

Figure 1: timing-pattern

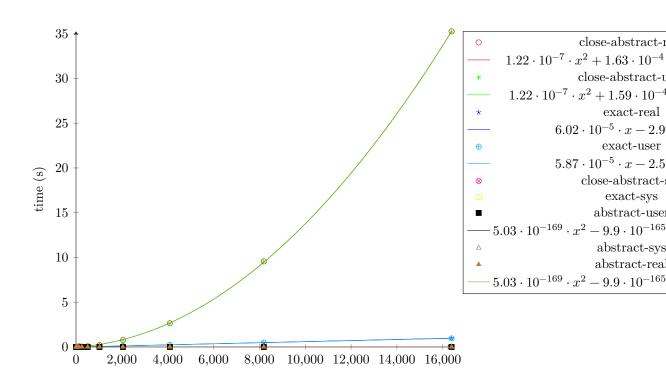


Figure 2: timing-n-polymorphic-universes param-1-n $\ 0$

-univ-count

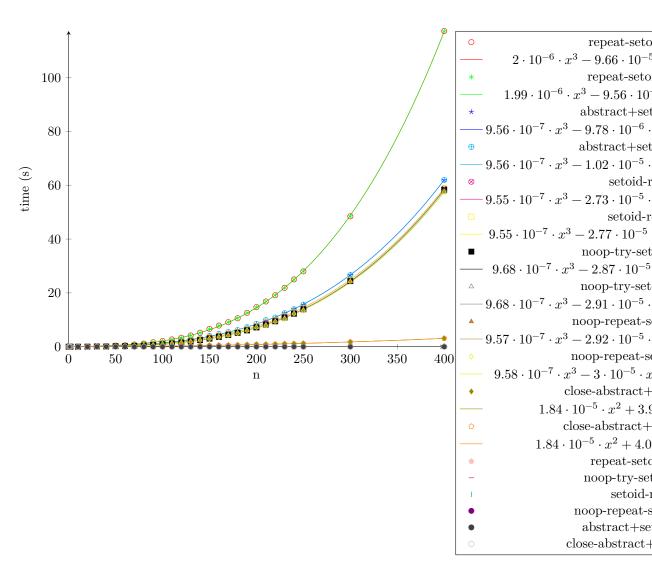
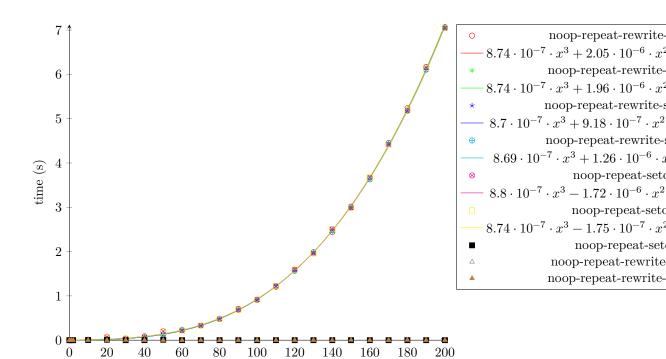


Figure 3: timing-repeat-setoid-rewrite-under-binders



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

n

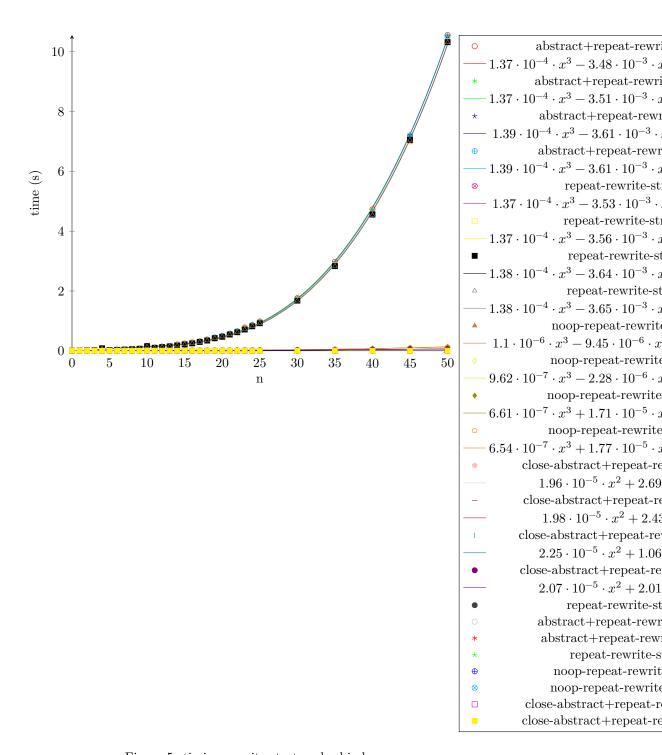


Figure 5: timing-rewrite-strat-under-binders

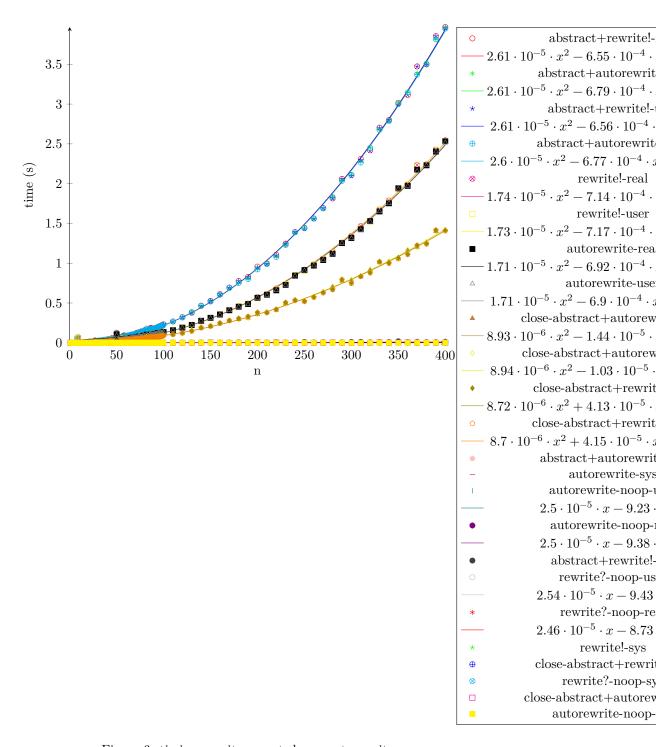


Figure 6: timing-rewrite-repeated-app-autorewrite

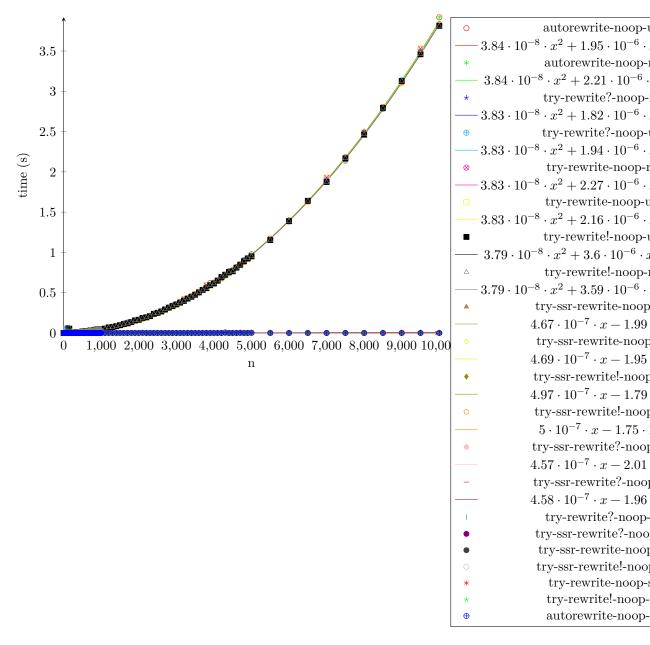


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

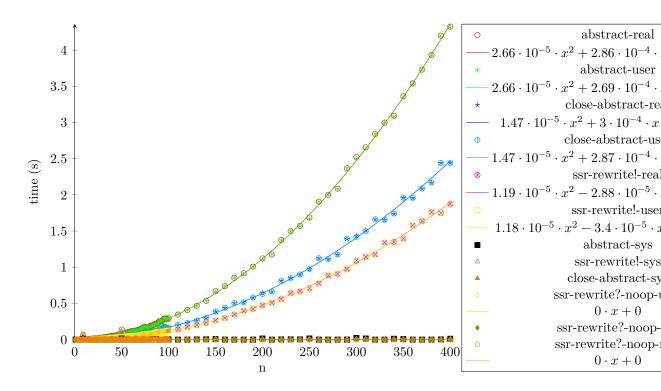


Figure 8: timing-rewrite-repeated-app-ssrrewrite

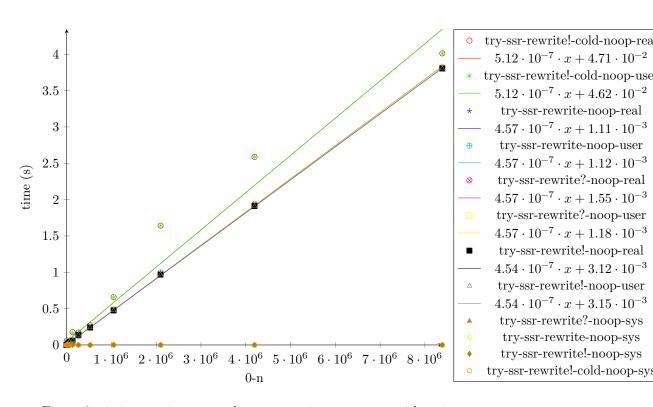


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn $\ 1$

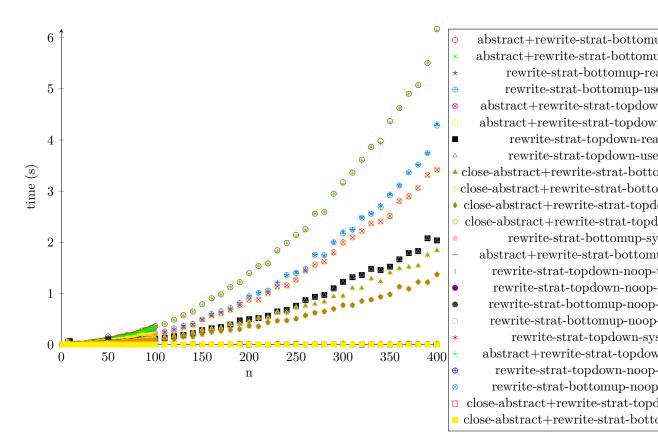
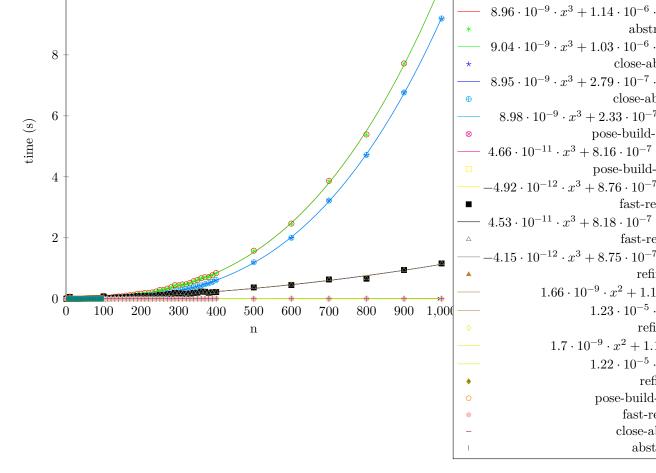


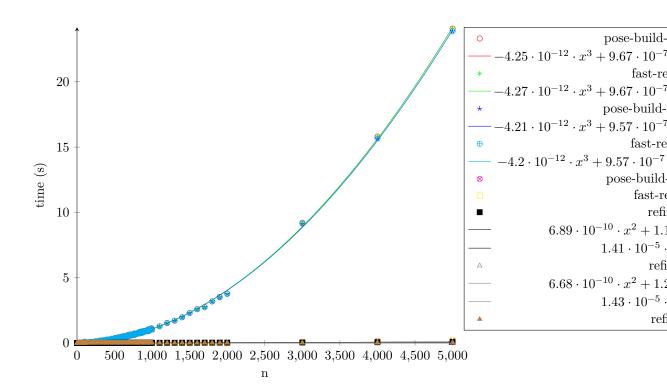
Figure 10: timing-rewrite-repeated-app-rewrite-strat



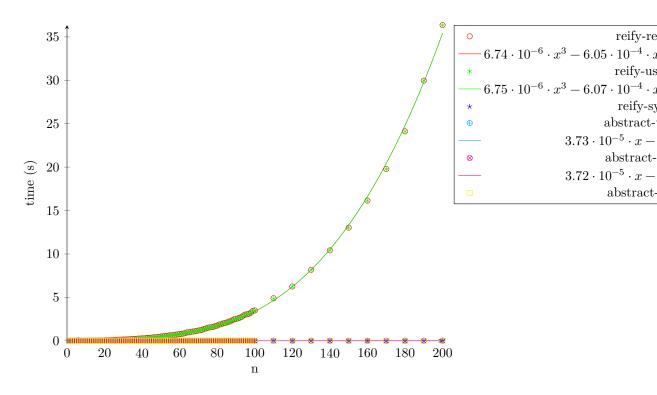
abst

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

10



 $\label{prop:figure 12:timing-rewrite-repeated-app-fast-rewrite-no-abstract} Figure~12:~timing-rewrite-repeated-app-fast-rewrite-no-abstract$



 ${\bf Figure~13:~timing-type class-reification-let-in-HOAS}$

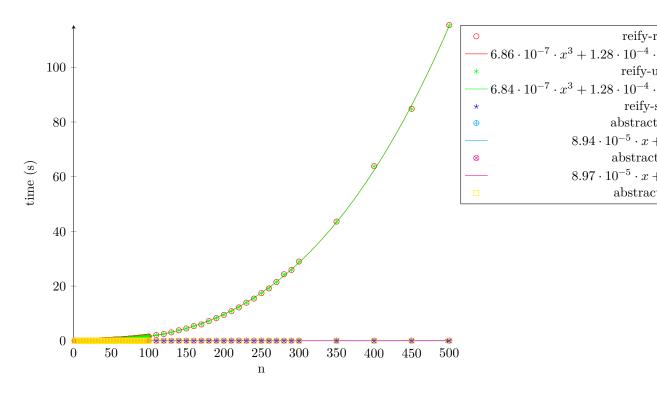


Figure 14: timing-typeclass-reification-let-in-PHOAS