

Wave like properties of Time

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Abstract

Time is a component of the measuring system used to sequence events, to compare the durations of events and the intervals between them. The measuring equipment is likely to be a clock. By making an assumption that clock is measuring Time, it is observed experimentally that “Time exhibit wave like properties “.

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I. INTRODUCTION

Properties of Time can only be identified if we measure relative Time between two clocks. An experiment has been carried out by synchronizing two second accurate clocks at the same time. Both the clocks traversed different spacetime compared to each other over the duration of one month and Δt being measured repeatedly within some finite time interval.

II. EXPERIMENT

Let's represent two clocks as **A** and **B**. Initially **B** was kept 3 seconds ahead of **A**, so $\Delta t=3$. **B** used to traverse more spacetime compared to **A**, but the spacetime difference between **B** and **A** is minute in large scale. Δt is found to be a nondeterministic wave function over the period of time.

III. MATHEMATICAL FRAMEWORK

$f_1(t)$ and $f_2(t)$ be the time function for **B** and **A**.

$$f_1(t) - f_2(t) = \Delta t \quad (1)$$

Δt is a time dependent wave function, shown in Fig.1.

Lemma: if Δt is a time dependent wave function, $f_1(t)$ and $f_2(t)$ also be a time dependent wave function.

IV. CONCLUSION

Can we conclude time exhibit wave properties?

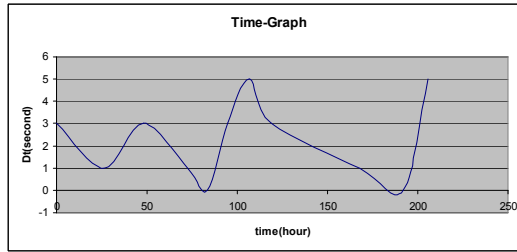


Figure.1 Time(in hours) is plotted along the X axis and Δt (in seconds) is plotted along the Y axis.

References: [None]