vibrating the external metal skin at the Resonant Frequency of the universe - a vehicle can instantly jump thru time or space. The precise volts, amps, and phase angle determine where in spacetime the vehicle jumps. This implies then, the difference between 2 points in SPACE is defined by electric charge, not distance, and the difference between 2 points in TIME is also defined by electric charge, not seconds or years.

This idea can be compared to using a strobe light on a rotating fan to "stop" the blades - from the perspective of the strobe, the fan is not moving and it is possible to "jump" between the blades. The jump, in our terms, is caused by a simple electric charge.

### Technical Note:

## PART 1

Time, in our terms, is one form of Probability. To jump between probable universes will require a specific amount of Energy.

Physicists are familiar with the equation from the Special Theory of Relativity: [1]

$$E = m c^2$$

From this formula, we can also deduce

$$dE = d (m c^2)$$

or perhaps more accurately

$$\frac{\partial E}{\partial t} = \frac{\partial m}{\partial t} \times c^2 + m \times \frac{\partial c^2}{\partial t}$$

If we assume mathematically that the speed of light,  $c$ , can vary with time, then  $c$  is no longer a constant.

And for very small intervals of time, the change in mass with respect to time can be considered negligible and this term becomes 0,

$$\frac{\partial E}{\partial t} = 0 + 2c m \frac{\partial c}{\partial t}$$

We assume this Energy is constantly created and never destroyed, because the physical universe blinks off and on (which is different than the Law of Energy Conservation). [4]

$$dE = m * 2c dc$$

If we evaluate  $dE$  over a time interval equal to a single cycle of the Lighthouse Frequency:

$$= m * 2c \, dc$$

which is a non-zero value, in contrast to the Conservation of Energy.

Therefore, the amount of Energy needed to jump to a different Probable Time, is determined by the mass and the change in the speed of light between the Origin Probable Universe (Origin) and the Target Probable Universe (Target), as well as the value of the Lighthouse Frequency.

Based upon the data in Reference [6] and [7], it appears that the speed of light is increasing over the last 50 years at an average value of 3.14929 m/s each year. We will assume this value is correct, however only precise laboratory and experimental testing can determine the correct values.

For small changes in time and the speed of light, we will assume that it is governed by the equation: [6], [7]

$$y = 3.14929 x$$

where  $x$  = calendar year difference in decimal format (ie. 50 years)  
and  $y$  is equal to  $dc$ .

So for a time translation of 50 years, we get approx.  $dc = 157.4645$  m/s

(After preliminary hardware testing using target objects, it will be possible to better define the equation. It is likely non-linear for large changes.)

So, in our terms, the Energy required depends on the value of the Lighthouse Frequency, the mass, and the change in the speed of light.

$$\text{Change in energy} = 2c * m \, dc$$

## PART 2

We can generate this energy by using an electric charge.

We know from electrical fundamentals (Maxwell) that

$$E = 1/2 Q V$$

where  $Q = \text{integral over time of } I dt$ , which is in amps\*sec.

$$E = \frac{1}{2} \int I dt V$$

where in our case, during the time interval,  $dt$ , we use the time-averaged value of the Lighthouse Frequency. For our test case, we assume it is approx. constant for small changes in time.

$$E = V * I * t / 2$$

$$E = \text{Volt} * (\text{Amp} * \text{sec}) / 2$$

Let's continue with an example case to solve for the approximate Volt\*Amps\*sec required:

We will assume the total mass of our time machine is 160 kg.

We will assume a time translation of 50 years, which gives a  $dc = 157.4645 \text{ m/s}$

Therefore the Volt\*Amp\*sec required are:

$$V * A * \text{sec} / 2 = 2c * m * dc$$

$$V * A * \text{sec} = 2 * 2c * m * dc \text{ [units are m/s * kg * m/s]}$$

$$= 4 * c * 160 * 157.4645$$

$$= 3.02123E*13 \text{ volt*amps*sec}$$

$$= 30,212,288,673 \text{ kVA sec [units are kvolts * amps * sec]}$$

$$= 8,392,302 \text{ kW.hr}$$

which is a large amount of energy to discharge in one billionth of a second.

This amount of energy is placed on the shell housing of the Time Machine while simultaneously vibrating the skin at the Lighthouse Frequency - which is done by using a hyfrecator-type device. The Lighthouse Frequency is embedded in the discharge in the form of a square wave, for example.

## CONCLUSIONS

An approximate solution has been provided to determine the amount of energy required for time travel. The concept is based upon a blinking universe. A sample problem has been analyzed assuming a time machine with a mass of 160 kg and a time translation of 50 years. [9]

This document is a living document. The author reserves the right to make corrections and changes.

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## APPENDIX

If we assume that we will build up this electric charge on a capacitor, and then discharge it within a single cycle of the Lighthouse Frequency:

@ 10 cents per kWatt\*hr

The electricity to make a time translation of 50 years for a single traveler will cost approximately:

$$= 3.02123E^{*13} / 1000 / 3600 =$$

\$ 839,230 or nearly 1 Million USD.