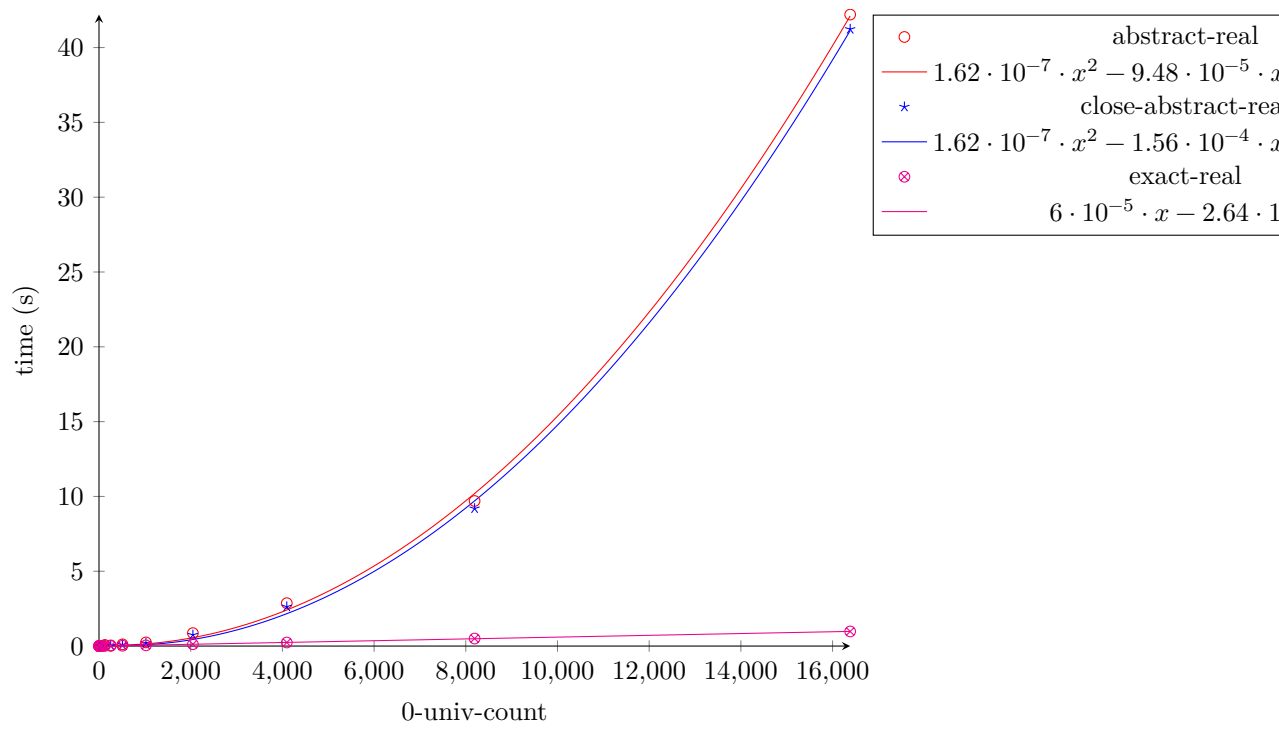Figure 1: timing-pattern

1

Figure 2: timing-n-polymorphic-universes param-1-n 0
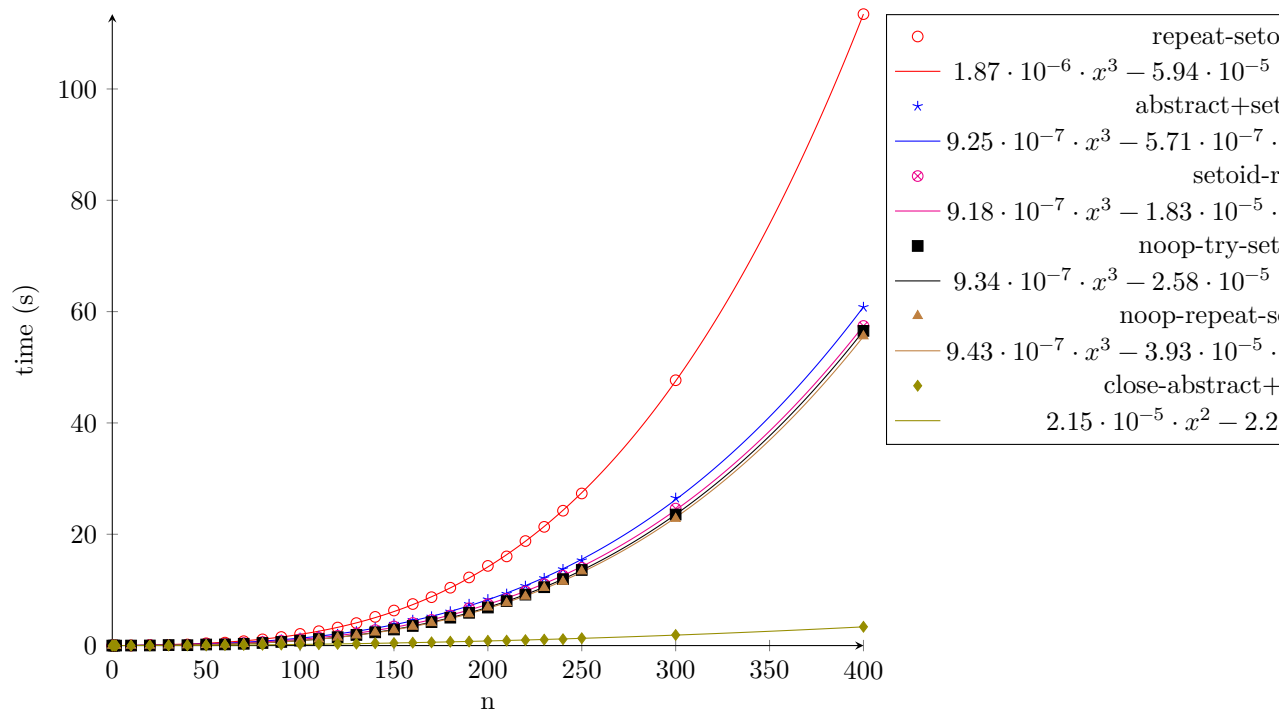
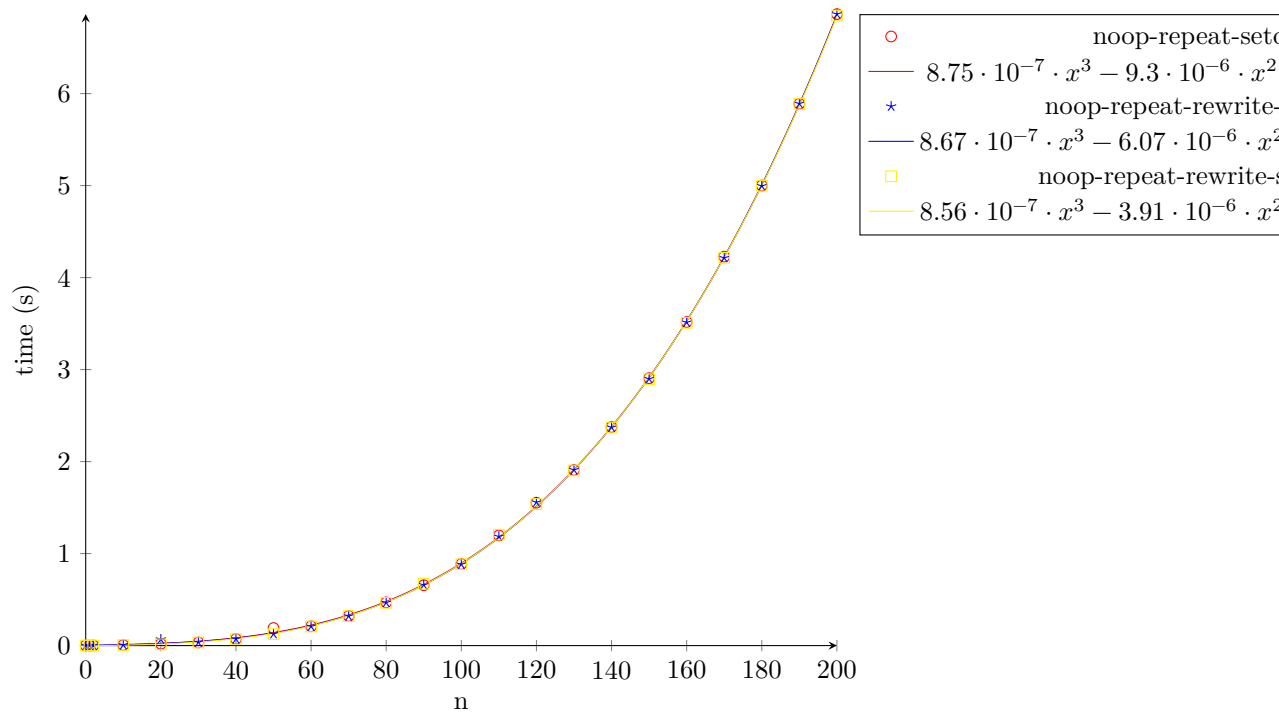Figure 3: timing-repeat-setoid-rewrite-under-binders

3

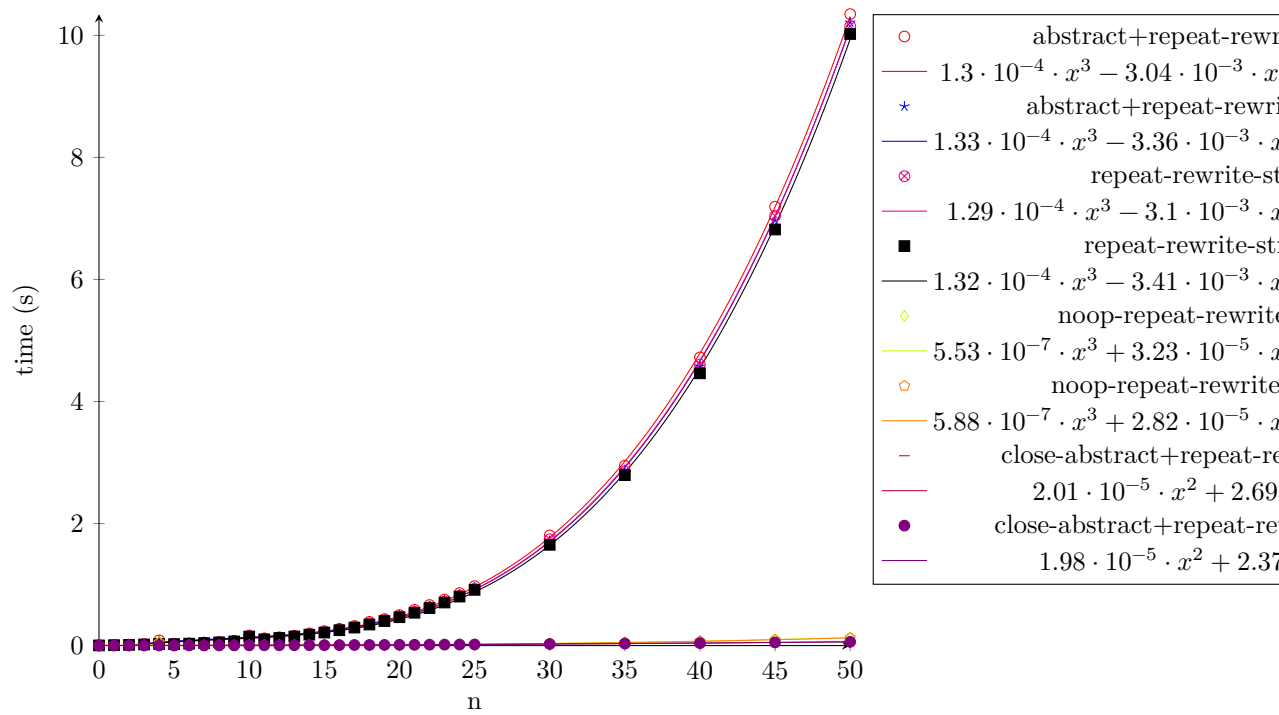Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

4

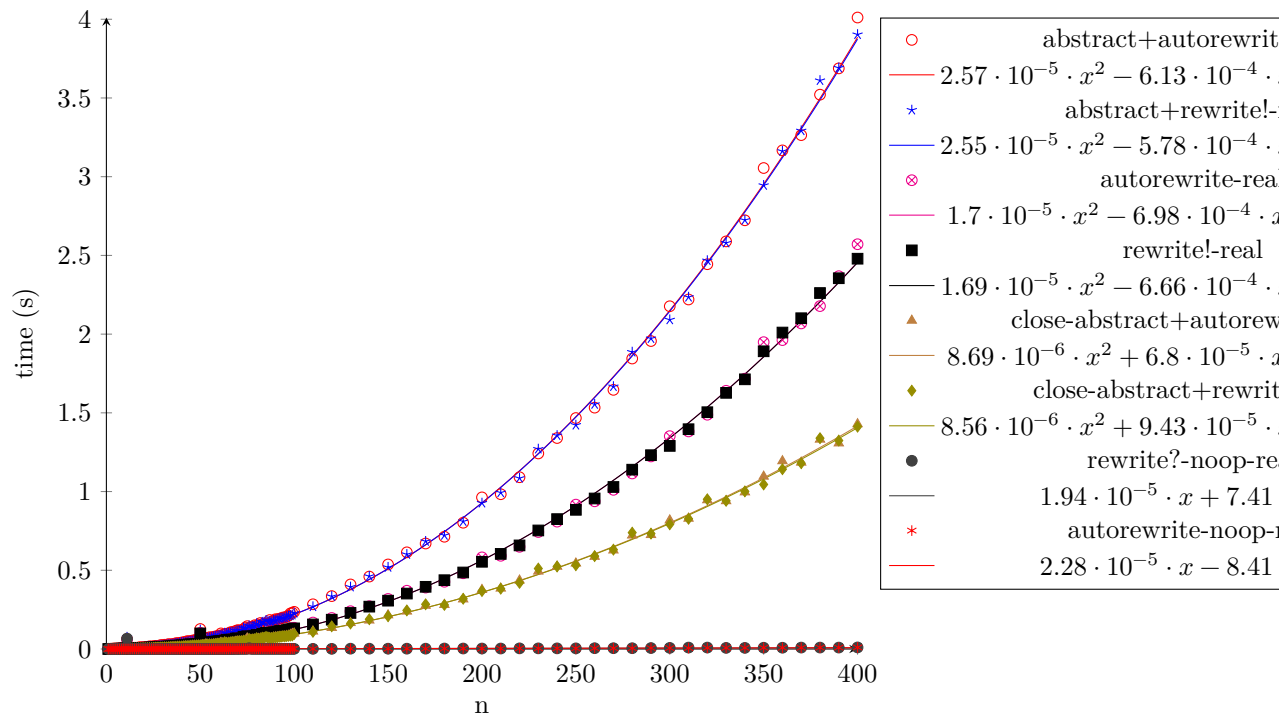Figure 5: timing-rewrite-strat-under-binders

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

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

autorewrite-noop-r
$3.8 \cdot 10^{-8} \cdot x^2 + 4.69 \cdot 10^{-6} \cdot x$
try-rewrite!-noop-r
$3.79 \cdot 10^{-8} \cdot x^2 + 3.87 \cdot 10^{-6} \cdot x$
try-rewrite-noop-r
$3.79 \cdot 10^{-8} \cdot x^2 + 3.76 \cdot 10^{-6} \cdot x$
try-rewrite?-noop-r
$3.78 \cdot 10^{-8} \cdot x^2 + 4.3 \cdot 10^{-6} \cdot x$
try-ssr-rewrite-noop
$4.88 \cdot 10^{-7} \cdot x - 2.18$
try-ssr-rewrite!-noop
$5.12 \cdot 10^{-7} \cdot x - 1.92$
try-ssr-rewrite?-noop
$4.69 \cdot 10^{-7} \cdot x - 2.04$

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

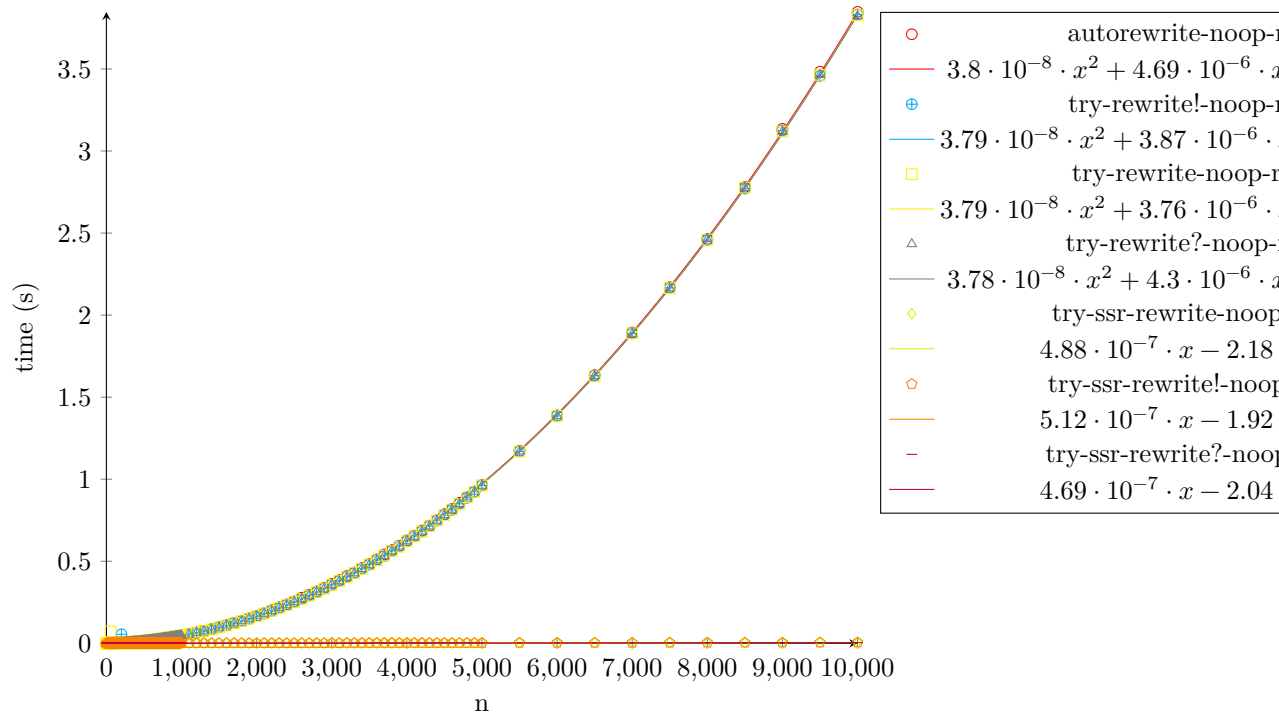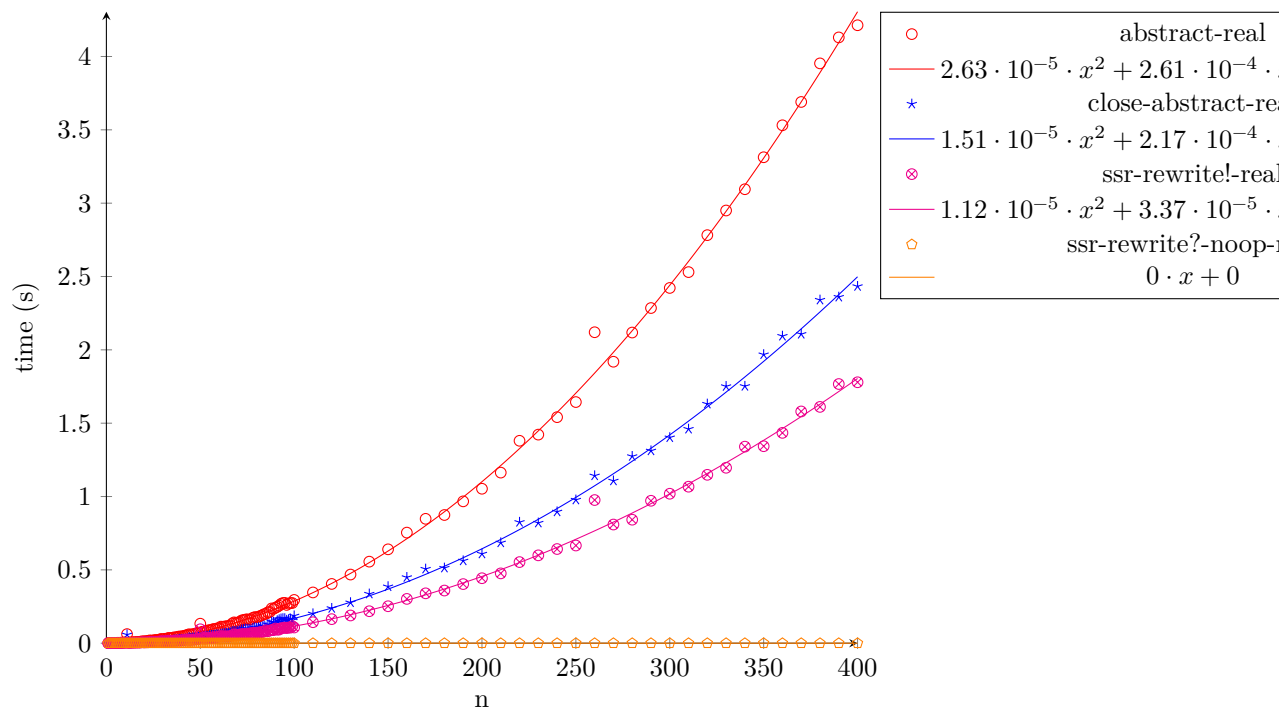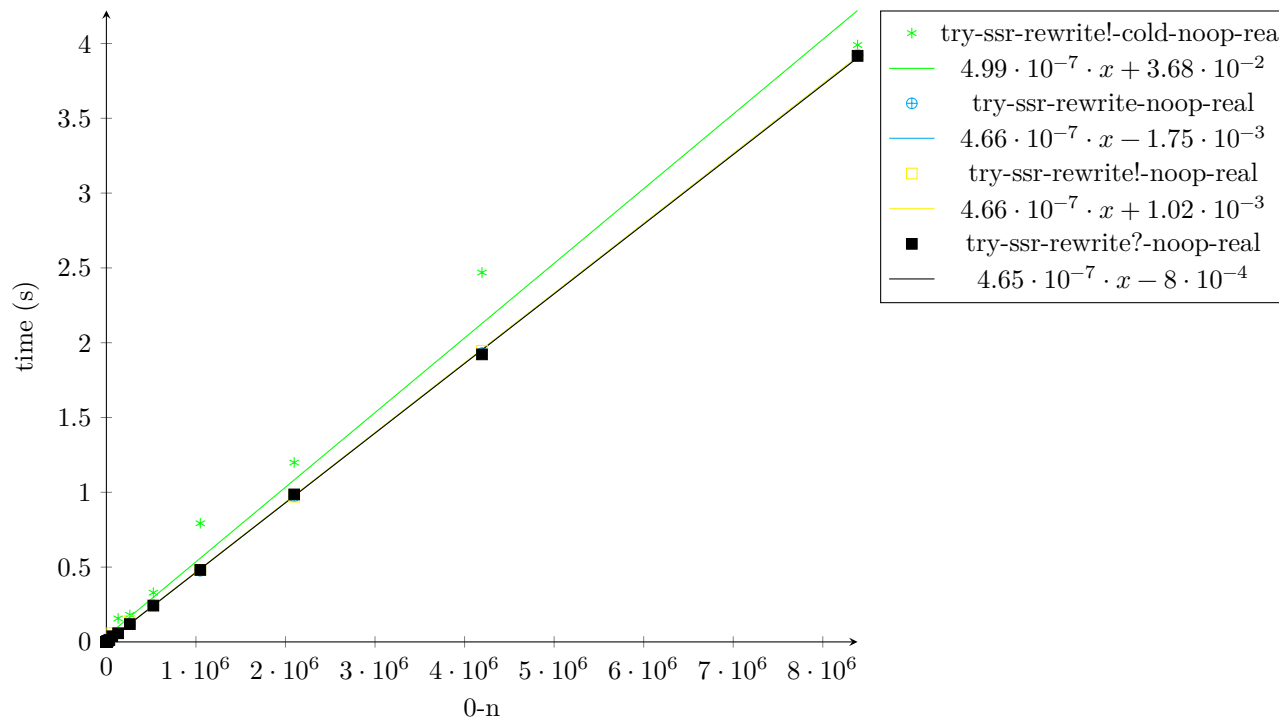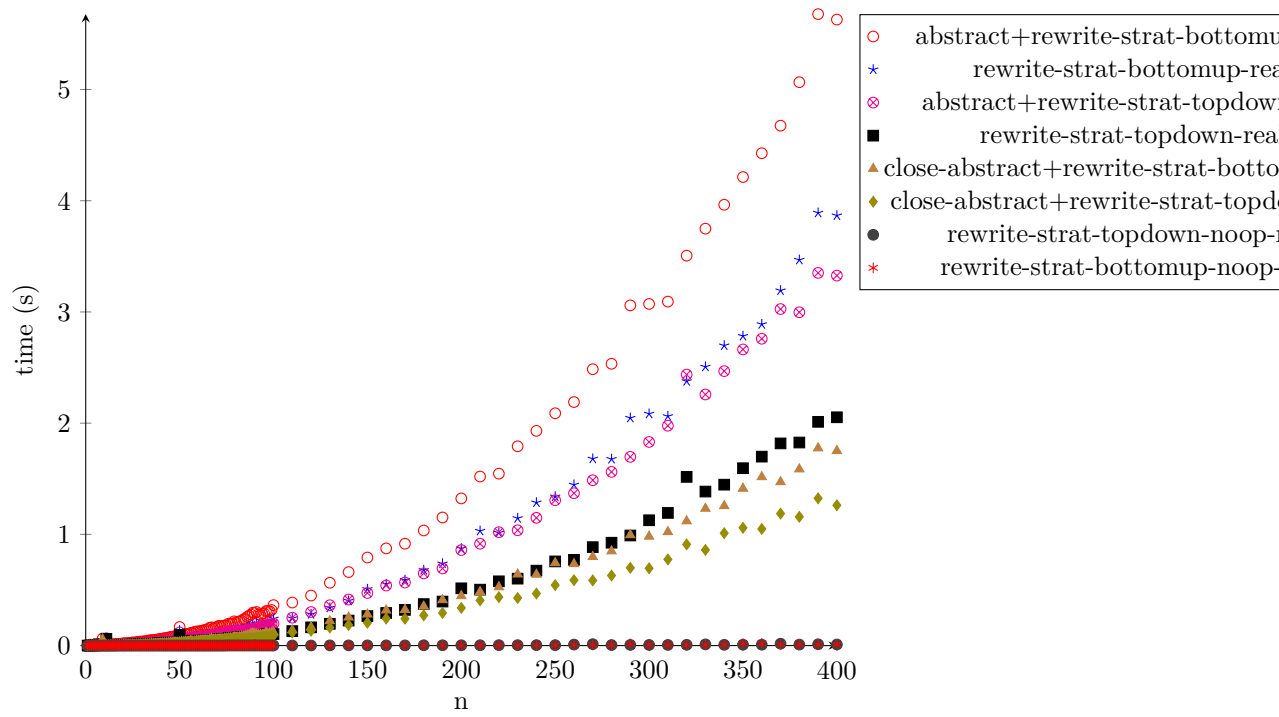Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

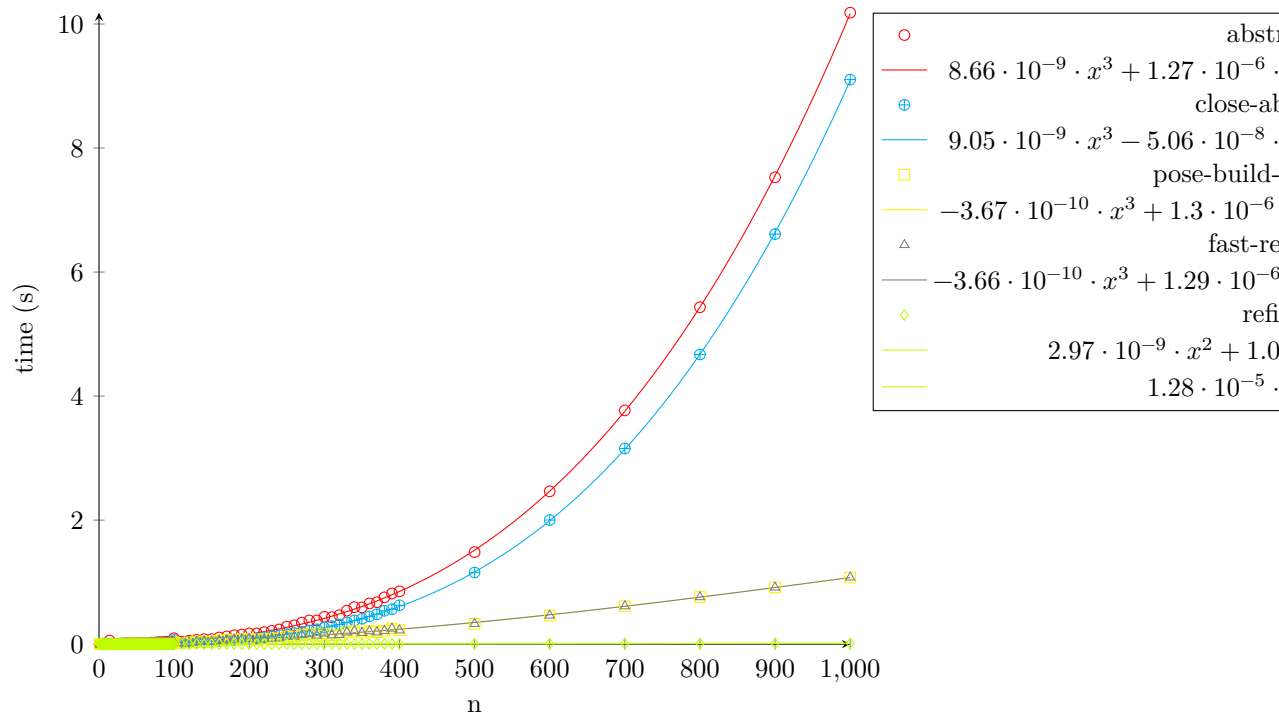Figure 10: timing-rewrite-repeated-app-rewrite-strat

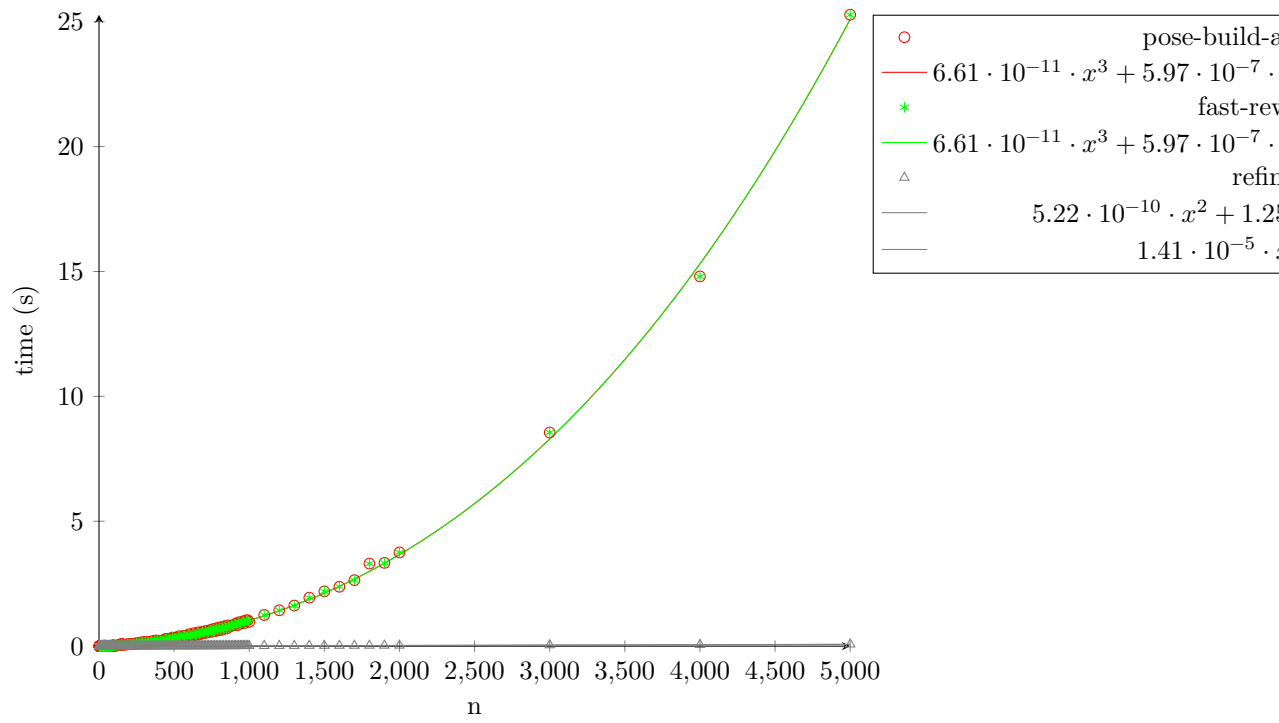Figure 11: timing-rewrite-repeated-app-fast-rewrite

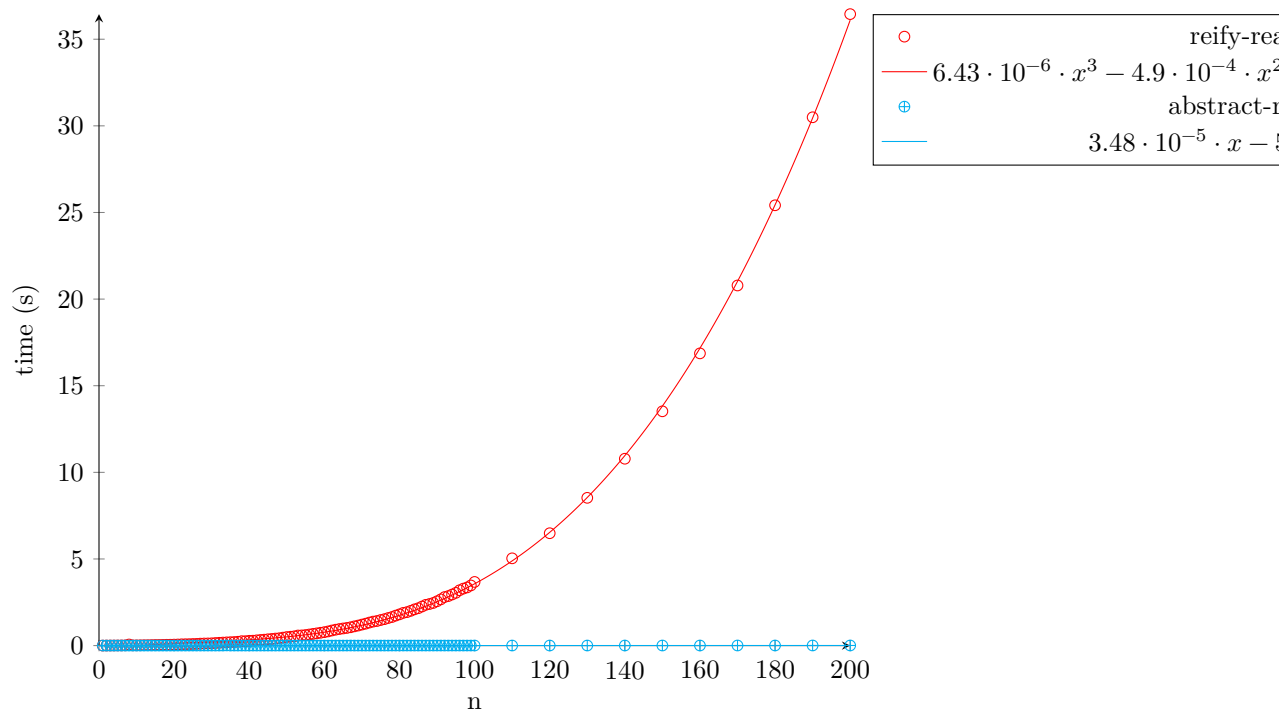Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract

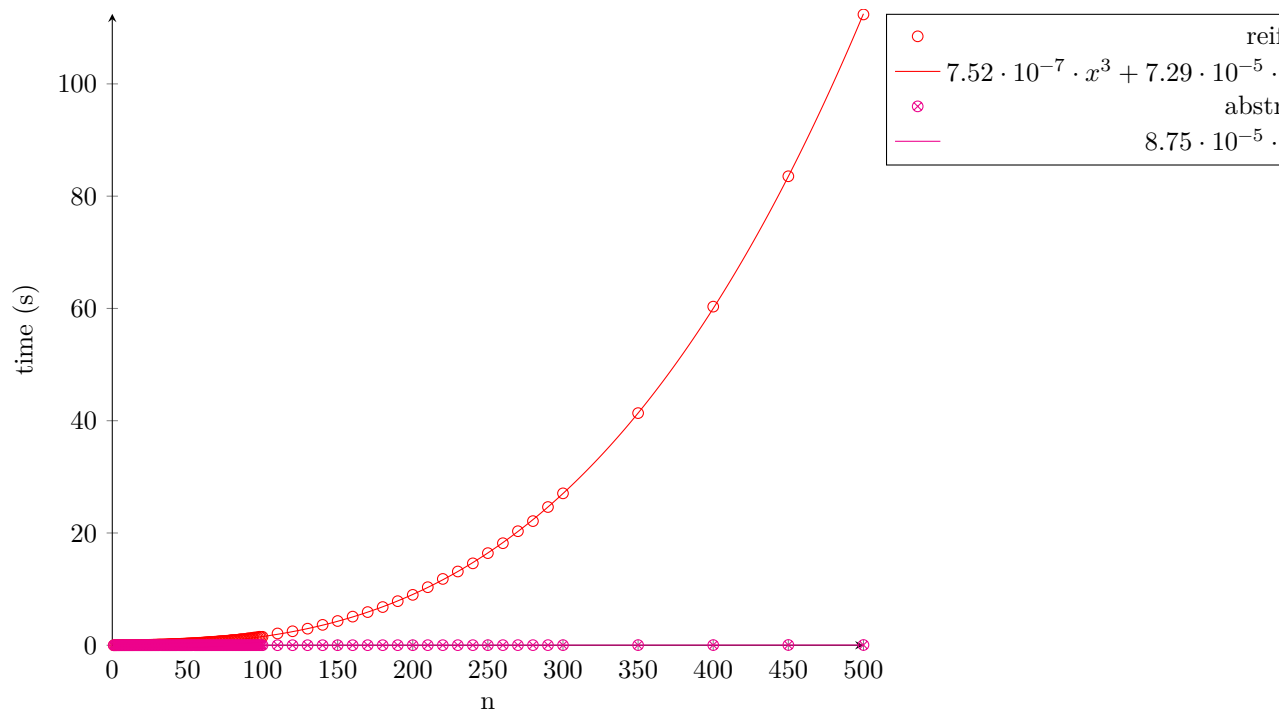Figure 13: timing-typeclass-reification-let-in-HOAS

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

abstract-real

$2.78 \cdot 10^{-6} \cdot x^2 - 1.65 \cdot 10^{-3}$

fast-rewrite-real

$2.5 \cdot 10^{-6} \cdot x^2 - 1.69 \cdot 10^{-3}$

check-admit-cast-re

$4.06 \cdot 10^{-7} \cdot x^2 - 3.36 \cdot 10^{-4} \cdot x$

check-pf-cast-real

$3.93 \cdot 10^{-7} \cdot x^2 - 3.13 \cdot 10^{-4} \cdot x$

type-admit-cast-re

$3.98 \cdot 10^{-7} \cdot x^2 - 3.39 \cdot 10^{-4} \cdot x$

close-abstract-rea

$2.86 \cdot 10^{-7} \cdot x^2 + 4.02 \cdot 10^{-5} \cdot x$

refine-real

$3.56 \cdot 10^{-7} \cdot x^2 - 2.76 \cdot 10^{-4} \cdot x$

$4.62 \cdot 10^{-4} \cdot x - 5.57$

type-pf-cast-real

$3.5 \cdot 10^{-7} \cdot x^2 - 2.55 \cdot 10^{-4} \cdot x$

type-admit-real

$3.38 \cdot 10^{-7} \cdot x^2 - 2.46 \cdot 10^{-4} \cdot x$

check-admit-real

$2.53 \cdot 10^{-7} \cdot x^2 - 1.2 \cdot 10^{-4} \cdot x$

build-eval-thunk-re

$1.13 \cdot 10^{-4} \cdot x - 5.48$

build-thunk-real

$1.13 \cdot 10^{-4} \cdot x - 6.63$

check-I-real

$2.03 \cdot 10^{-5} \cdot x - 5.4$

type-I-real

$2 \cdot 10^{-5} \cdot x - 7.03 \cdot 1$

build-I-real

$1.15 \cdot 10^{-5} \cdot x - 6.39$

build-pf-cast-real

$9.9 \cdot 10^{-6} \cdot x - 4.21$

build-admit-real

$9.89 \cdot 10^{-6} \cdot x - 4.91$

build-admit-cast-re

$9.85 \cdot 10^{-6} \cdot x - 4 \cdot 1$
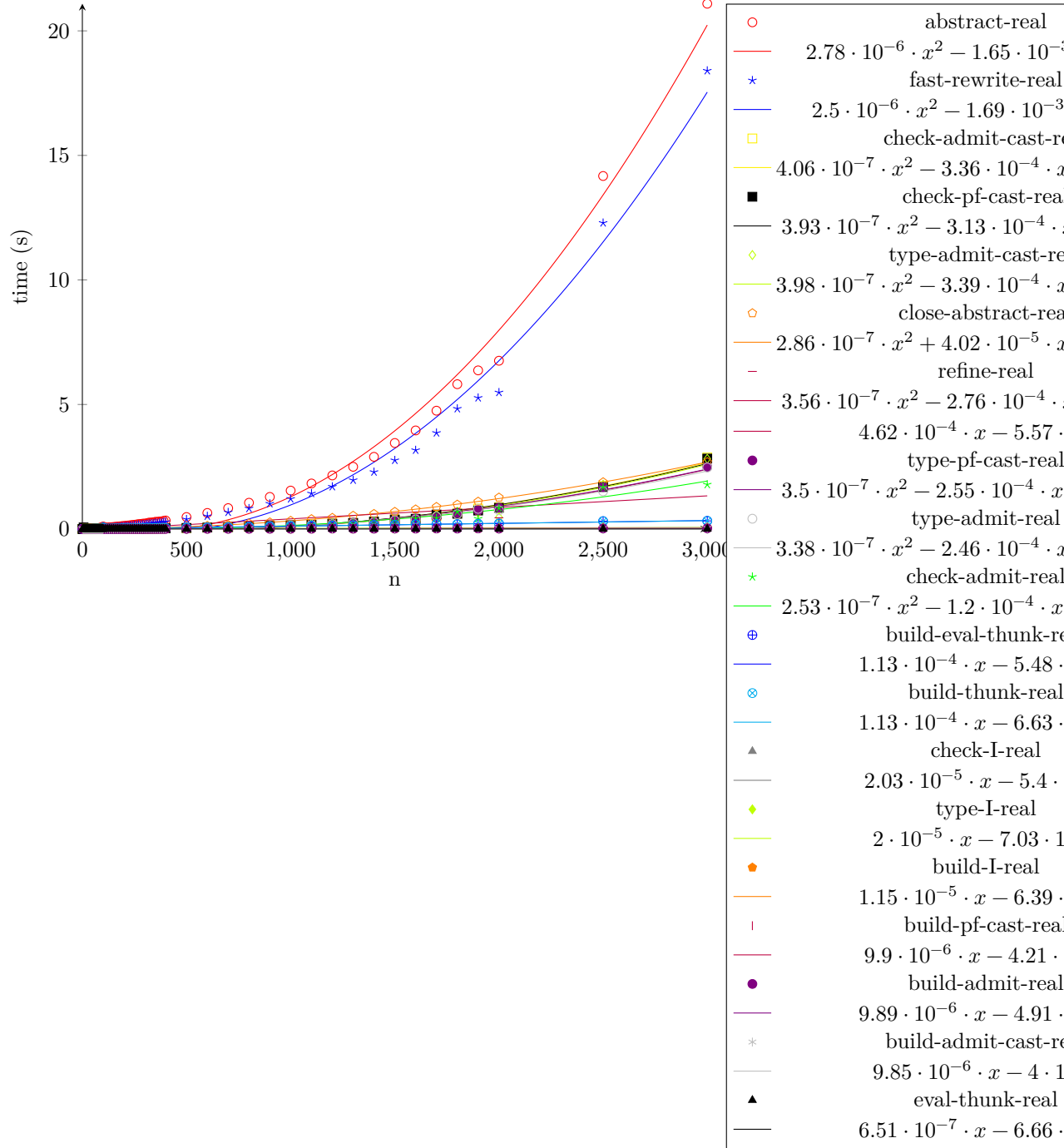
eval-thunk-real

$6.51 \cdot 10^{-7} \cdot x - 6.66$

Figure 15: timing-rewrite-repeated-app-fast-rewrite-ltac2

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