

The main goal of the thesis is to introduce methods used for the construction of confidence intervals for correlation coefficient in detail and to show their performances on various examples. In the first chapter is an introduction of basic properties of correlation coefficient and Fisher's z-transformation. The second chapter is about a method based on generalized pivotal quantities. It also contains an explanation why is an assumption of bivariate normal distribution necessary for this method. In the third chapter there is a description of two methods based on empirical likelihood. These methods are appropriate also for non-normal bivariate distributions. In the last chapter are all mentioned methods applied on several examples and compared with each other.