In standard binary trees the rebalancing is carried out in connection with and immediately folowing the updates. Relaxed balancing allows to separate updates and rebalancing. First advantage of this approach is to keep the tree partially unbalanced and leave rebalancing to the different time when system is idle. Other great benefit of presented relaxed balancing algorithms in concurrent enviroment is necessity of keeping only small constant number of locks for modifying operations and thus allowing more modifying operations in the tree at the same time. The aim of this thesis is to empirically compare standard and relaxed variant of AVL tree
in several different scenarios in concurrent enviroment according to number of data compares, number and type of rotations and according to the time requirements.