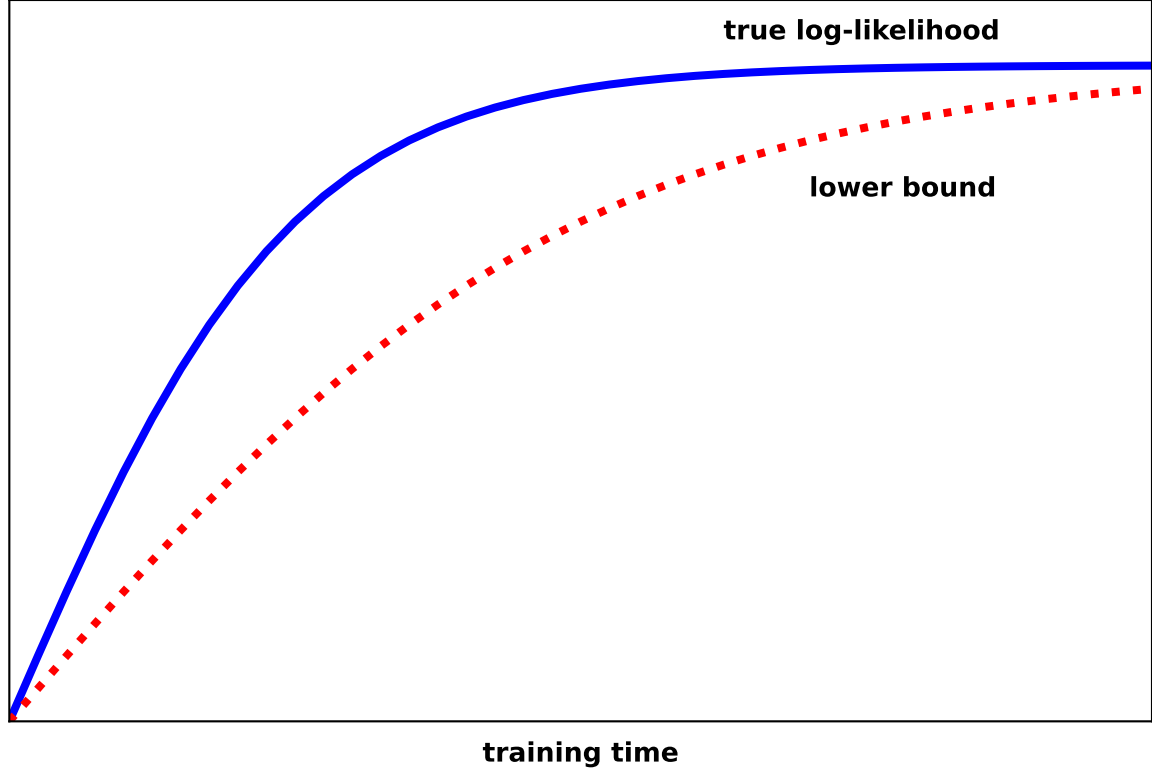
true log-likelihood
lower bound
training time