Inhomogeneity Factors for a Regular Stellar Structures in Modified Gravity

Muhammad Zaeem Ul Haq Bhatti Department of Mathematics University of the Punjab Pakistan

This study is devoted to calculate some inhomogeneity factors for a regular background of self-gravitating stellar structure in the presence of cosmic dark sector terms. In order to analyze the causes of energy density inhomogeneities, we compute and solved two notable differential equations widely known as Ellis equations by means of conservation laws and Weyl tensor. The inhomogeneity epochs are examined for radiating and non-radiating self-gravitating systems. The role of cosmic structure scalars are also investigated in the analysis.