

Figure 1: timing-pattern

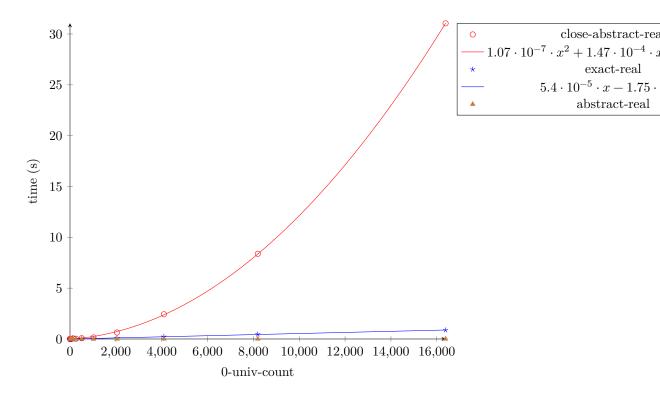
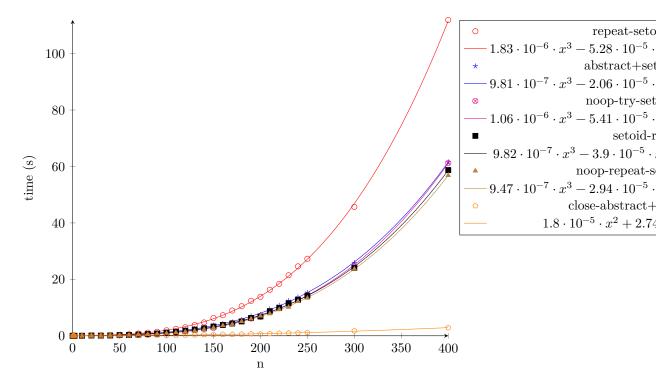
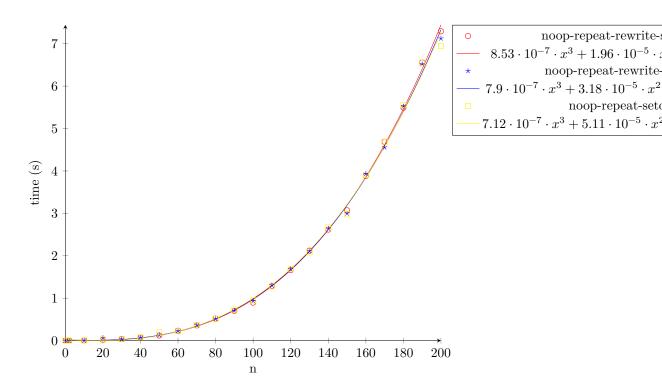


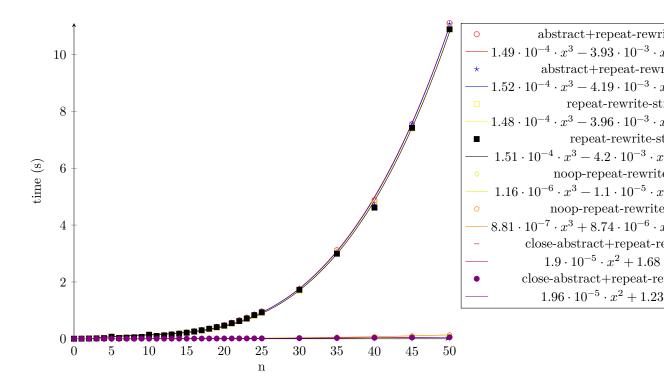
Figure 2: timing-n-polymorphic-universes param-1-n 0



 $Figure \ 3: \ timing-repeat-setoid-rewrite-under-binders$ 



 $Figure \ 4: \ timing-repeat-setoid-rewrite-under-binders-noop \\$ 



 $Figure\ 5:\ timing-rewrite-strat-under-binders$ 

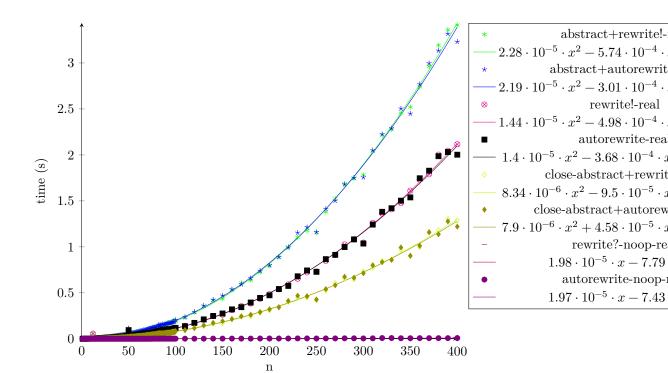
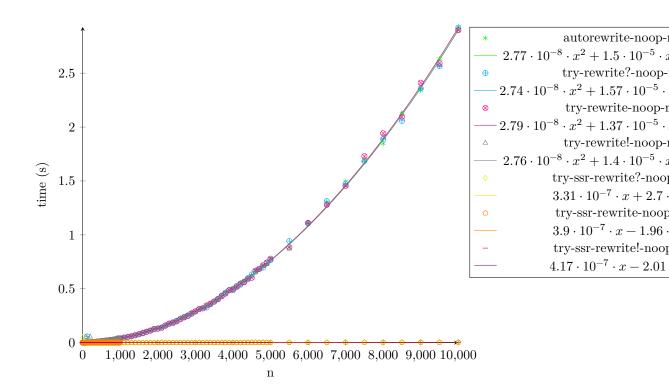


Figure 6: timing-rewrite-repeated-app-autorewrite



 $Figure~7:~timing\mbox{-rewrite-repeated-app-autorewrite-noop}$ 

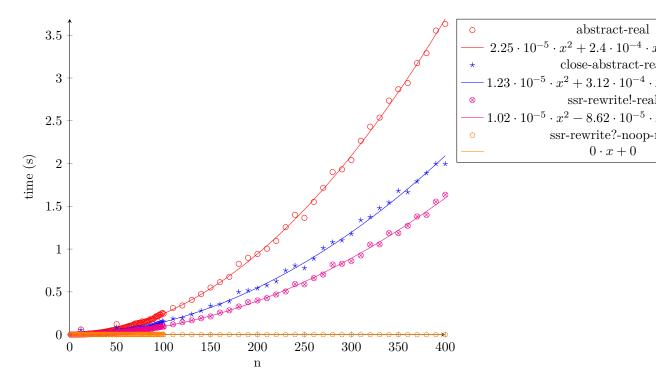
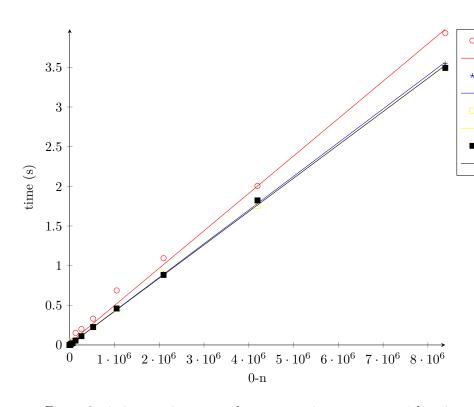


Figure 8: timing-rewrite-repeated-app-ssrrewrite



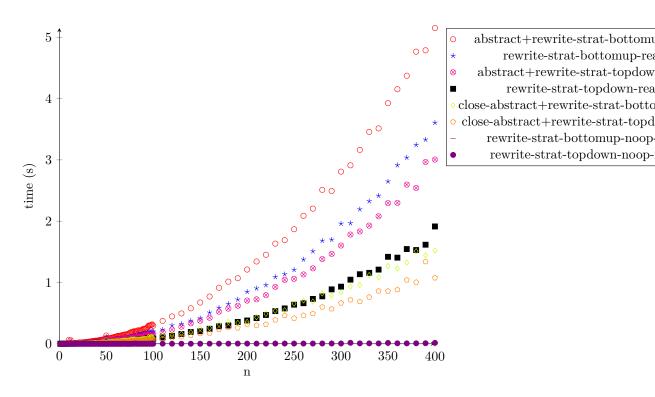
try-ssr-rewrite!-cold-noop-rea  $4.72 \cdot 10^{-7} \cdot x + 2.54 \cdot 10^{-2}$ 

try-ssr-rewrite-noop-real  $4.25\cdot 10^{-7}\cdot x + 1.71\cdot 10^{-3}$ 

try-ssr-rewrite?-noop-real  $4.2\cdot 10^{-7}\cdot x + 2.05\cdot 10^{-3}$  try-ssr-rewrite!-noop-real

 $4.2\cdot 10^{-7}\cdot x + 2.46\cdot 10^{-3}$ 

Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn  $\ 1$ 



rewrite-strat-bottomup-rea

rewrite-strat-topdown-rea

rewrite-strat-bottomup-nooprewrite-strat-topdown-noop-

 $Figure\ 10:\ timing-rewrite-repeated-app-rewrite-strat$ 

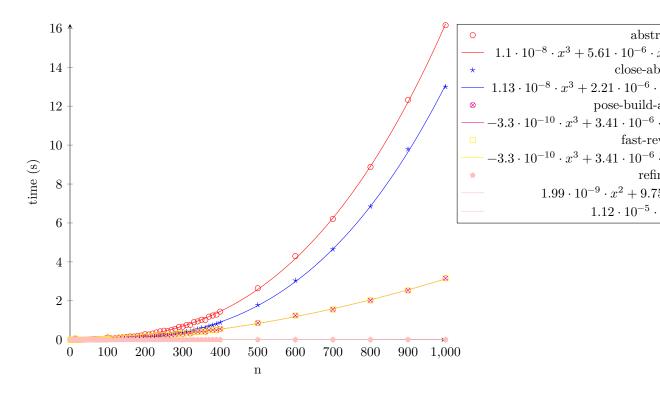
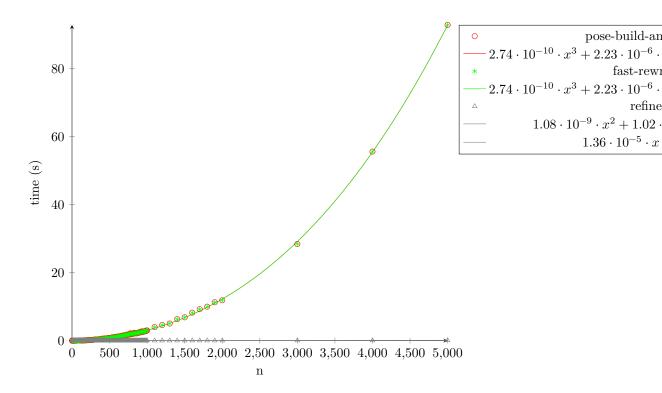


Figure 11: timing-rewrite-repeated-app-fast-rewrite



Figure~12:~timing-rewrite-repeated-app-fast-rewrite-no-abstract