

This work deals with accuracy of silicon detectors, especially pixel detector DEPFET. Prediction of particle's in-detector position measurement errors was determined from simulated data and dependence of these errors on several parameters was analysed—some of the parameters relating to the detector (e.g. pixel size) and another relating to the particle (e.g. its energy). Basics about principle of silicon detectors, their applications and accuracy, experiment Belle and Belle II in KEK (The High Energy Accelerator Research Organization) and also statistic method as ANOVA, regression trees, division by probability (using entropy) are summarized here. Finally, original processing of simulated data (using regression trees) and resulting error predictions are presented.