



PROJECT PROPOSAL

DELHI TECHNOLOGICAL UNIVERSITY

Department of Applied Physics

I Semester

➤ **Project Details**

Topic: Relativistic Mass

Subject: Physics I (AP 101)

➤ **Project by**

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➤ **Project Supervisor**

Dr. Renuka Bokolia

➤ **Project Introduction**

In this project I am going to study about Relativistic mass. There are two types of masses in Special Relativity, Rest mass and Relative mass. The Theory of Special Relativity explains how space and time are linked for objects that are moving at a constant speed in a straight line. When velocity (v) is comparable to speed of light (c) we use Lorentz Transformations. Mass at speed comparable to speed of light becomes relative. The formula for Relative Mass and Energy relation is given by Einstein's Energy Mass Equivalence. There is inter-relation between these Relative Mass, Energy and Momentum. The Relativistic Mass Concept can be used to give explanation to many natural and artificially occurring events.

➤ **Project Objective**

Objective of this project is to study about Einstein's Energy Mass Equivalence and checking the validity of The Law of Conservation of Momentum and Law of Conservation of Mass.

Checking the validity of Relativistic Mass Concept (i.e. whether the mass is really relative or is it constant) is main focussed objective.

❖ **Date:**

January 15, 2021