

Figure 1: timing-pattern

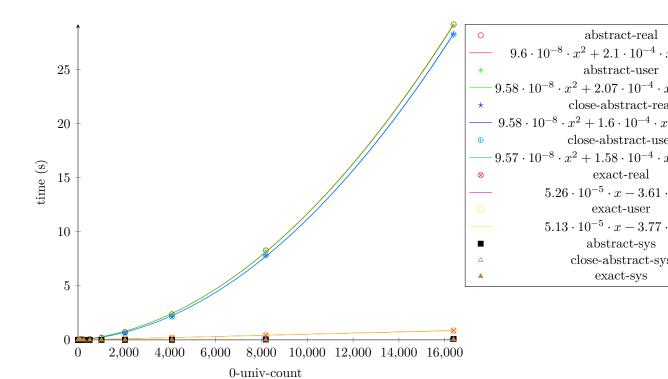


Figure 2: timing-n-polymorphic-universes param-1-n 0

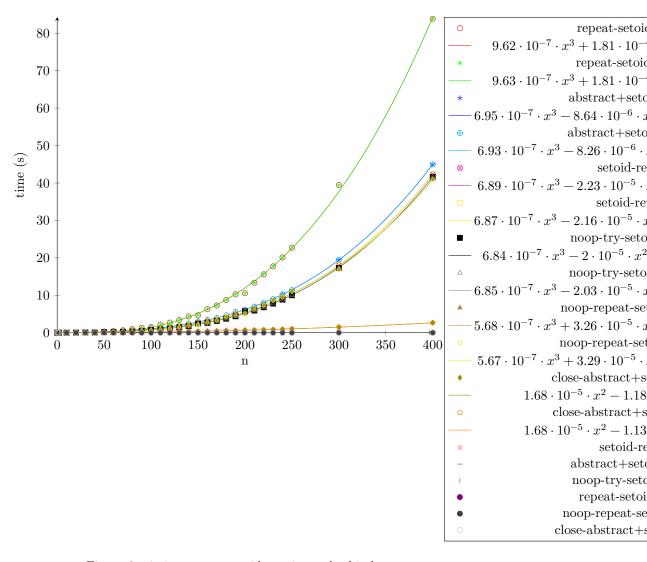


Figure 3: timing-repeat-setoid-rewrite-under-binders

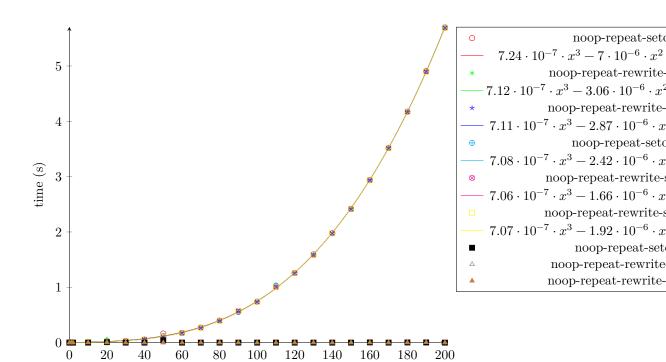


Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

n

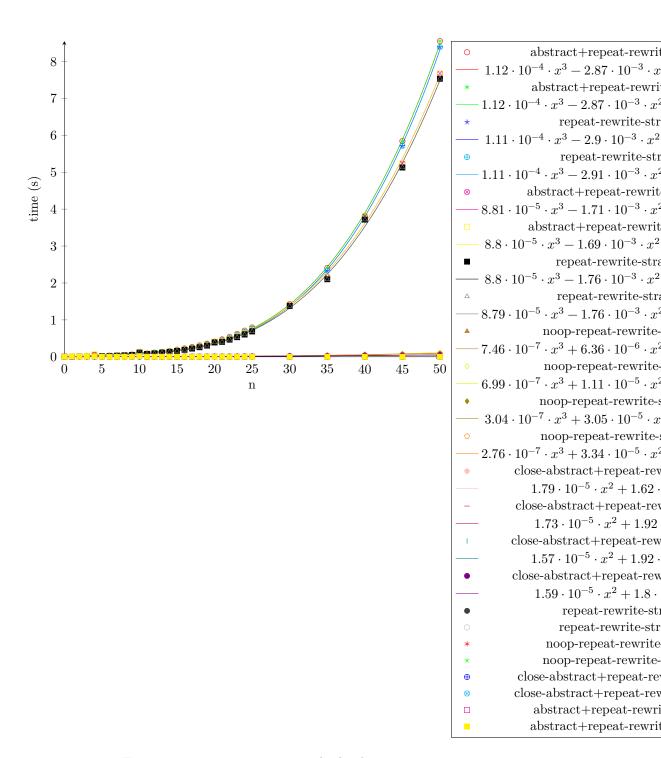


Figure 5: timing-rewrite-strat-under-binders

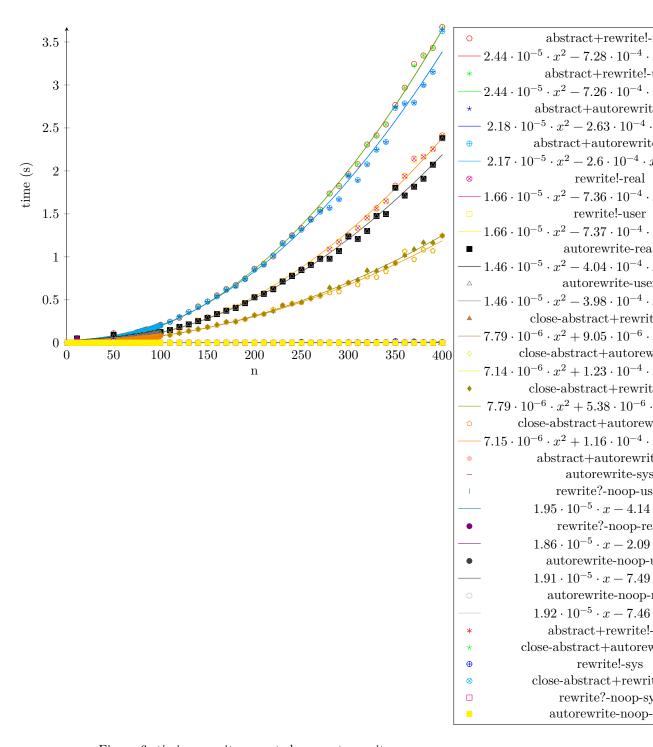
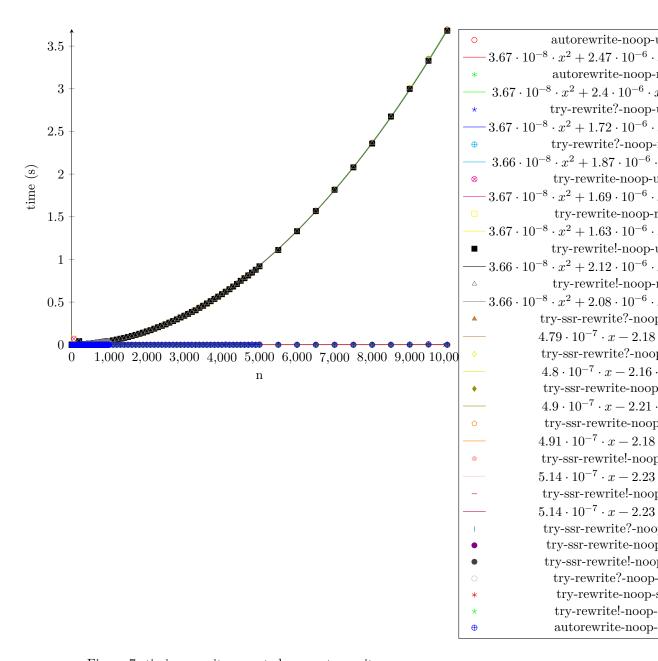
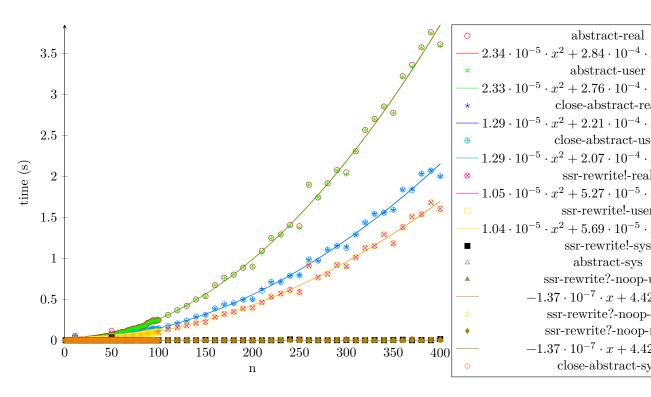


Figure 6: timing-rewrite-repeated-app-autorewrite



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



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

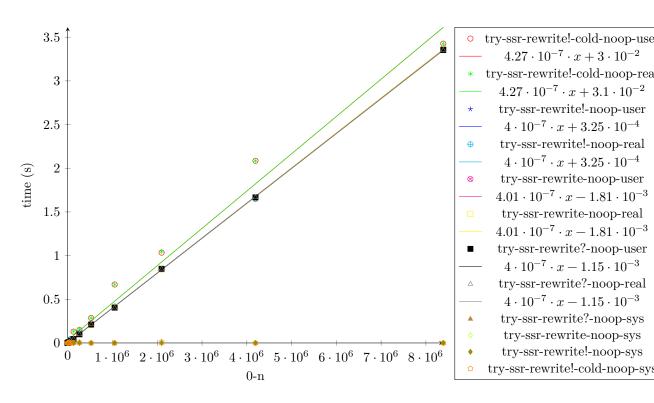


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn $\ 1$

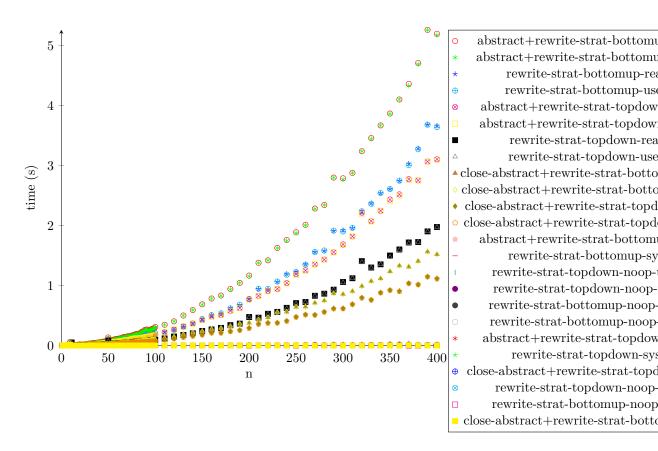


Figure 10: timing-rewrite-repeated-app-rewrite-strat

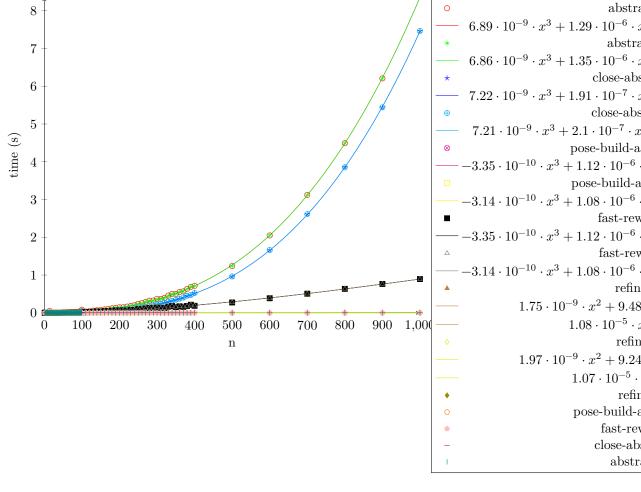
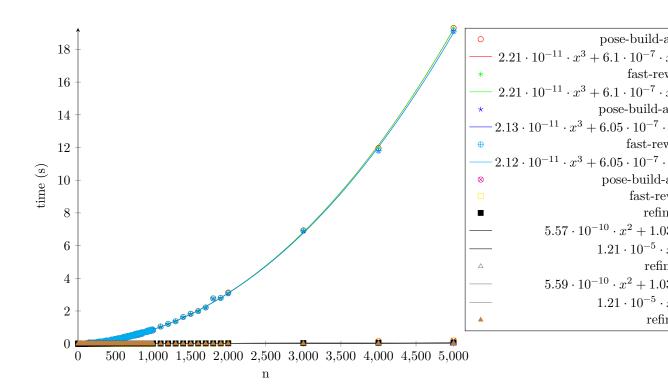
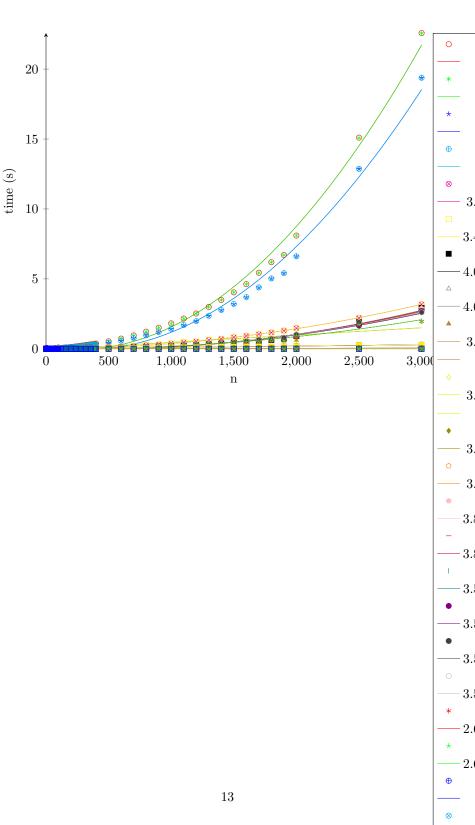


Figure 11: timing-rewrite-repeated-app-fast-rewrite



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



 $2.89 \cdot 10^{-6} \cdot x^2 - 1.47 \cdot 10^{-6}$ $2.89 \cdot 10^{-6} \cdot x^2 - 1.47 \cdot 10^{-6}$ $2.55 \cdot 10^{-6} \cdot x^2 - 1.51 \cdot 10^{-6}$ $2.55 \cdot 10^{-6} \cdot x^2 - 1.51 \cdot 10^{-6}$ $3.41 \cdot 10^{-7} \cdot x^2 + 3.7 \cdot 10^{-5} \cdot x$ $3.41 \cdot 10^{-7} \cdot x^2 + 3.73 \cdot 10^{-5} \cdot x^2$ $4.02 \cdot 10^{-7} \cdot x^2 - 2.99 \cdot 10^{-4} \cdot x^2$ $4.02 \cdot 10^{-7} \cdot x^2 - 2.98 \cdot 10^{-4} \cdot x^2$ $3.95 \cdot 10^{-7} \cdot x^2 - 2.99 \cdot 10^{-4}$ $3.95 \cdot 10^{-7} \cdot x^2 - 2.98 \cdot 10^{-4}$ $3.86 \cdot 10^{-7} \cdot x^2 - 2.78 \cdot 10^{-4}$ $3.86 \cdot 10^{-7} \cdot x^2 - 2.78 \cdot 10^{-4}$ $3.87 \cdot 10^{-7} \cdot x^2 - 2.67 \cdot 10^{-4} \cdot x^2$ $3.87 \cdot 10^{-7} \cdot x^2 - 2.67 \cdot 10^{-4} \cdot x^2$ $3.56 \cdot 10^{-7} \cdot x^2 - 2.26 \cdot 10^{-4} \cdot x^2$ $3.56 \cdot 10^{-7} \cdot x^2 - 2.26 \cdot 10^{-4} \cdot x^2$ $3.58 \cdot 10^{-7} \cdot x^2 - 2.14 \cdot 10^{-4} \cdot x^2$ $3.57 \cdot 10^{-7} \cdot x^2 - 2.13 \cdot 10^{-4} \cdot x^2$ $2.61 \cdot 10^{-7} \cdot x^2 - 9.09 \cdot 10^{-5} \cdot x^2$ $2.61 \cdot 10^{-7} \cdot x^2 - 9.11 \cdot 10^{-5} \cdot x^2$

abstract-real

abstract-user

fast-rewrite-real

fast-rewrite-user

close-abstract-use

close-abstract-rea

type-admit-cast-us

type-admit-cast-re

 $5.22 \cdot 10^{-4} \cdot x - 6.26 \cdot$

 $5.22 \cdot 10^{-4} \cdot x - 6.26 \cdot$ type-pf-cast-user

refine-user

refine-real

type-pf-cast-real

check-admit-cast-r

check-admit-cast-u

check-pf-cast-use

check-pf-cast-rea

type-admit-real

type-admit-user

check-admit-user

check-admit-real

build-eval-thunk-u

 $9.68 \cdot 10^{-5} \cdot x - 6.3 \cdot$ build-eval-thunk-re $9.67 \cdot 10^{-5} \cdot x - 5.32 \cdot$ build-thunk-user $9.6 \cdot 10^{-5} \cdot x - 7.29 \cdot$ build-thunk-real $9.6 \cdot 10^{-5} \cdot x - 6.48 \cdot$ ob ools I sea