

## Time and Kinematics of Moving Bodies

**Authors :** Muhammad Omer Farooq Saeed

**Abstract :** The purpose of the proposal is to find out what time actually is! And to understand the natural phenomenon of the behavior of time and light corresponding to the motion of the bodies at relatively high speeds. The utmost concern of the paper is to deal with the possible demerits in the equations of relativity, thereby providing some valuable extensions in those equations and concepts. The idea used develops the most basic conception of the relative motion of the body with respect to space and a real understanding of time and the variation of energy of the body in different frames of reference. The results show the development of a completely new understanding of time, relative motion and energy, along with some extensions in the equations of special relativity most importantly the time dilation and the mass-energy relationship that will explain all frames of a body, all in one go. The proposal also raises serious questions on the validity of the "Principle of Equivalence" on which the General Relativity is based, most importantly a serious case of the bending light that eventually goes against its own governing concepts of space-time being proposed in the theory. The results also predict the existence of a completely new field that explains the fact just how and why bodies acquire energy in space-time. This field explains the production of gravitational waves based on time. All in all, this proposal challenges the formulas and conceptions of Special and General Relativity, respectively.

**Keywords :** time, relative motion, energy, speed, frame of reference, photon, curvature, space-time, time -differentials

**Conference Title :** ICCTP 2023 : International Conference on Computational and Theoretical Physics

**Conference Location :** New York, United States

**Conference Dates :** October 09-10, 2023