

Figure 1: timing-pattern

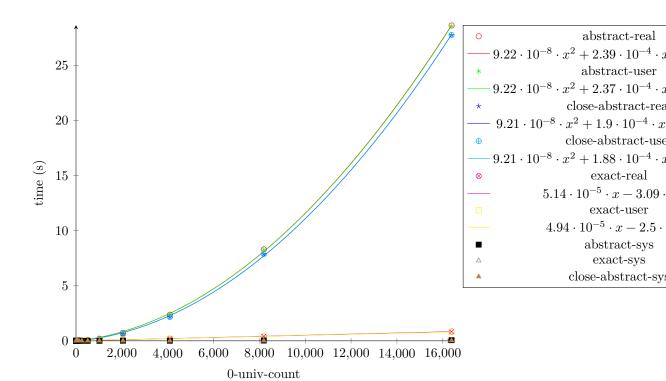


Figure 2: timing-n-polymorphic-universes param-1-n 0

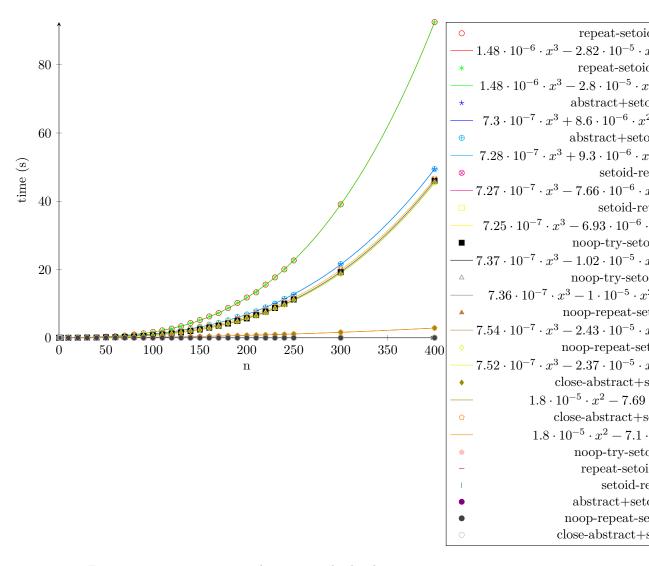
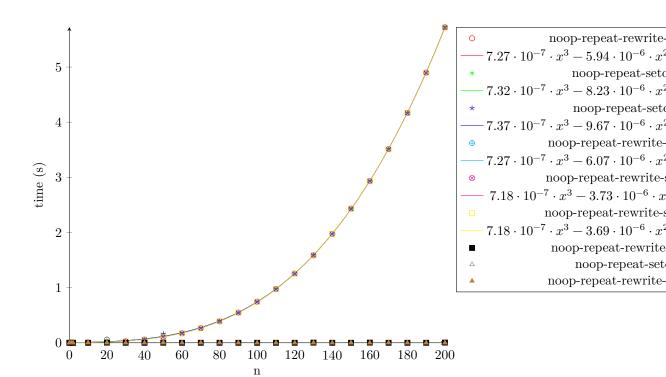


Figure 3: timing-repeat-setoid-rewrite-under-binders



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

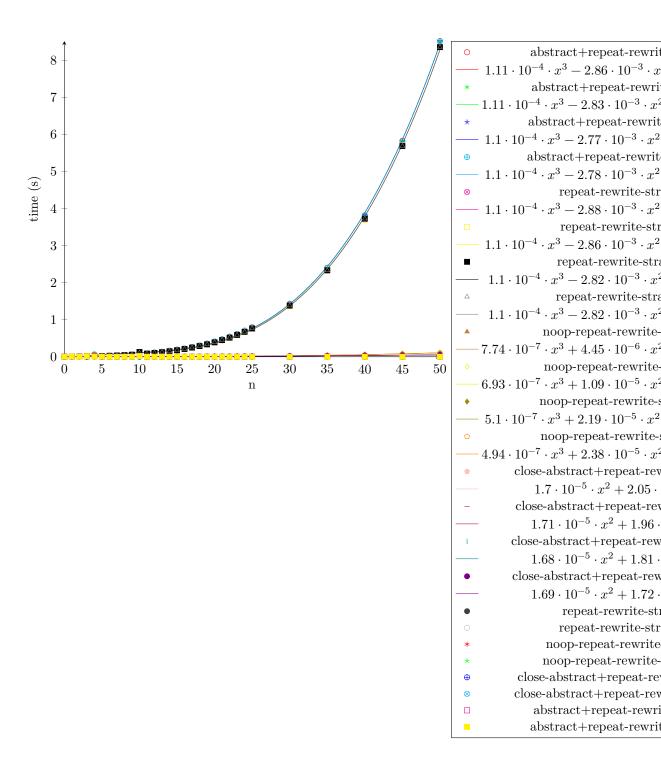


Figure 5: timing-rewrite-strat-under-binders

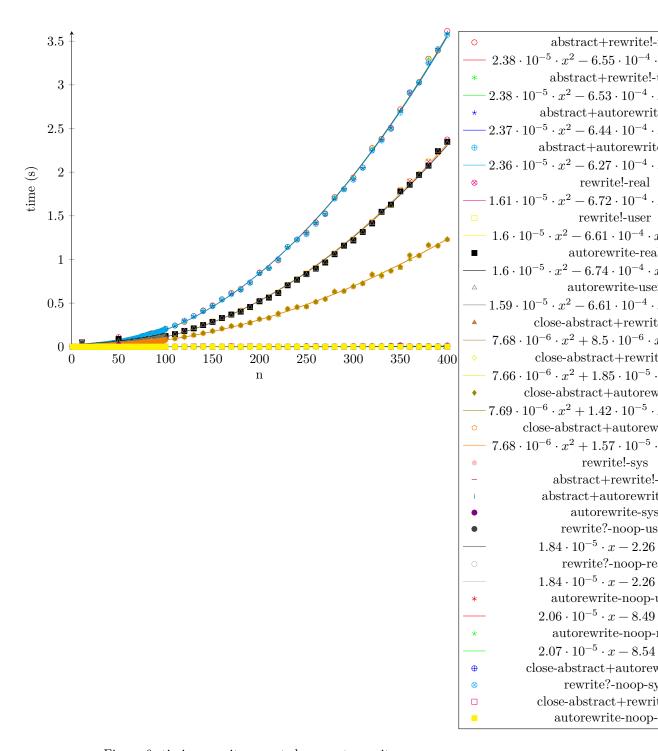


Figure 6: timing-rewrite-repeated-app-autorewrite

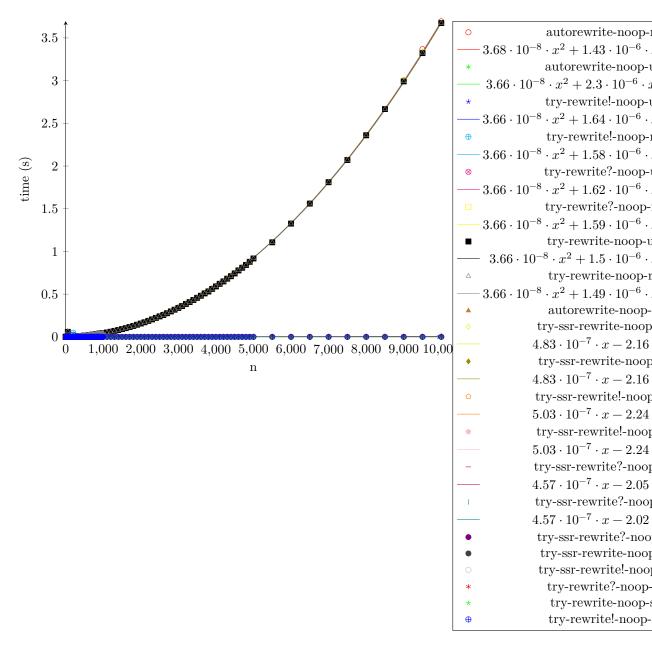


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

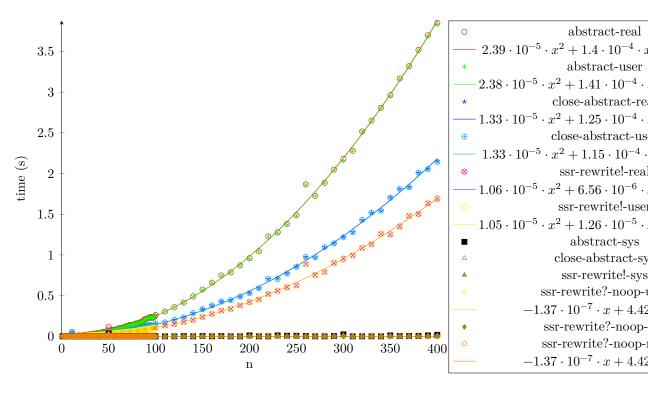


Figure 8: timing-rewrite-repeated-app-ssrrewrite

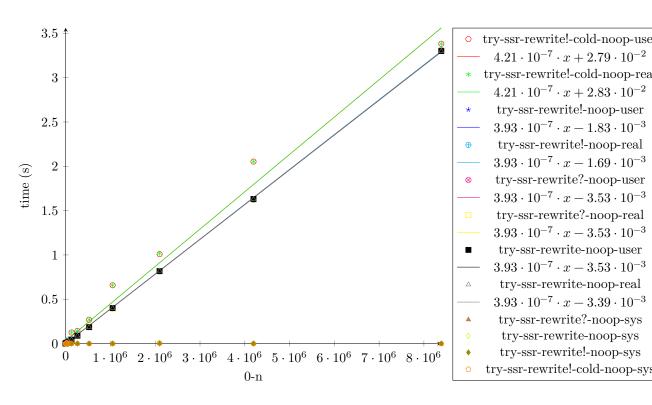


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

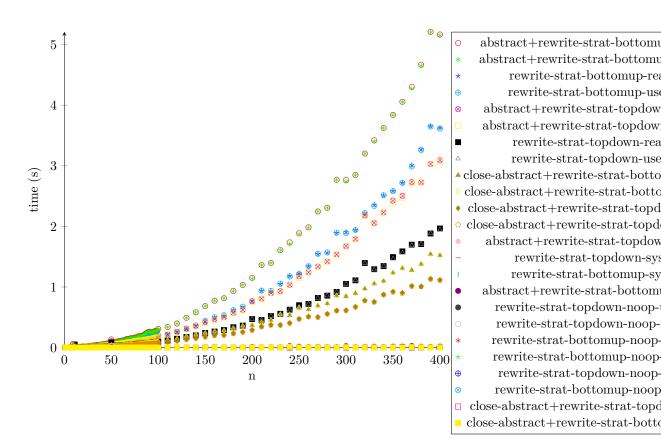


Figure 10: timing-rewrite-repeated-app-rewrite-strat

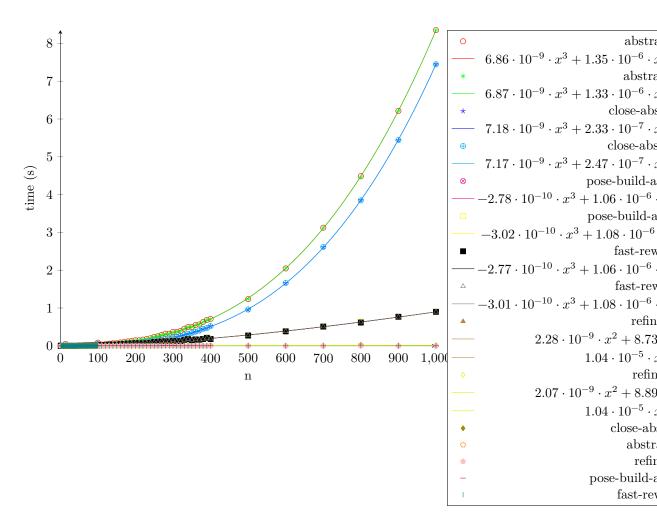
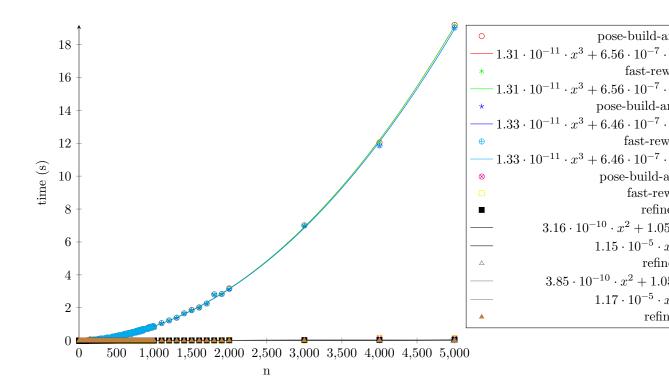
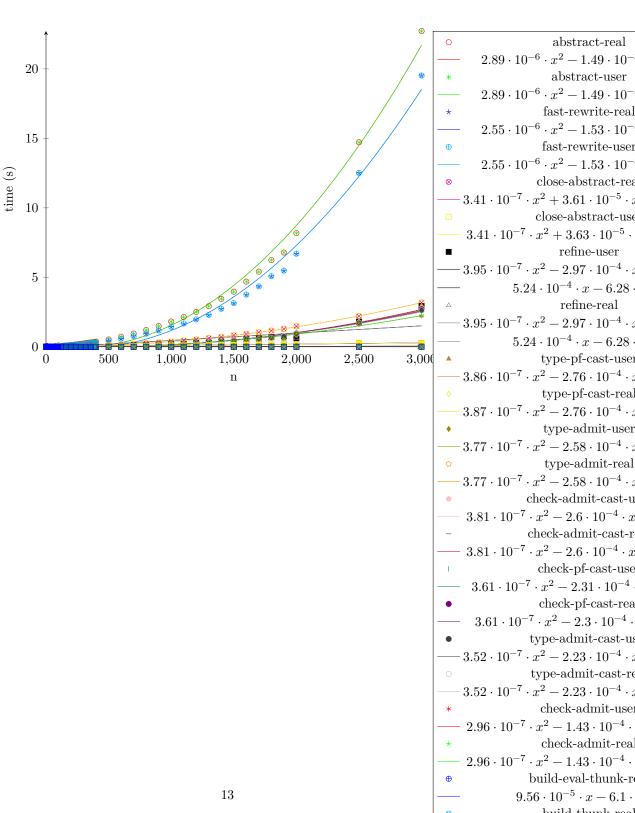


Figure 11: timing-rewrite-repeated-app-fast-rewrite



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



 $3.95 \cdot 10^{-7} \cdot x^2 - 2.97 \cdot 10^{-4} \cdot x^2$ $3.86 \cdot 10^{-7} \cdot x^2 - 2.76 \cdot 10^{-4} \cdot x^2$ $3.87 \cdot 10^{-7} \cdot x^2 - 2.76 \cdot 10^{-4} \cdot x^2$ $3.77 \cdot 10^{-7} \cdot x^2 - 2.58 \cdot 10^{-4} \cdot x^2$ $3.77 \cdot 10^{-7} \cdot x^2 - 2.58 \cdot 10^{-4} \cdot x^2$ $3.81 \cdot 10^{-7} \cdot x^2 - 2.6 \cdot 10^{-4} \cdot x$ $3.81 \cdot 10^{-7} \cdot x^2 - 2.6 \cdot 10^{-4} \cdot x$ $3.61 \cdot 10^{-7} \cdot x^2 - 2.31 \cdot 10^{-4}$ $3.61 \cdot 10^{-7} \cdot x^2 - 2.3 \cdot 10^{-4} \cdot$ $3.52 \cdot 10^{-7} \cdot x^2 - 2.23 \cdot 10^{-4} \cdot x^2$ $3.52 \cdot 10^{-7} \cdot x^2 - 2.23 \cdot 10^{-4} \cdot x^2$ $2.96 \cdot 10^{-7} \cdot x^2 - 1.43 \cdot 10^{-4}$ $2.96 \cdot 10^{-7} \cdot x^2 - 1.43 \cdot 10^{-4}$

abstract-real

abstract-user

fast-rewrite-real

fast-rewrite-user

close-abstract-rea

close-abstract-use

 $5.24 \cdot 10^{-4} \cdot x - 6.28 \cdot$ refine-real

 $5.24 \cdot 10^{-4} \cdot x - 6.28 \cdot$

type-pf-cast-user

type-pf-cast-real

type-admit-user

type-admit-real

check-admit-cast-u

check-admit-cast-r

check-pf-cast-use

check-pf-cast-rea

type-admit-cast-us

type-admit-cast-re

check-admit-user

check-admit-real

build-eval-thunk-re

 $9.56 \cdot 10^{-5} \cdot x - 6.1 \cdot$ build-thunk-real $9.49 \cdot 10^{-5} \cdot x - 6.82 \cdot$ build-eval-thunk-u $9.46 \cdot 10^{-5} \cdot x - 4.82 \cdot$ build-thunk-user $9.4 \cdot 10^{-5} \cdot x - 5.62 \cdot$ obools I ...

refine-user

 $2.89 \cdot 10^{-6} \cdot x^2 - 1.49 \cdot 10^{-6}$

 $2.89 \cdot 10^{-6} \cdot x^2 - 1.49 \cdot 10^{-6}$

 $2.55 \cdot 10^{-6} \cdot x^2 - 1.53 \cdot 10^{-6}$

 $2.55 \cdot 10^{-6} \cdot x^2 - 1.53 \cdot 10^{-6}$