

Gravitational Decoupled Anisotropic Stars in Modified Gauss-Bonnet Gravity

Abstract

We explore exact anisotropic solutions through gravitational decoupling approach in the context of modified Gauss-Bonnet gravity. For this purpose, we use minimal geometric deformation to decouple the purely gravitational sources for static spherically symmetric space-time. Further, we use some physical constraints to derive two realistic anisotropic models as well as the generalized anisotropic solution. We check physical acceptability as well as stability of the derived models through energy conditions and squared speed of sound, respectively.