

Research of the highest energy cosmic ray particles is in the middle of the interest of theoretical and experimental physics. Their energies are several orders of magnitude higher than energies accessible at present accelerators. In this work, the reconstruction techniques of extensive air showers measured at the Pierre Auger Observatory are studied. For this purpose, extensive air showers are modelled in the simulation tool CORSIKA. Data collected at the Pierre Auger Observatory together with simulations are used to calculate resolutions of reconstruction methods. The Multiple-eye reconstruction is the main interest of this work. It can be used for independent verification of experimental results of the Observatory.