**ARNAK DALALYAN**, Université Pierre et Marie Curie, Paris 6 Sparsity and sharp PAC-Bayesian bounds for the EW-aggregate

We study the problem of aggregation under the squared loss in the model of regression with deterministic design. We obtain sharp PAC-Bayesian risk bounds for aggregates defined via exponential weights (EW-aggregate), under general assumptions on the distribution of errors and on the functions to aggregate. We then apply these results to derive sparsity oracle inequalities. This is a joint work with Alexandre Tsybakov.