Abstract

Abstract:In this talk we, first, generalize the quasilocal de?nition of the stress energy tensor of Einstein gravity to the case of Lovelock gravity, by introducing the tensorial form of surface terms that make the action well-defined. We also introduce the boundary counterterm that removes the divergences of the action and the conserved quantities of the solutions of Lovelock gravity with flat boundary at constant t and r. As an example we obtain a new class of magnetic solutions in third order Lovelock-Maxwell gravity. We use the counterterm method and compute the conserved quantities of these spacetime as well as study the properties of these solutions.