LSVI: Plots from extra experiments (rebuttal, 2nd round, reply to hBY5)
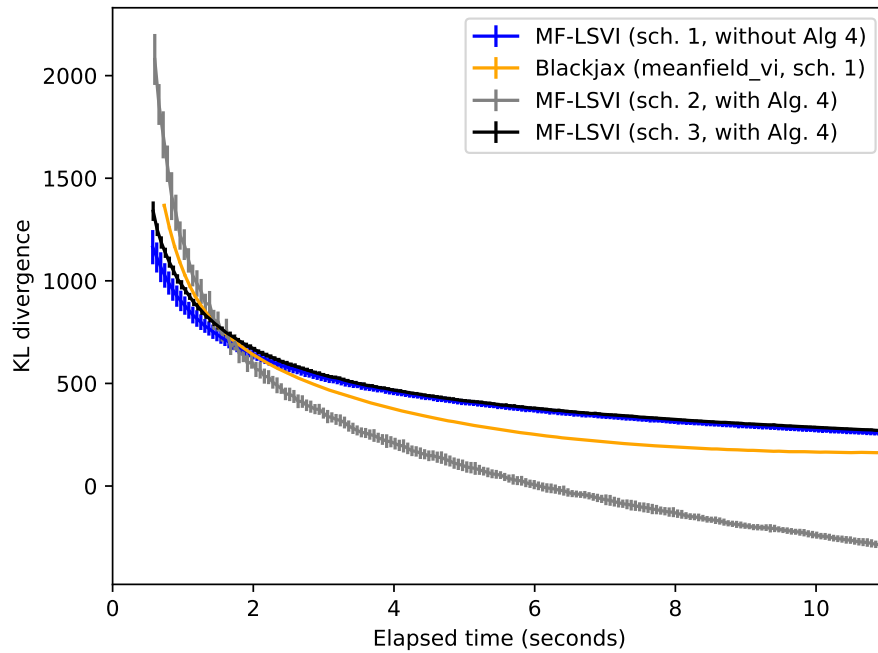
1 Wall clock time

Figure 1: Logistic regression example, MNIST data set, $N = 10^4$ samples. KL loss versus elapsed CPU time for MF (mean field) LSVI (three different schedules) and the BlackJax implementation of (mean field) ADVI.
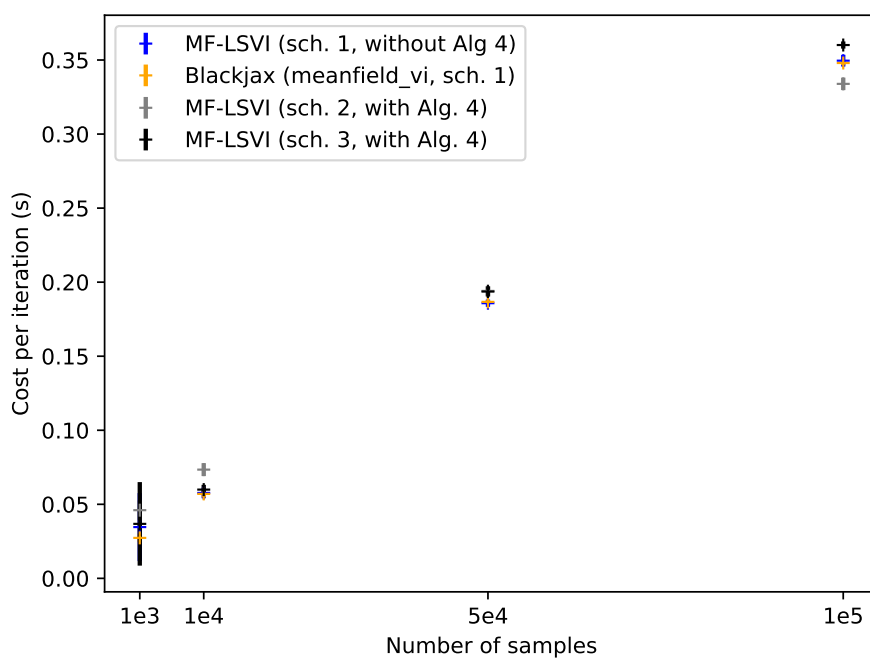

Figure 2: Logistic regression example, MNIST data set, $N = 10^4$ samples. Cost per iteration for the same algorithms as Figure 1 (LSVI vs ADVI).
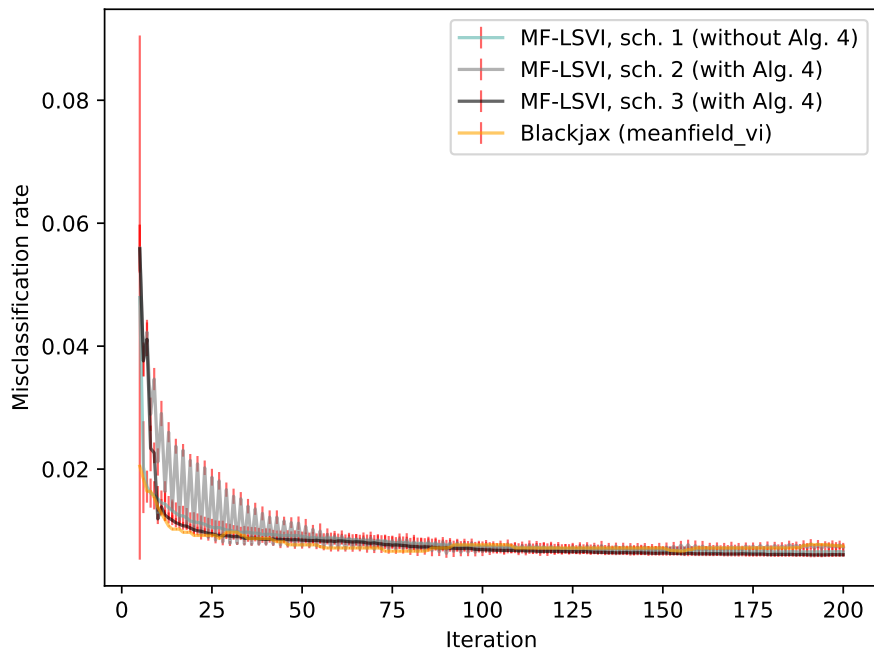
2 Misclassification rates

Figure 3: Logistic regression example, MNIST data set, $N = 10^4$ samples. Misclassification rate vs iteration, same algorithms as in Figures 1 and 2.
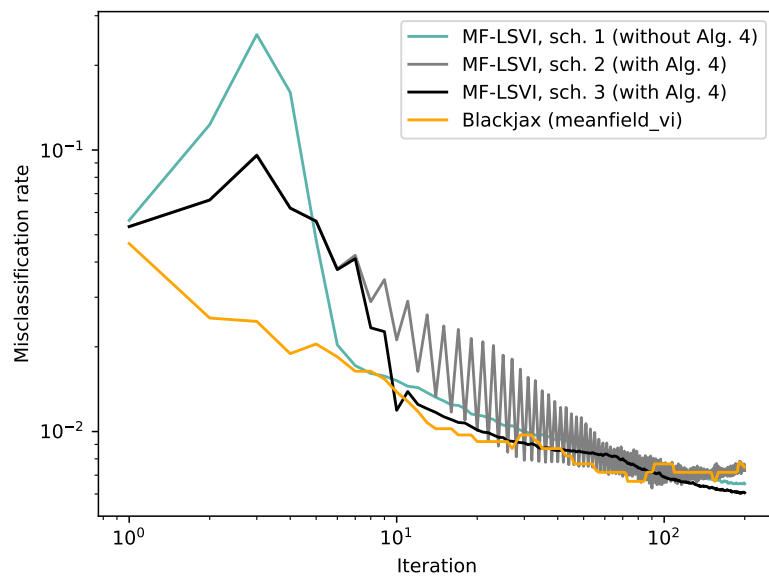

Figure 4: Same plot as above, using the log scale on both axes.
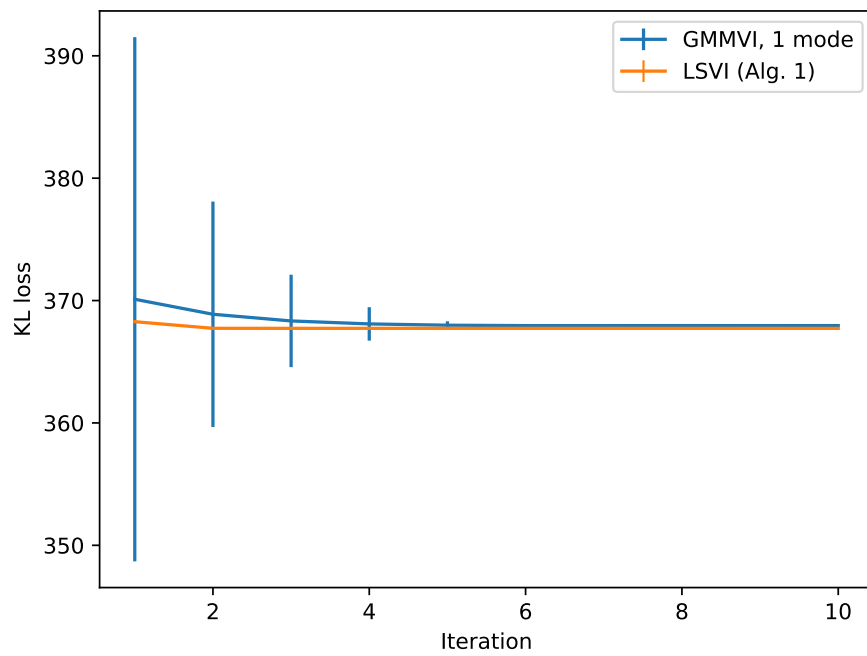
3 Arenz et al (2018)

Figure 5: Logistic regression example, Pima data set. KL loss versus iteration for LSVI and GMMVI (Arenz et al method, with number of mixture components set to one). The vertical bars represent the variability (± one standard deviation) over 100 trials.