Title: Objects spending zero time interval

Author: Yahya Awad Sharif Mohammed

Abstract: This article aims to analyze mathematically objects spending zero time interval in reality.

Article:

Objects in motion spends zero time at each point of their movement , at each point as they have been photographed they spend at that point zero seconds before they move to another point to elapse a distance S .

Free-fall objects thrown from below upwards exactly vertical ninety degrees angle , spends zero seconds at the exact point of stationary, it is the same point the object has zero meters per seconds speed, at this transformation point from positive speed to negative speed the object stops completely with zero speed spending zero seconds at that point.

Mathematically spending zero seconds is not defined according to velocity definition , the displacement-time function is not defined in the case the time interval is zero, that emphasizes the idea that time interval should never be equal to zero.   According to my definition each moving object spends zero seconds at a photographed point , at that point the object is motionless-at least at its simplest motion which is constant speed-   motionless objects are not capable to measure their constant speed , because they are motionless, their speed is naturally undefined at that motionless point , however at that motionless point they spend zero seconds, naturally the displacement-time function is defined except in the case the object is motionless .   At the starting point the velocity is not defined as well, at the motionless point or the starting point   -motionless as well- the time interval is always squalls to zero -in the case of the starting point time is taken immediately - in this case the velocity is not defined both physically and mathematically whenever the time interval is zero seconds.

This might   imply that both time and distance are continuous , they might be, and the number line can represent continuous time or distance by having a number line   without numbers assigned to it , a number line of meter can be assigned to four numbers , 1,2, 3 and 4 each number has 25 cm distance long or 6 numbers or 7 , etc. Or infinite amount of numbers , assigning numbers to the number line change it -whether a vertical one for distance or horizontal one for time- to a discrete number line to represent discrete values-time and distance.