

Figure 1: timing-pattern

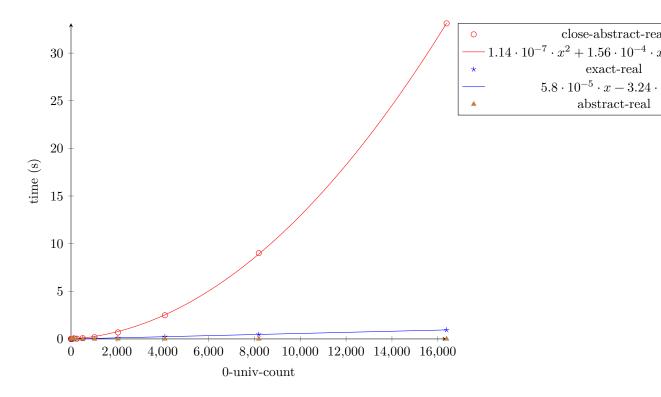
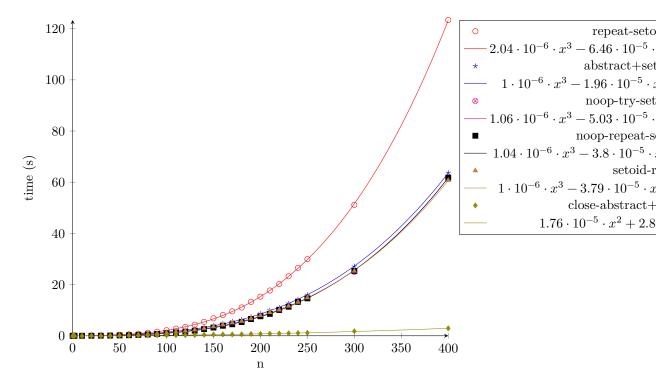


Figure 2: timing-n-polymorphic-universes param-1-n 0



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

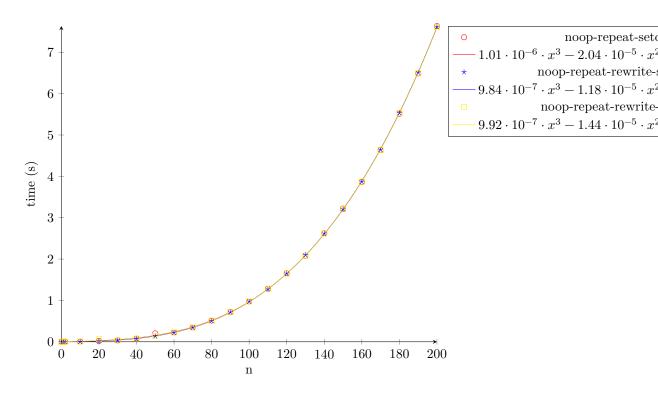
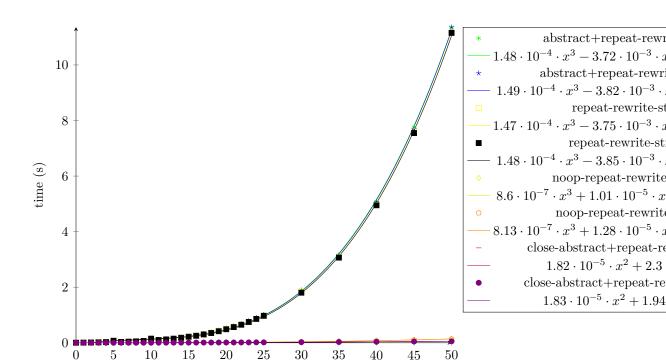
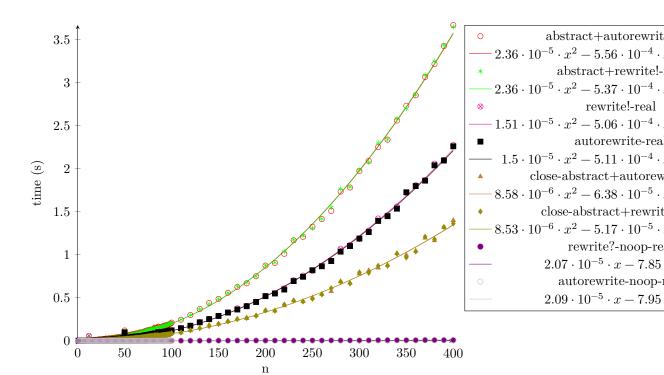


Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

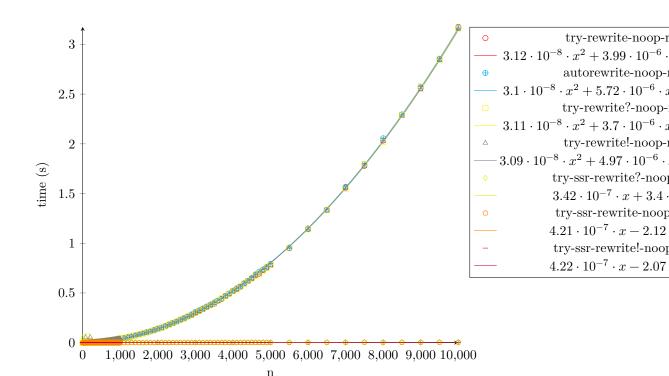


 $Figure\ 5:\ timing-rewrite-strat-under-binders$

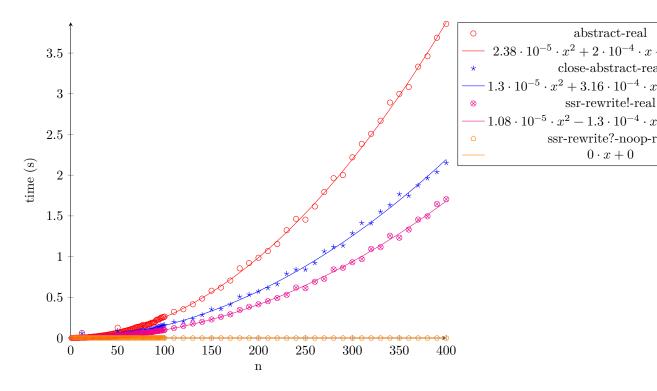
n



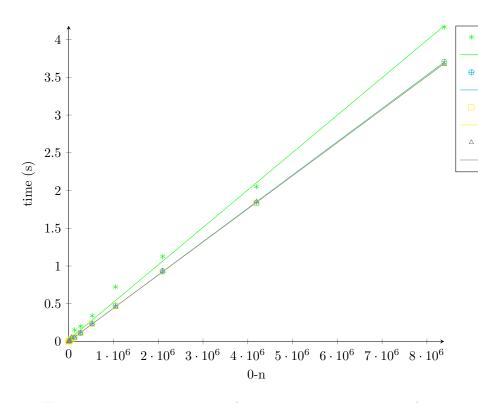
 $Figure \ 6: \ timing-rewrite-repeated-app-autorewrite \\$



Figure~7:~timing-rewrite-repeated-app-autorewrite-noop



 ${\bf Figure~8:~timing\text{-}rewrite\text{-}repeated\text{-}app\text{-}ssrrewrite}$



try-ssr-rewrite!-cold-noop-rea

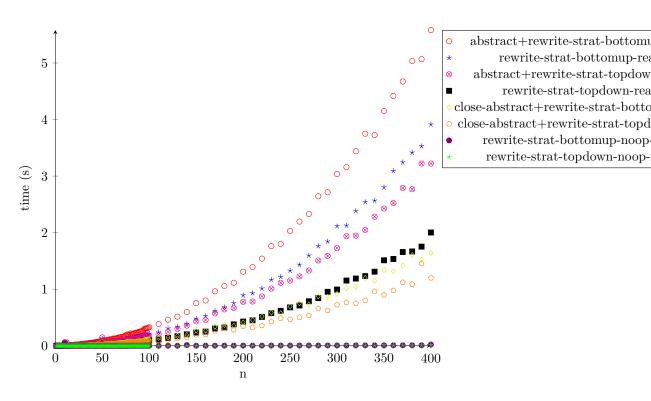
 $4.96 \cdot 10^{-7} \cdot x + 2.36 \cdot 10^{-2}$ try-ssr-rewrite!-noop-real

 $4.41 \cdot 10^{-7} \cdot x + 2.5 \cdot 10^{-4}$ try-ssr-rewrite-noop-real

 $4.4\cdot 10^{-7}\cdot x + 5.87\cdot 10^{-4}$ try-ssr-rewrite?-noop-real

 $4.39 \cdot 10^{-7} \cdot x + 1.73 \cdot 10^{-3}$

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

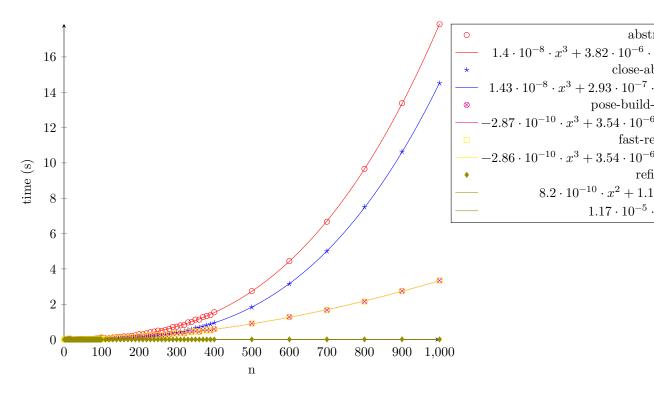


rewrite-strat-bottomup-real

rewrite-strat-topdown-rea

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

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



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

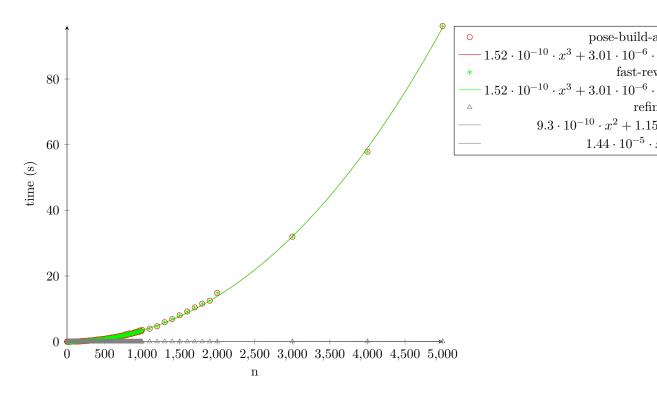


Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract