

Figure 1: timing-pattern

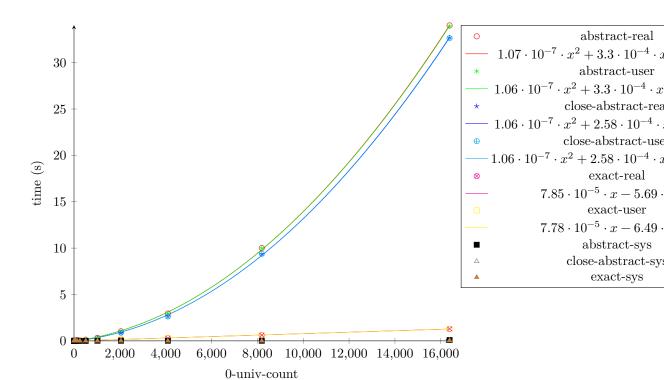


Figure 2: timing-n-polymorphic-universes param-1-n 0

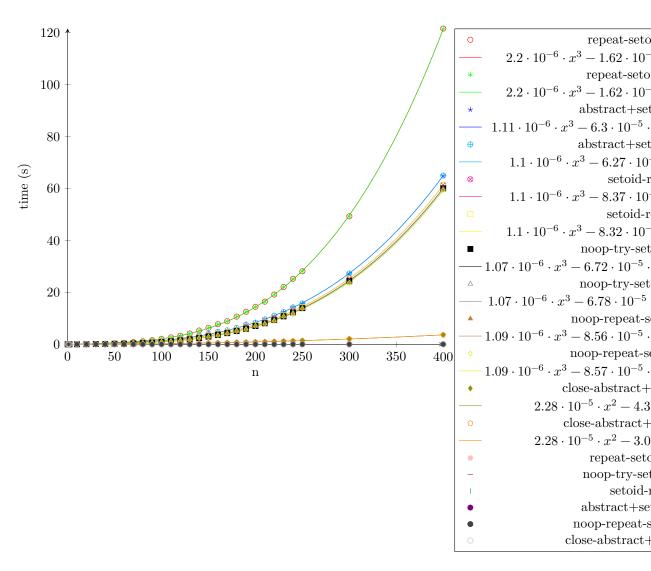
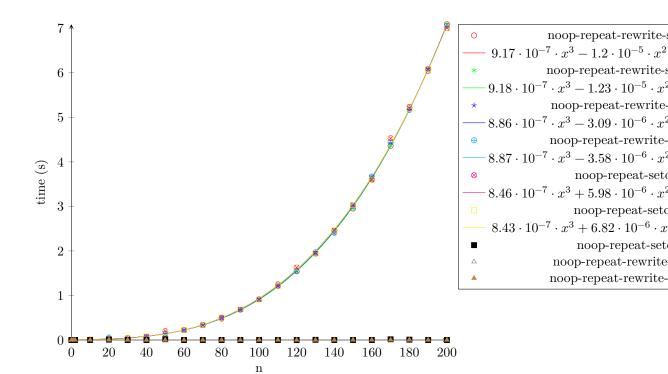


Figure 3: timing-repeat-setoid-rewrite-under-binders



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

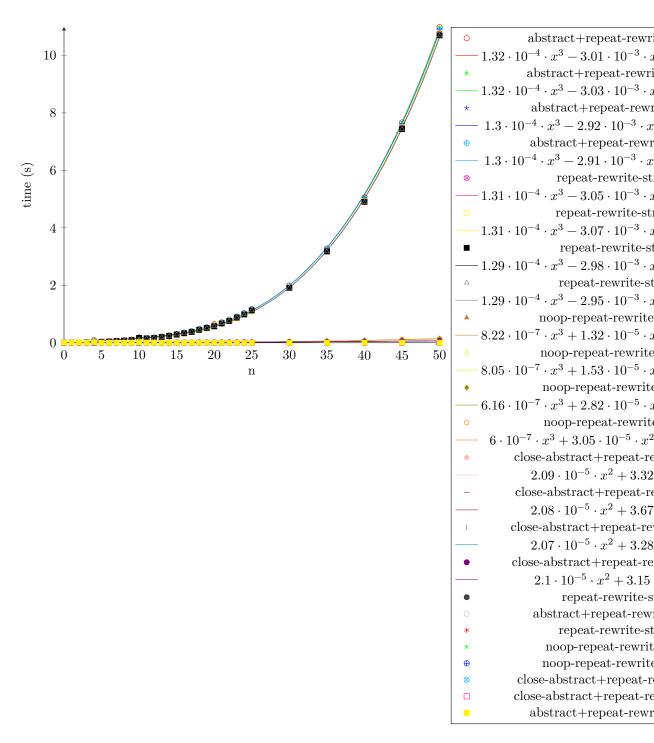
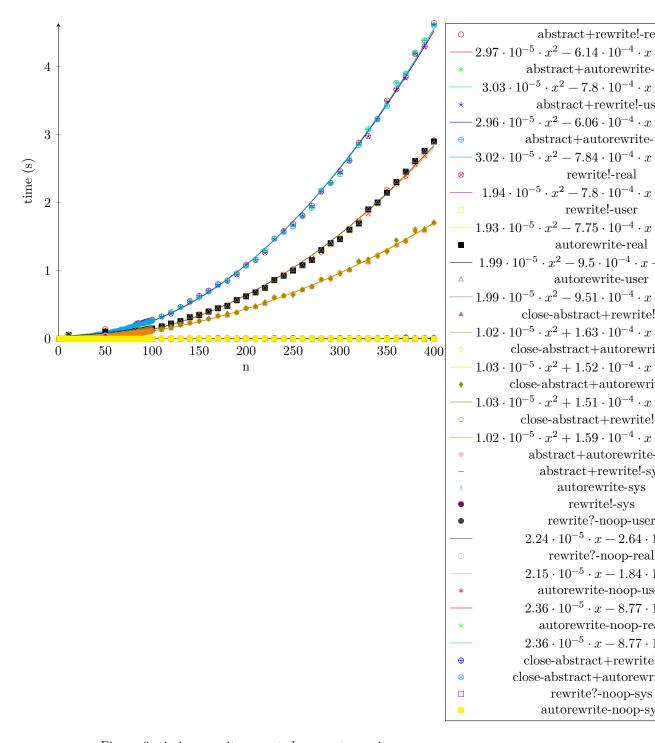


Figure 5: timing-rewrite-strat-under-binders



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

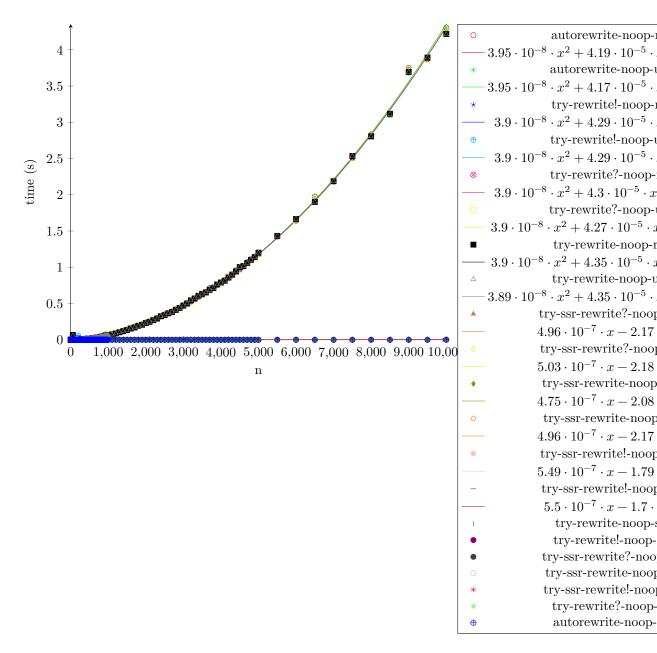


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

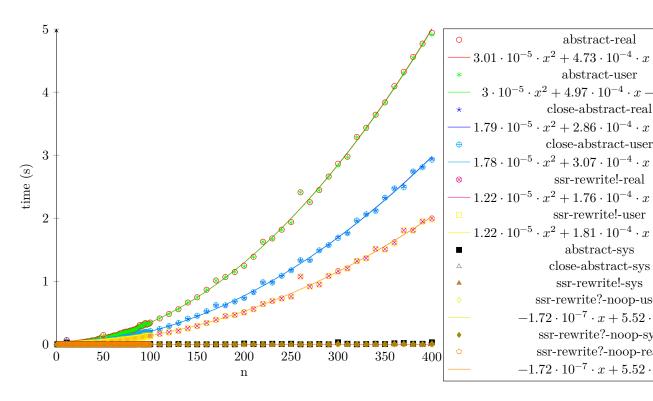


Figure 8: timing-rewrite-repeated-app-ssrrewrite

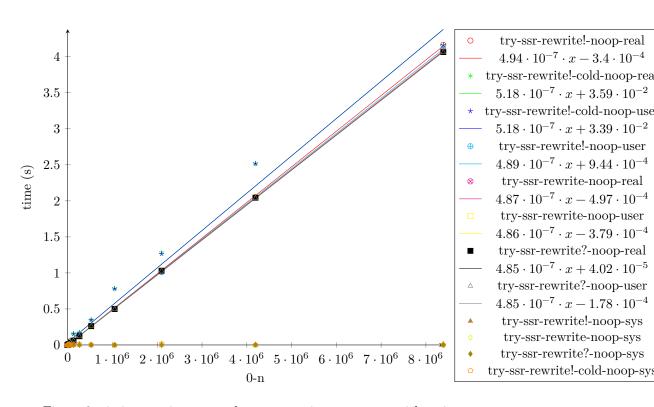


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn $\ 1$

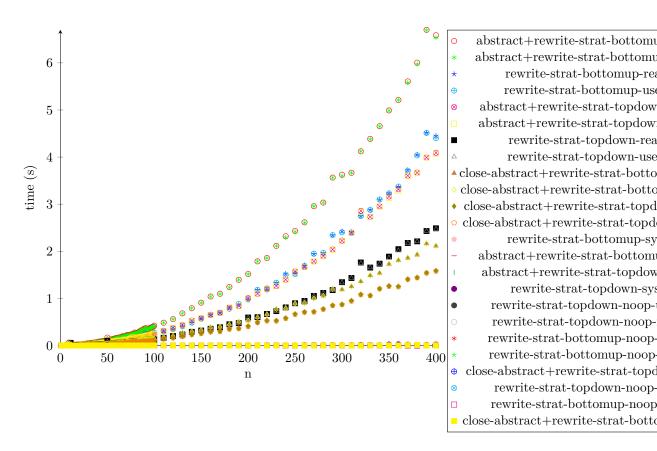


Figure 10: timing-rewrite-repeated-app-rewrite-strat

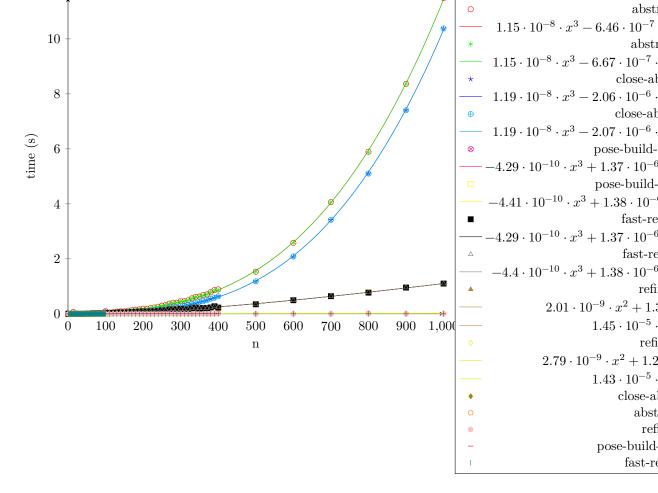
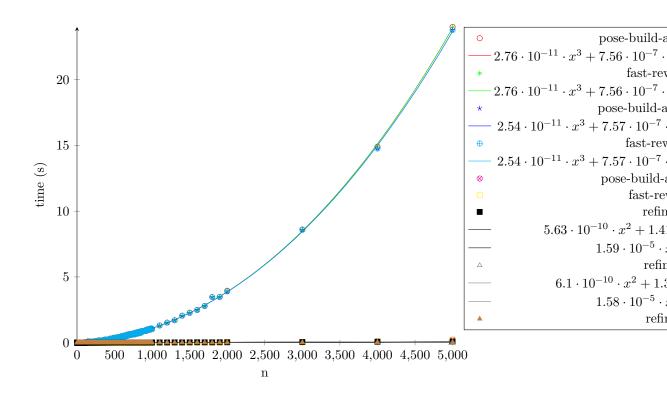
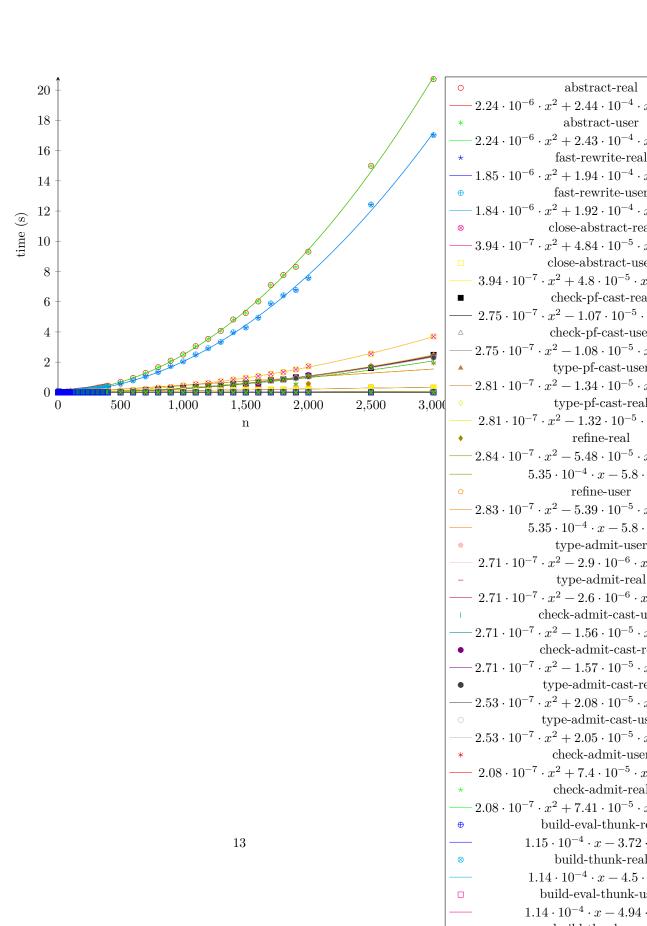


Figure 11: timing-rewrite-repeated-app-fast-rewrite



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

check-pf-cast-rea

check-pf-cast-use

type-pf-cast-user

type-pf-cast-real

refine-real

 $5.35\cdot 10^{-4}\cdot x - 5.8\cdot$ refine-user

 $5.35 \cdot 10^{-4} \cdot x - 5.8 \cdot$ type-admit-user

type-admit-real

check-admit-cast-u

check-admit-cast-r

type-admit-cast-re

type-admit-cast-us

check-admit-user

check-admit-real

build-eval-thunk-re $1.15 \cdot 10^{-4} \cdot x - 3.72 \cdot$

build-thunk-real $1.14 \cdot 10^{-4} \cdot x - 4.5 \cdot$ build-eval-thunk-u $1.14 \cdot 10^{-4} \cdot x - 4.94 \cdot$ build-thunk-user $1.13 \cdot 10^{-4} \cdot x - 5.86 \cdot$ type_I_user