

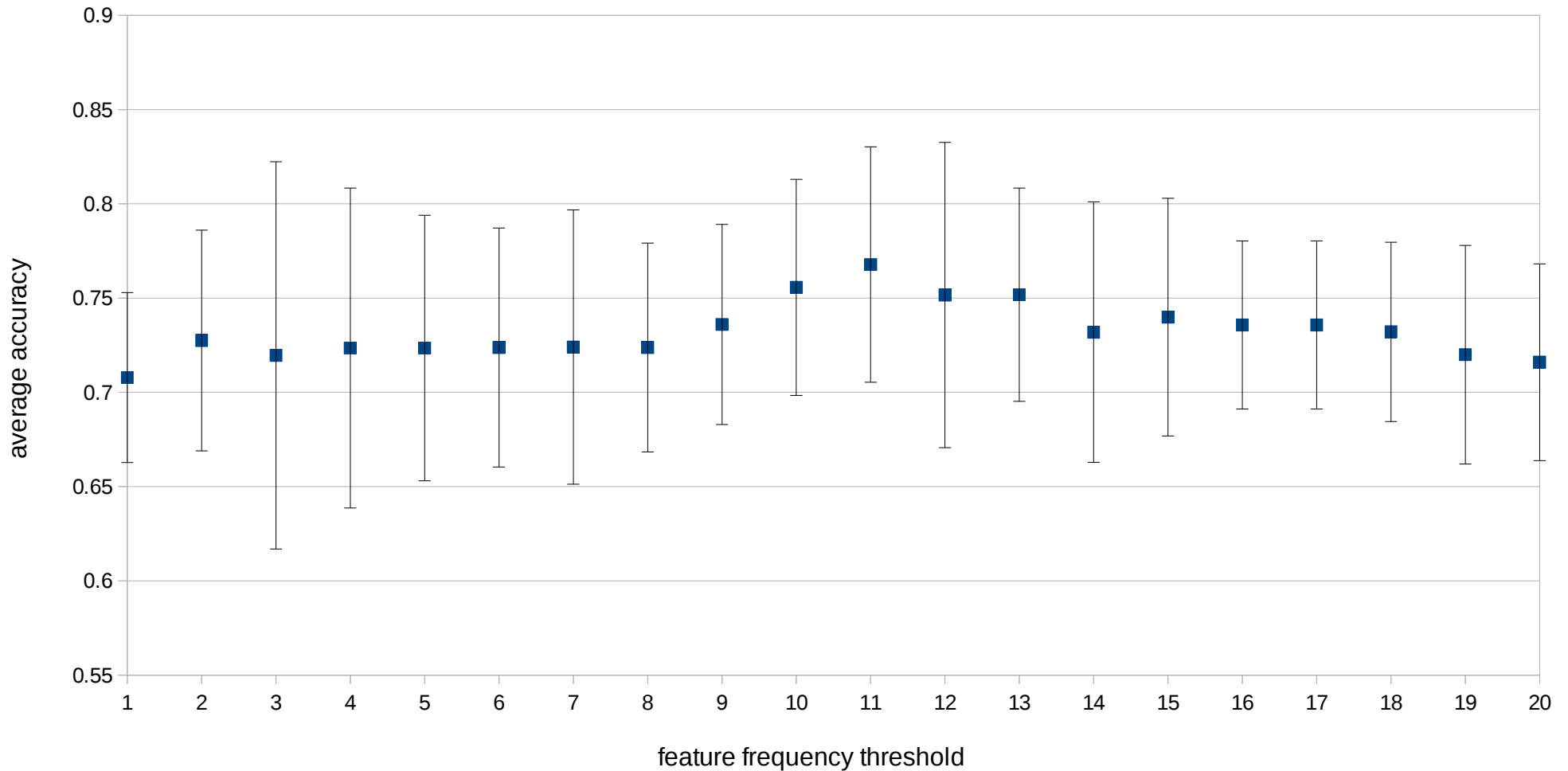
# Feature selection + SVM learner

## Comments on the illustrations below

- confidence intervals in the plots are based on 9-fold cross-validation and t-test with confidence level = 95%
- models in the first plot works with the full feature set (363 features) reduced only by the frequency threshold (values between 1 to 20)
  - data can be generated using the demo code `svm.tuning.fr.R`
- models in the second plot works similarly, but the base feature set is taken from the output of Lasso regression
  - data was generated by the demo code `svm.fs-lasso.cry.R`
  - the Lasso output is shown in `feature-selection.lasso.cry`
- the third plot shows SVM model with feature selection using the variable importance produced by AdaBoost; of course, getting the feature ranking based on the AdaBoost variable importance is a random process
  - data was generated by the demo code `var-imp.ab.R`

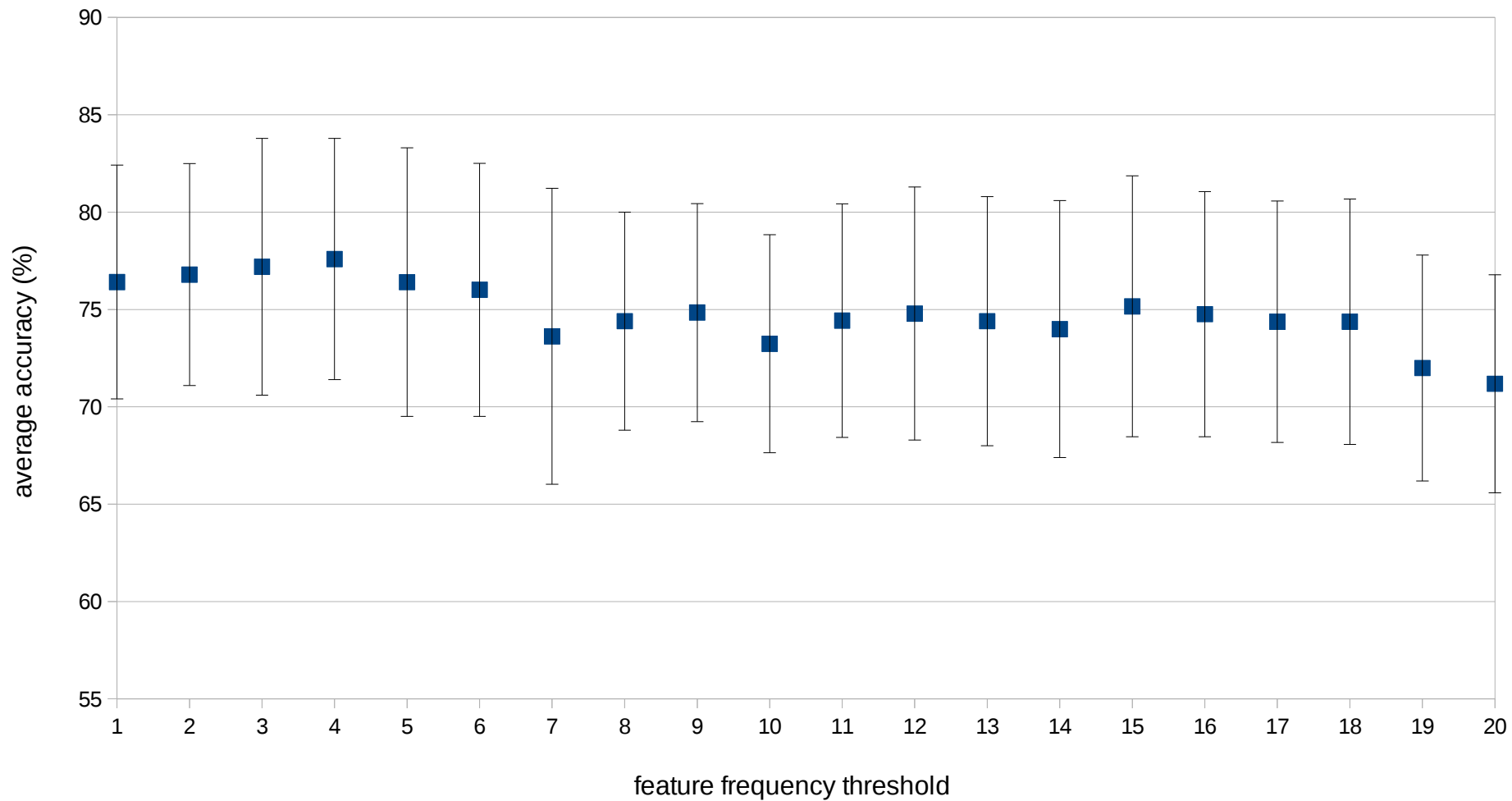
# CRY -- cross-validated SVM models

pure SVM with tuned cost



# CRY -- cross-validated SVM

with Lasso feature selection



# Feature selection -- AdaBoost vs. random

SVM model, verb = cry

