ABSTRACT

Energy-momentum is an important conserved quantity whose definition has been under investigation since the birth of general relativity. Although, the problem of localization of energy is unresolved and controversial but much attention has been given by different scientists to resolve it. The reason behind this problem is that the energy-momentum tensor is not a conserved tensor, that's, it does not satisfy the conservation laws. In this thesis, we use energy-momentum prescriptions of four well known scientists, namely, Einstein, Landau-Lifshitz, Bergmann-Thomsom and Møller in both general relativity and teleparallel theory of gravitation to explore the energy-momentum distribution of non-static plane symmetric spacetimes. A comparison between the results of two theories is furnished in the end.