

Fast Learning from Non-i.i.d. Observations

I. Steinwart and A. Christmann, **Poster M58**

Problem:

- ▶ Statistical analysis of learning usually assumes i.i.d. data.
- ▶ In many applications this cannot be strictly justified.

Our Results:

- ▶ Oracle inequality for regularized ERM and α -mixing data.
- ▶ Covers ERM, SVMs, regularized boosting, ...
- ▶ For least squares SVMs, the resulting learning rates are almost as good as the optimal rates in the i.i.d. case.