

- The time consumption of the LHCb reconstruction software was reduced by a factor 2 from 2012 to 2015 thanks to the help of parallelization in hot-spots of the software
- There is continuous effort to reduce time consumption further, especially in view of the upgrade
- With the help of machine learning, LHCb reduced its rate of fake tracks by about 40 % in the trigger
 - by a neural network after track fitting
 - by two neural networks in the forward tracking (new in 2016)
- The upgrade of LHCb will use a purely software-based trigger
 - This poses severe restrictions on the timing-budget
 - Parallelization will be crucial for upgrade track reconstruction