

Abstract

In this talk, firstly we will introduce two classes of Lie conformal superalgebras, which are both of rank $(2 + 1)$ and the even part is isomorphic to the Heisenberg - Virasoro Lie conformal algebra, and discuss the structure theory and representation theory of them. Then we will investigate all the Lie conformal superalgebras of rank three and introduce some applications of them. This is a joint work with Jinrong Wang.