

Figure 1: timing-pattern

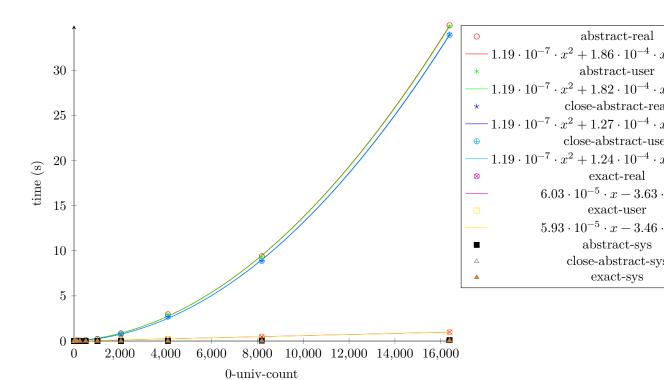


Figure 2: timing-n-polymorphic-universes param-1-n 0

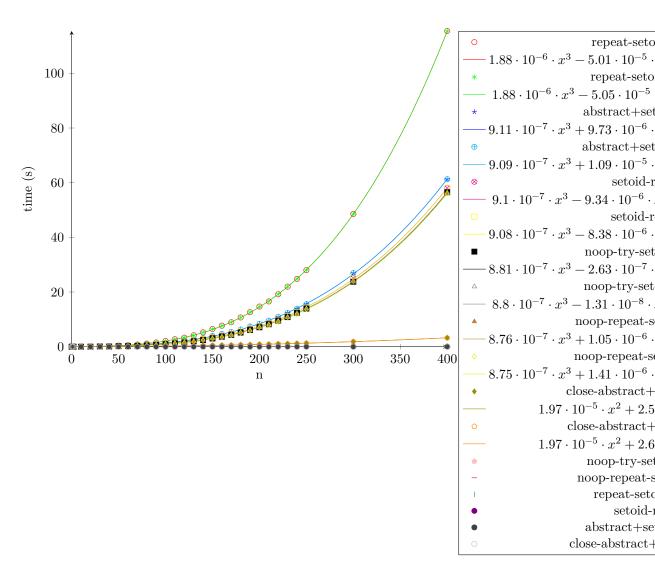
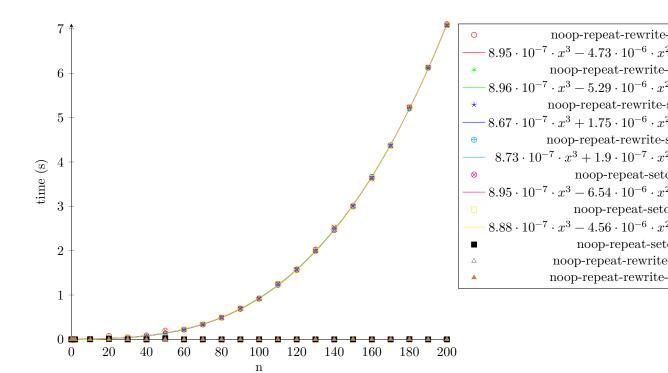


Figure 3: timing-repeat-setoid-rewrite-under-binders



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

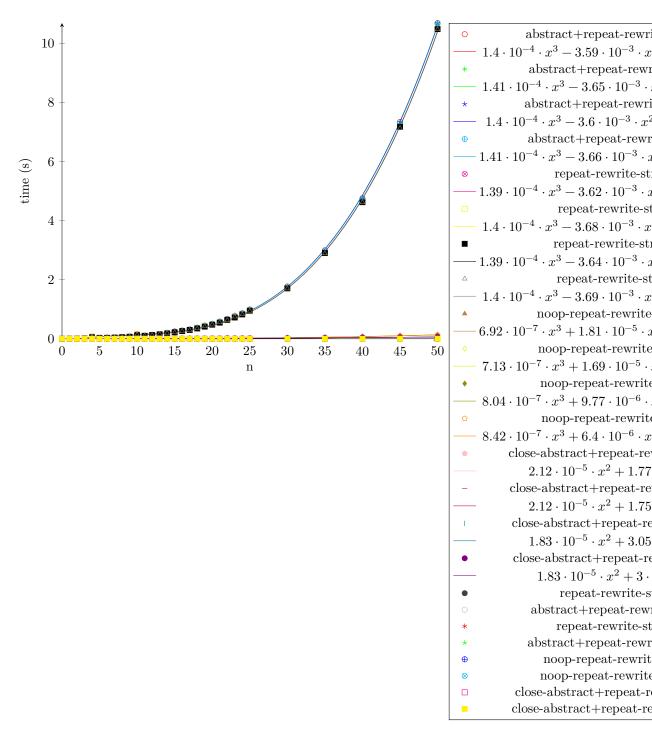
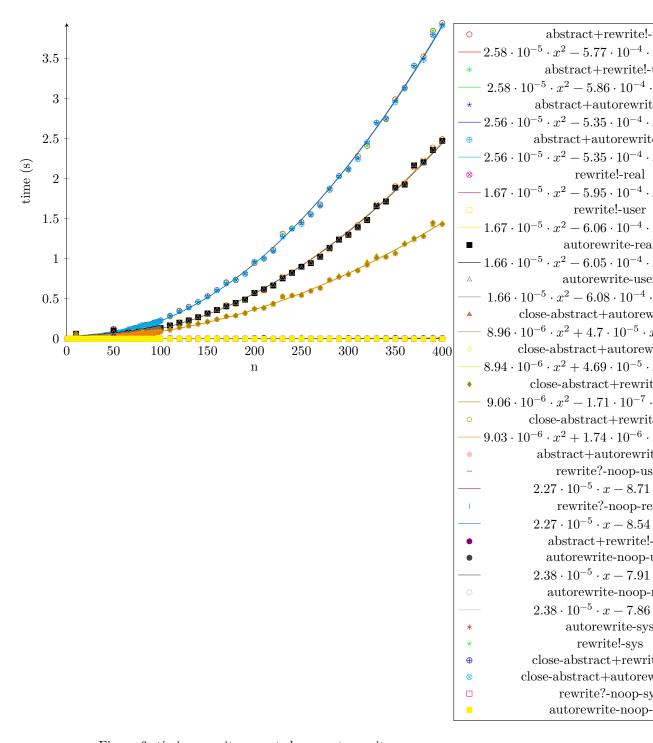


Figure 5: timing-rewrite-strat-under-binders



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

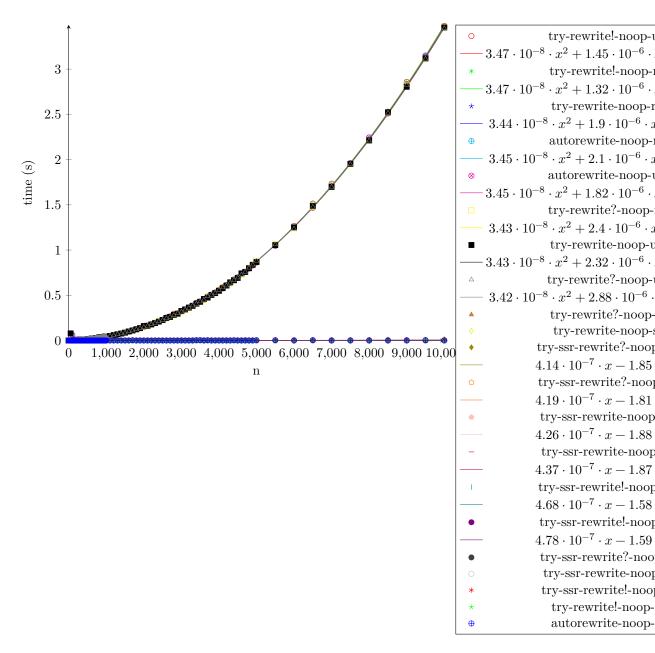


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

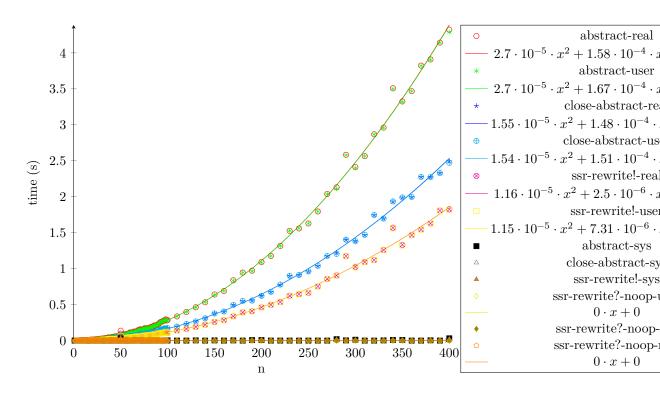


Figure 8: timing-rewrite-repeated-app-ssrrewrite

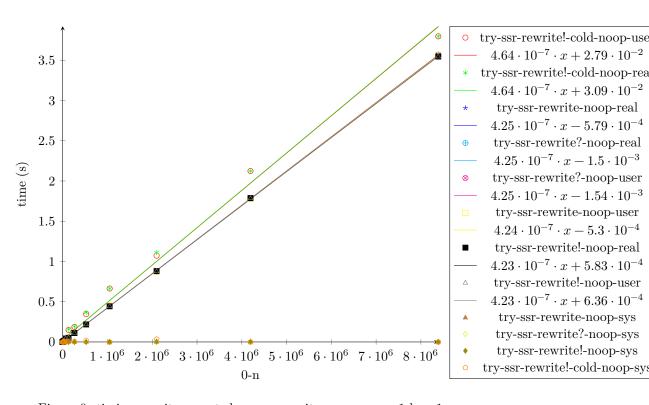


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn $\ 1$

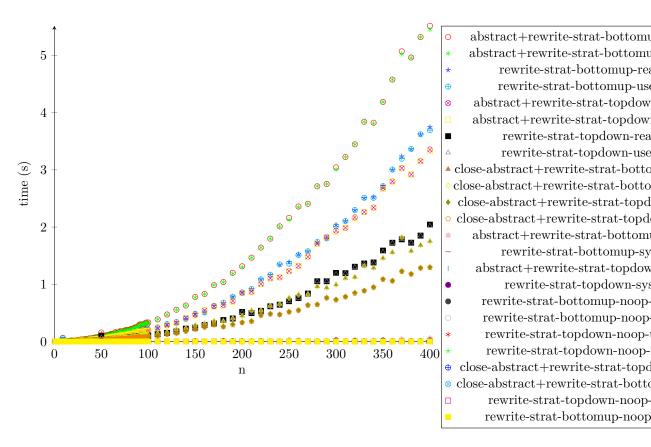


Figure 10: timing-rewrite-repeated-app-rewrite-strat

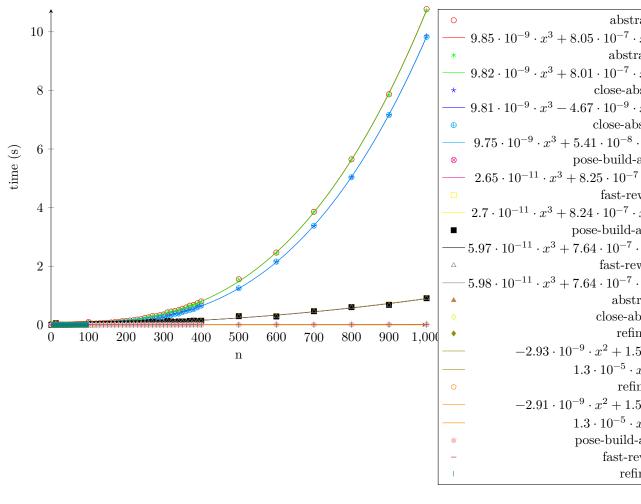
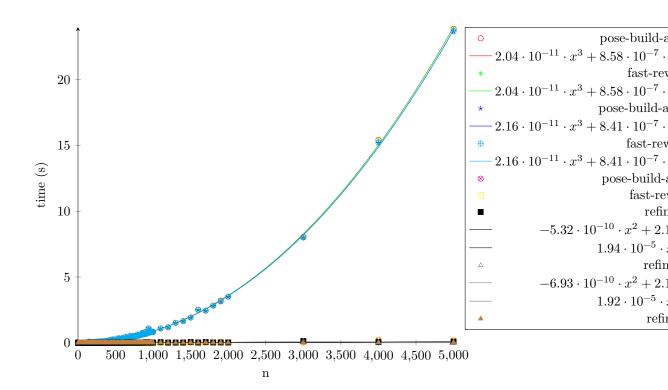
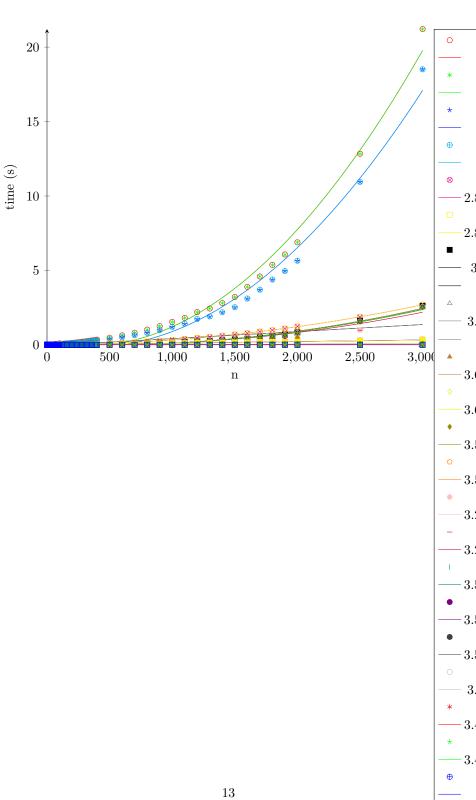


Figure 11: timing-rewrite-repeated-app-fast-rewrite



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



abstract-real

abstract-user

fast-rewrite-real

fast-rewrite-user

close-abstract-rea

close-abstract-use

 $4.73 \cdot 10^{-4} \cdot x - 5.73 \cdot$ refine-user

 $4.73 \cdot 10^{-4} \cdot x - 5.73 \cdot$

type-admit-cast-re

type-admit-cast-us

check-pf-cast-use

check-pf-cast-rea

type-pf-cast-real

type-pf-cast-user

check-admit-cast-r

check-admit-cast-u

type-admit-real

type-admit-user

check-admit-real

check-admit-user

build-eval-thunk-re

 $1.09 \cdot 10^{-4} \cdot x - 6.18$ build-eval-thunk-u $1.08 \cdot 10^{-4} \cdot x - 6.6 \cdot$ build-thunk-user $1.07 \cdot 10^{-4} \cdot x - 7.19$ build-thunk-real $1.08 \cdot 10^{-4} \cdot x - 6.89$

refine-real

 $2.75 \cdot 10^{-6} \cdot x^2 - 1.7 \cdot 10^{-3}$

 $2.75 \cdot 10^{-6} \cdot x^2 - 1.71 \cdot 10^{-6}$

 $2.46 \cdot 10^{-6} \cdot x^2 - 1.74 \cdot 10^{-6}$

 $2.46 \cdot 10^{-6} \cdot x^2 - 1.74 \cdot 10^{-6}$