

## **Abstract**

This bachelor thesis deals with the verifying of energy losses and checking the implementation of material into software on the inner tracking detector in the Belle II experiment in Japan. The Basf2 framework, which is developed especially for this experiment, was used for this confirmation.

First part of the thesis theoretically describes the Belle II experiment, it's inner pixel silicon detector DEPFET and also describes software and analytics framework - Basf2, which is developed for Belle II. Second part presents the knowledge about the energy losses of the particle passing through matter. The last part compares theoretical values with the values acquired from the basf2 simulation.