

Static conformal models for anisotropic charged fluids

In this poster we investigate the role played by conformal symmetries in the study of exact solutions in static spherically symmetric spacetimes. We consider gravitational field associated with anisotropic charged fluids. The existence of a conformal symmetry provides us with a functional relation between the metric functions. This relationship yields a general solution to the Einstein-Maxwell equations. Various conformally symmetric models for fluids that are charged or anisotropic or both are shown to be special cases of the general exact solution generated. In particular we generate a conformally flat Finch-Skea type model for an isotropic charged fluid.