

Figure 1: timing-pattern

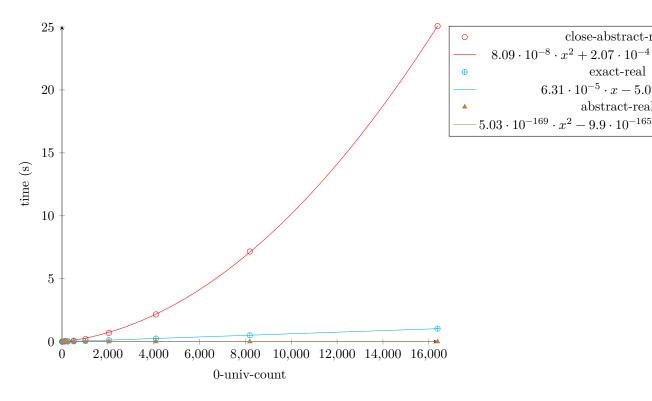
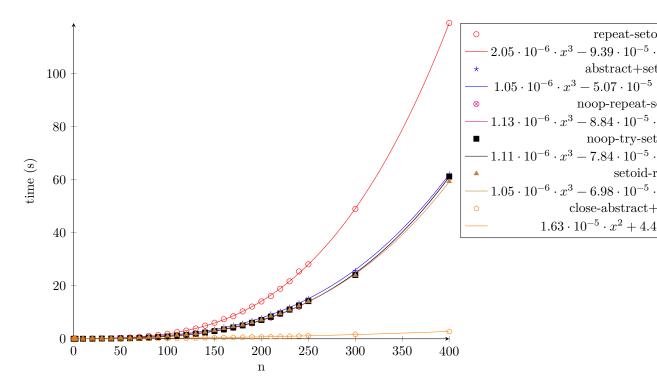
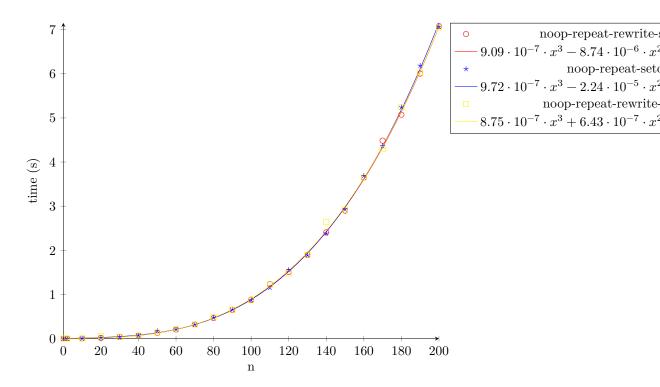


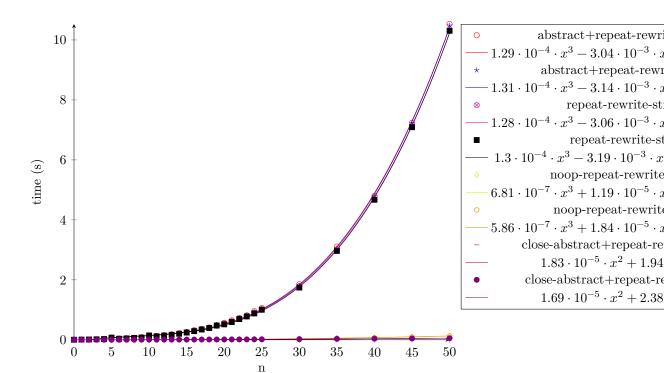
Figure 2: timing-n-polymorphic-universes param-1-n  $\,0\,$ 



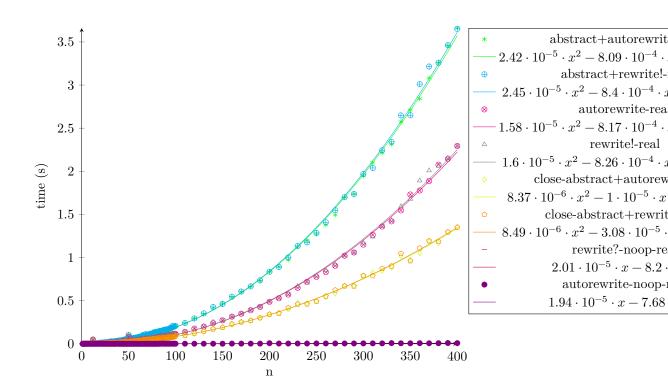
 $Figure \ 3: \ timing-repeat-setoid-rewrite-under-binders$ 



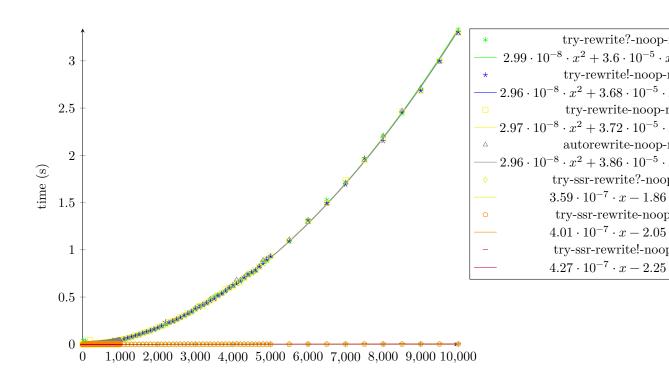
 $Figure\ 4:\ timing-repeat-setoid-rewrite-under-binders-noop$ 



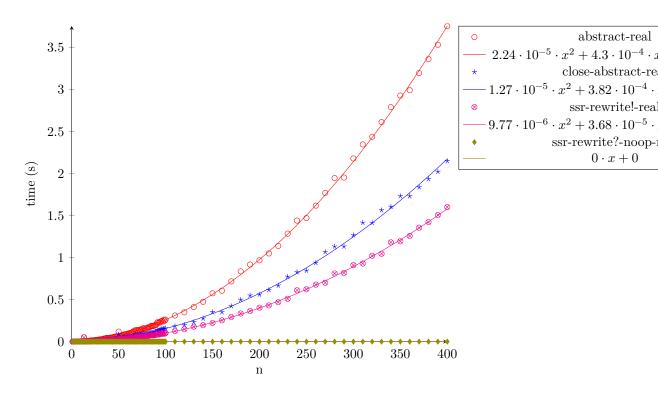
 $Figure\ 5:\ timing-rewrite-strat-under-binders$ 



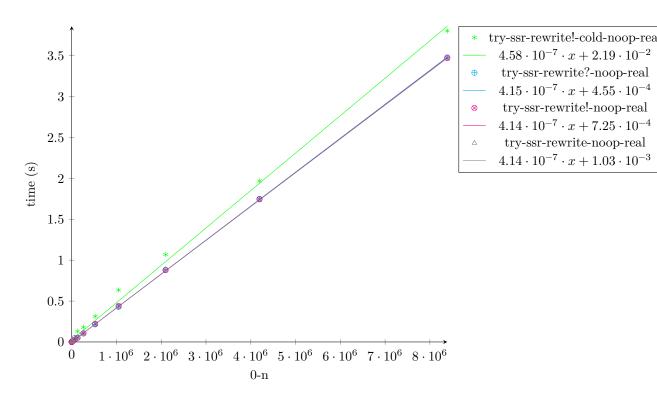
 $Figure \ 6: \ timing-rewrite-repeated-app-autorewrite \\$ 



 $Figure \ 7: \ timing-rewrite-repeated-app-autorewrite-noop$ 



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



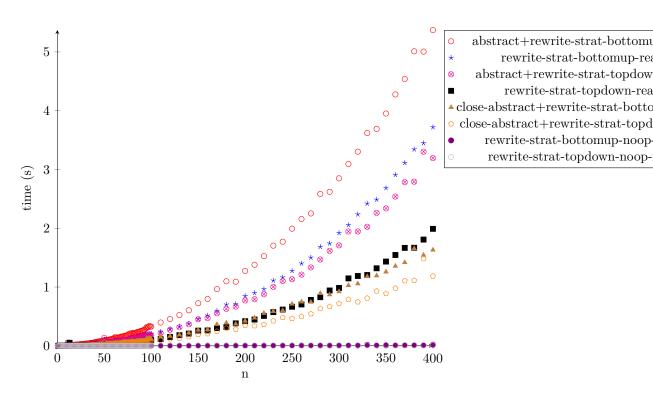
 $4.58 \cdot 10^{-7} \cdot x + 2.19 \cdot 10^{-2}$ 

try-ssr-rewrite?-noop-real $4.15\cdot 10^{-7}\cdot x + 4.55\cdot 10^{-4}$ 

try-ssr-rewrite!-noop-real  $4.14 \cdot 10^{-7} \cdot x + 7.25 \cdot 10^{-4}$ 

try-ssr-rewrite-noop-real $4.14\cdot 10^{-7}\cdot x + 1.03\cdot 10^{-3}$ 

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



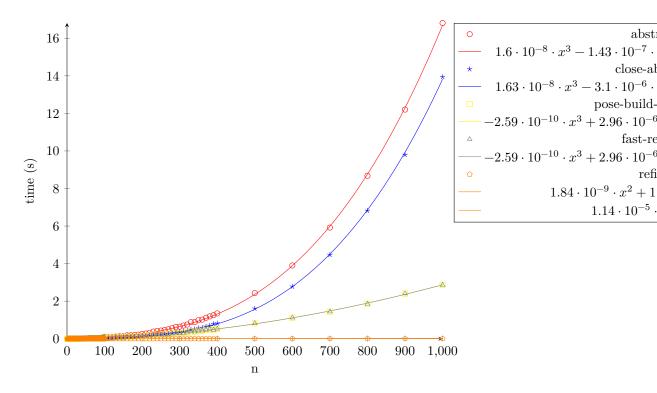
 $abstract + rewrite - strat - bottom \\ \\$ 

rewrite-strat-bottomup-rea abstract + rewrite - strat - topdow

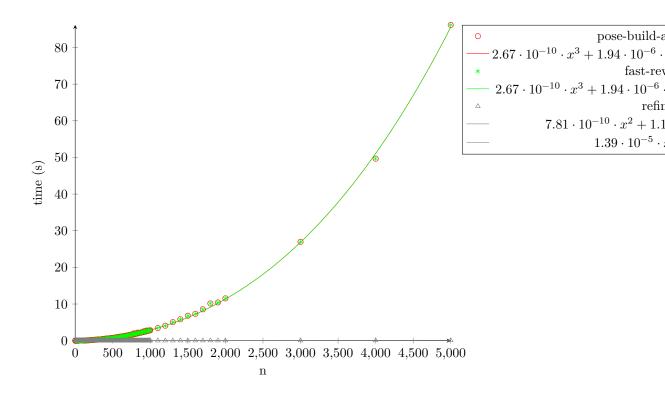
rewrite-strat-topdown-rea

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

 $Figure~10:~timing\mbox{-rewrite-repeated-app-rewrite-strat}$ 



 $Figure~11:~timing\mbox{-rewrite-repeated-app-fast-rewrite}$ 



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