## Running time of increasing hidden state space baumWelch backward\_time forward 0.020 -0.020 -0.012 -0.015 -0.015 -0.010 -0.010 -0.010 -0.008 -0.005 -0.005 -0.006 variant mean time [s] - 210.00 - 210.00 0.000 -0.004 - , **BLAS** 20 10 10 30 20 30 40 10 40 20 30 40 Conventional posteriorDecoding viterbi CSR 0.020 -RSB 0.015 -0.010 -0.010 -0.005 -0.005 -0.000 -

10

0

20

30

40

0

10

20

hidden states

30

40

error bars: standard deviation of 5 replicates input size: 120000, alphabet size: 4