Figure 1: timing-pattern

1

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

time (s)

n

repeat-seto

$2.38 \cdot 10^{-6} \cdot x^3 - 1.16 \cdot 10^{-4} \cdot$

abstract+set

$1.19 \cdot 10^{-6} \cdot x^3 - 6.26 \cdot 10^{-5} \cdot$

noop-repeat-s

$1.25 \cdot 10^{-6} \cdot x^3 - 8.23 \cdot 10^{-5} \cdot$

noop-try-set

$1.29 \cdot 10^{-6} \cdot x^3 - 1.04 \cdot 10$

setoid-r

$1.18 \cdot 10^{-6} \cdot x^3 - 7.75 \cdot 10^{-5}$

close-abstract+
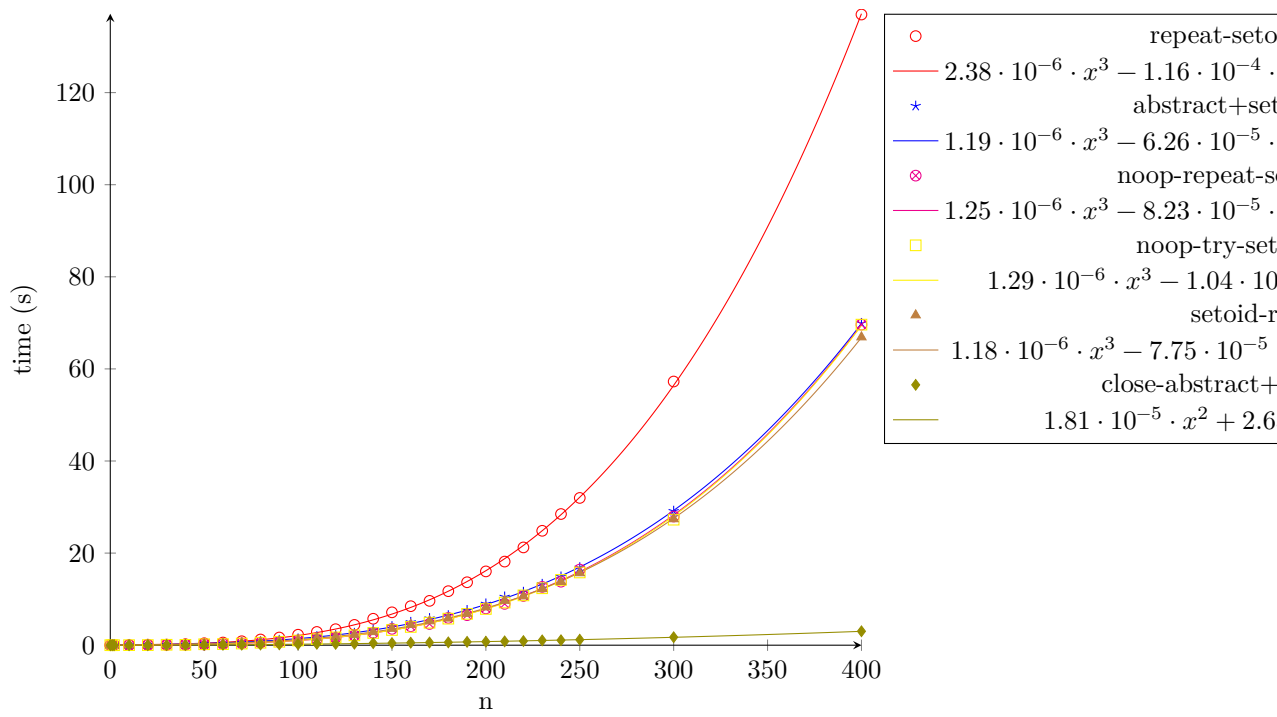
$1.81 \cdot 10^{-5} \cdot x^2 + 2.6$

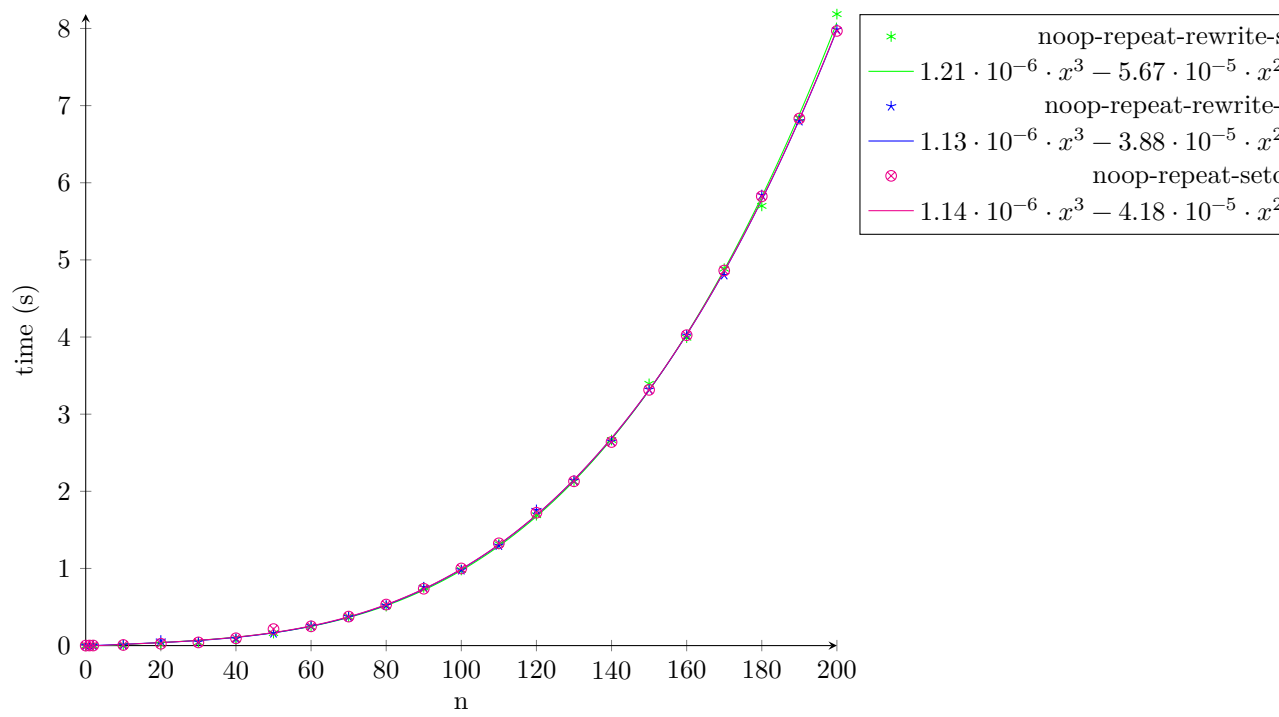Figure 3: timing-repeat-setoid-rewrite-under-binders

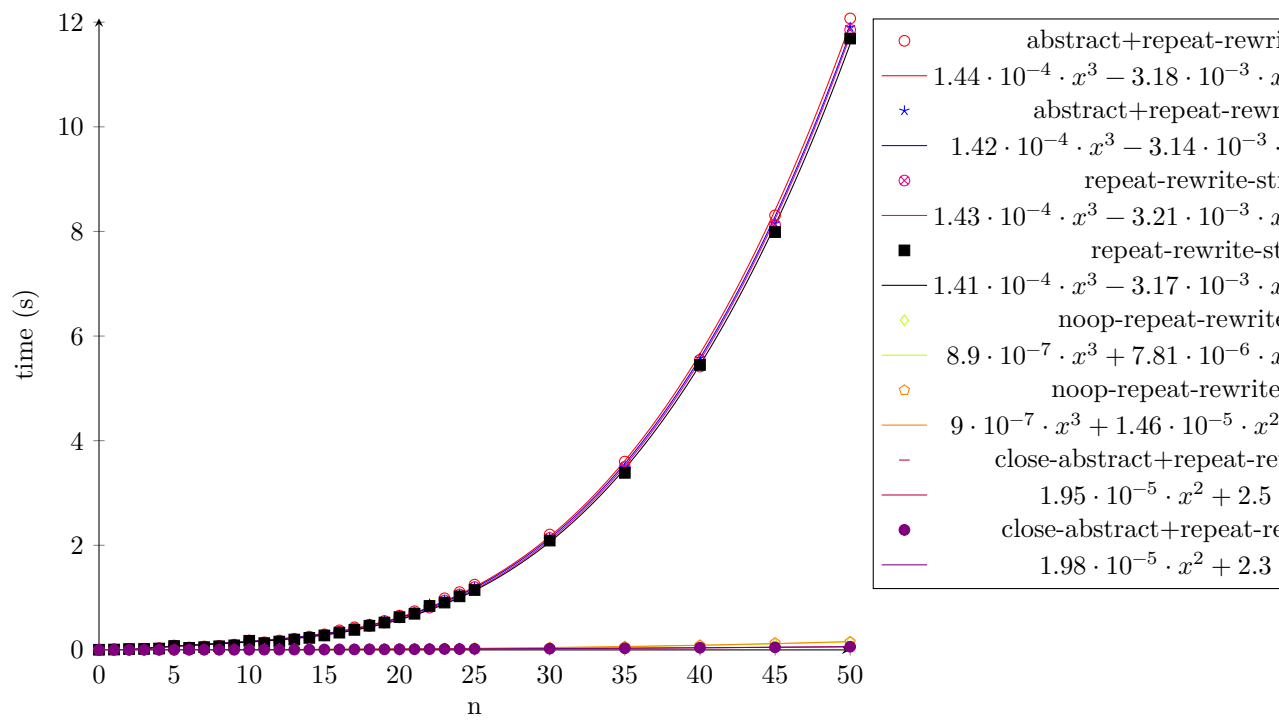Figure 4: timing-repeat-setoid-rewrite-under-binders-noop
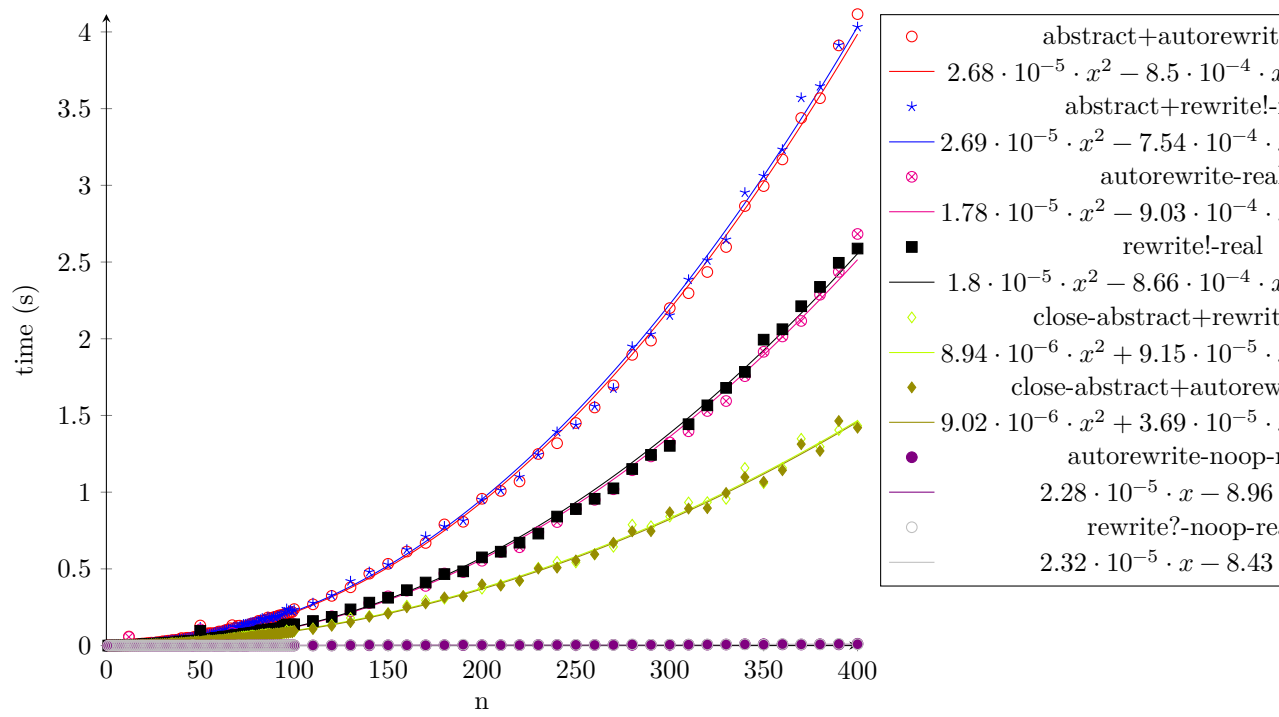
4

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

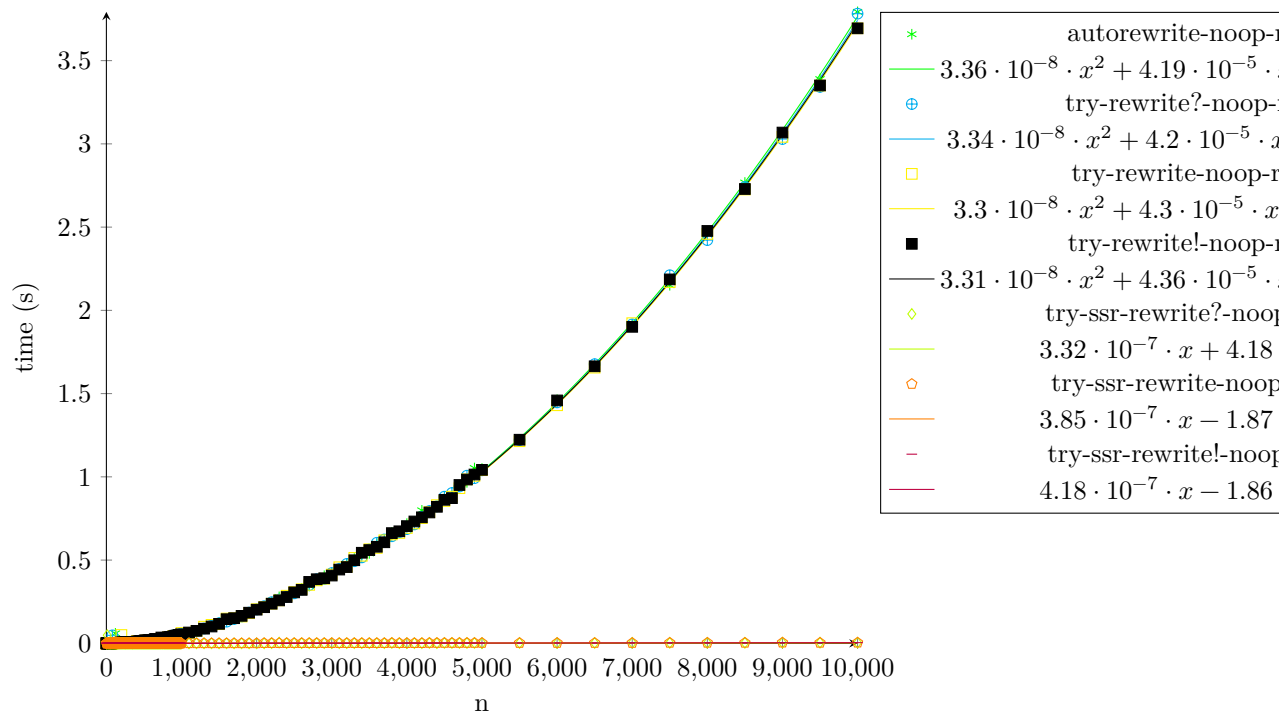Figure 6: timing-rewrite-repeated-app-autorewrite

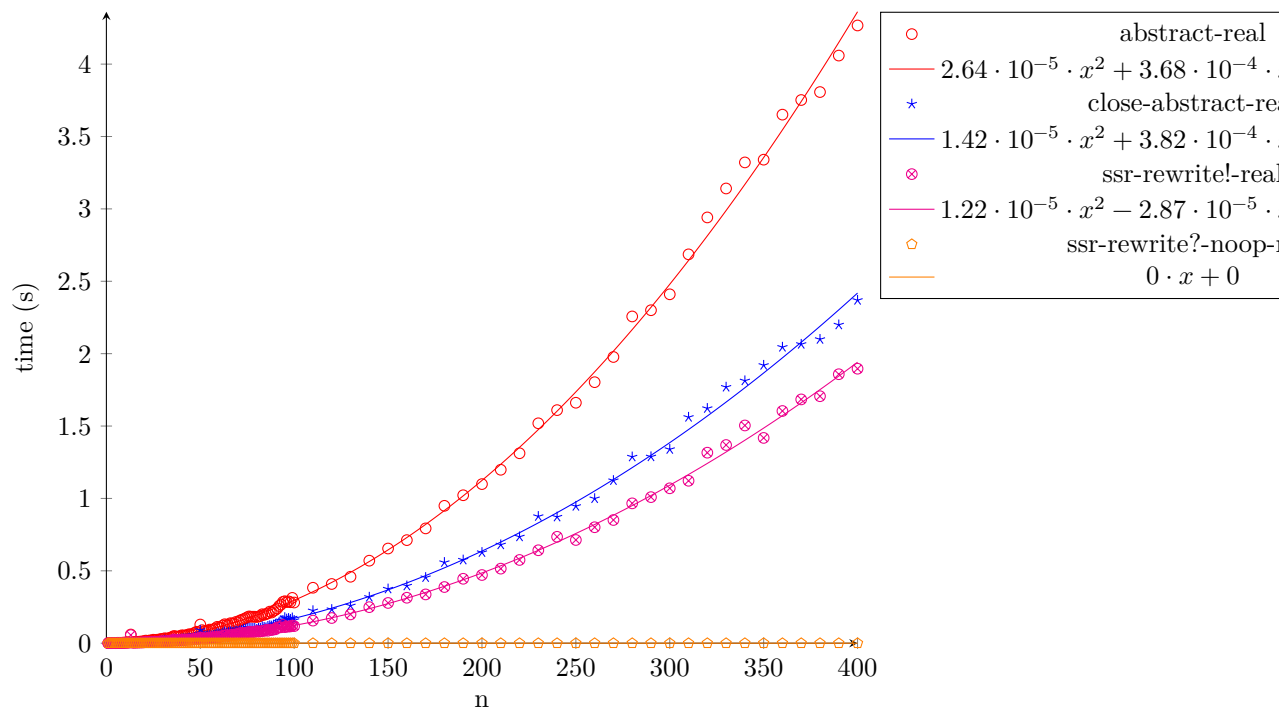Figure 7: timing-rewrite-repeated-app-autorewrite-noop
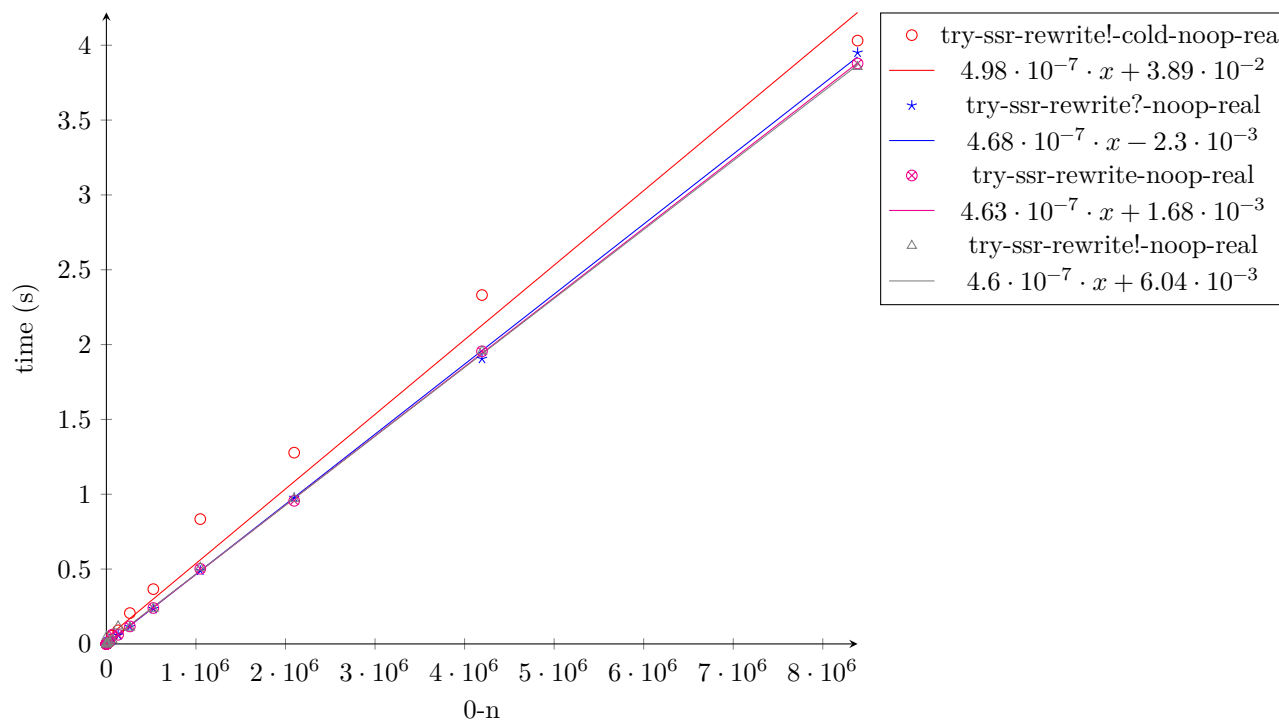
Figure 8: timing-rewrite-repeated-app-ssrrewrite

8

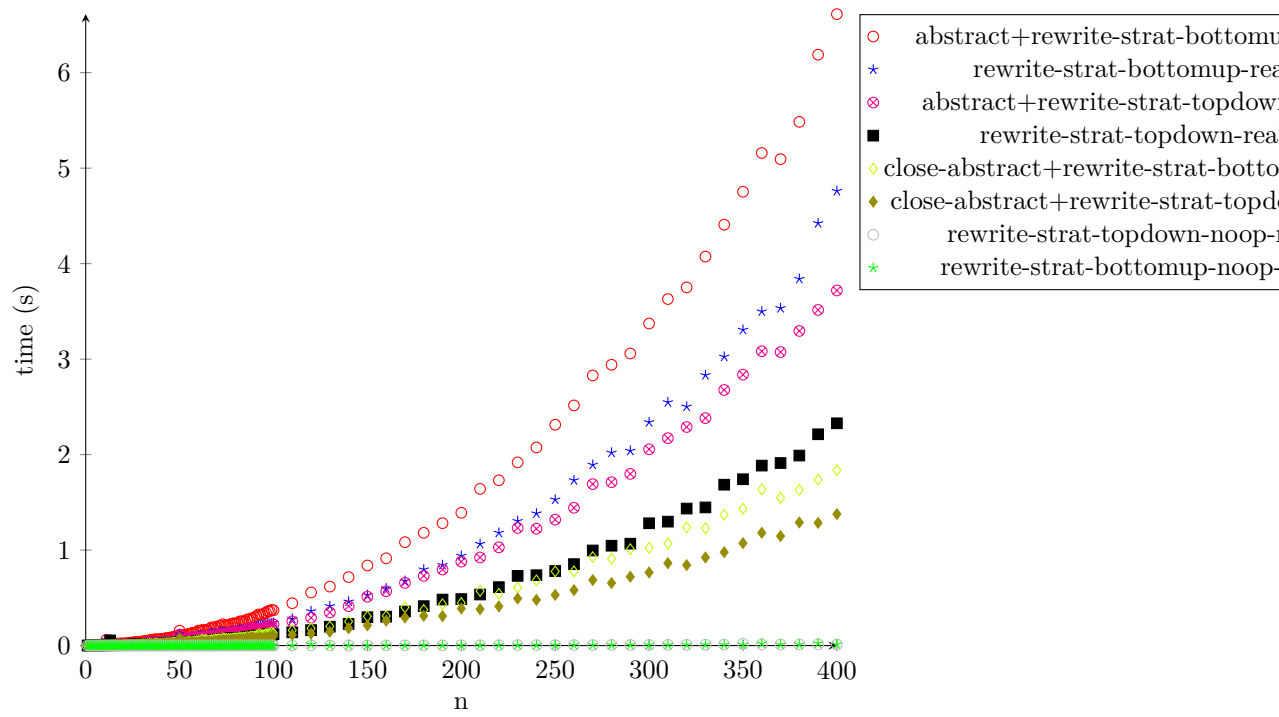Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

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

The legend of the figure reads:

- abstract+rewrite-strat-bottomu
- rewrite-strat-bottomup-rea
- abstract+rewrite-strat-topdown
- rewrite-strat-topdown-rea
- close-abstract+rewrite-strat-botto
- close-abstract+rewrite-strat-topd
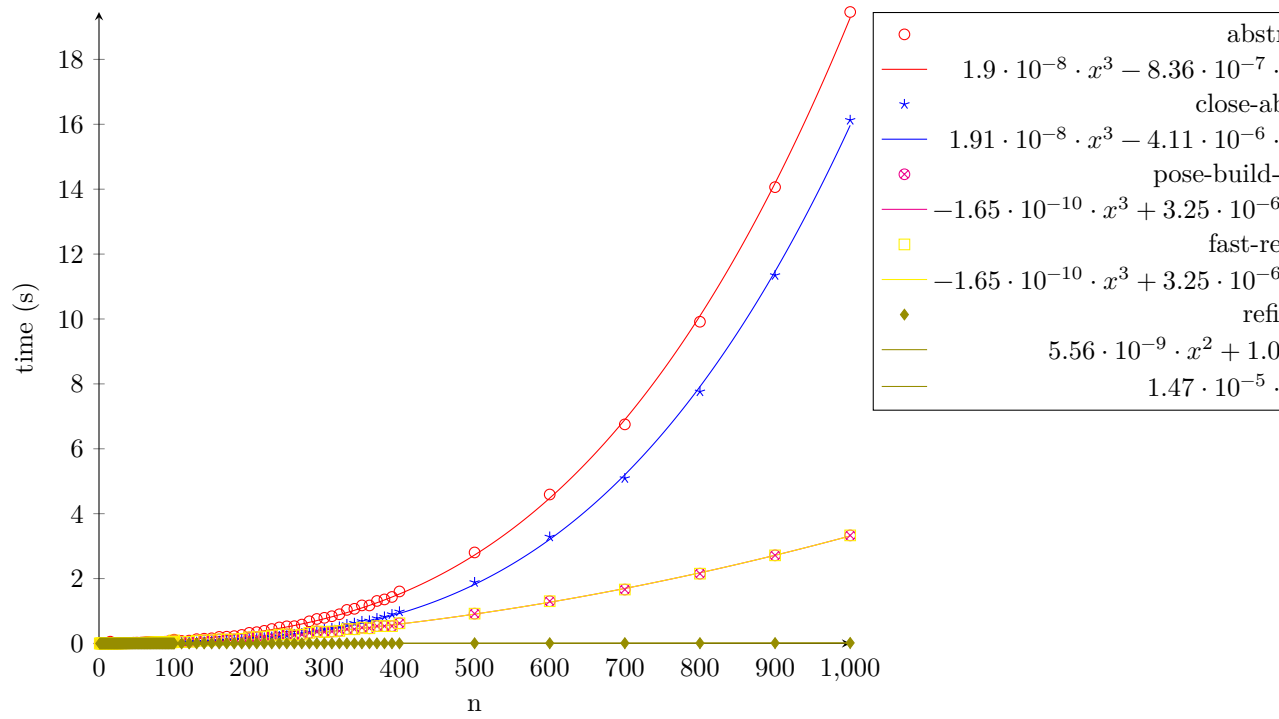- rewrite-strat-topdown-noop-r
- rewrite-strat-bottomup-noop-

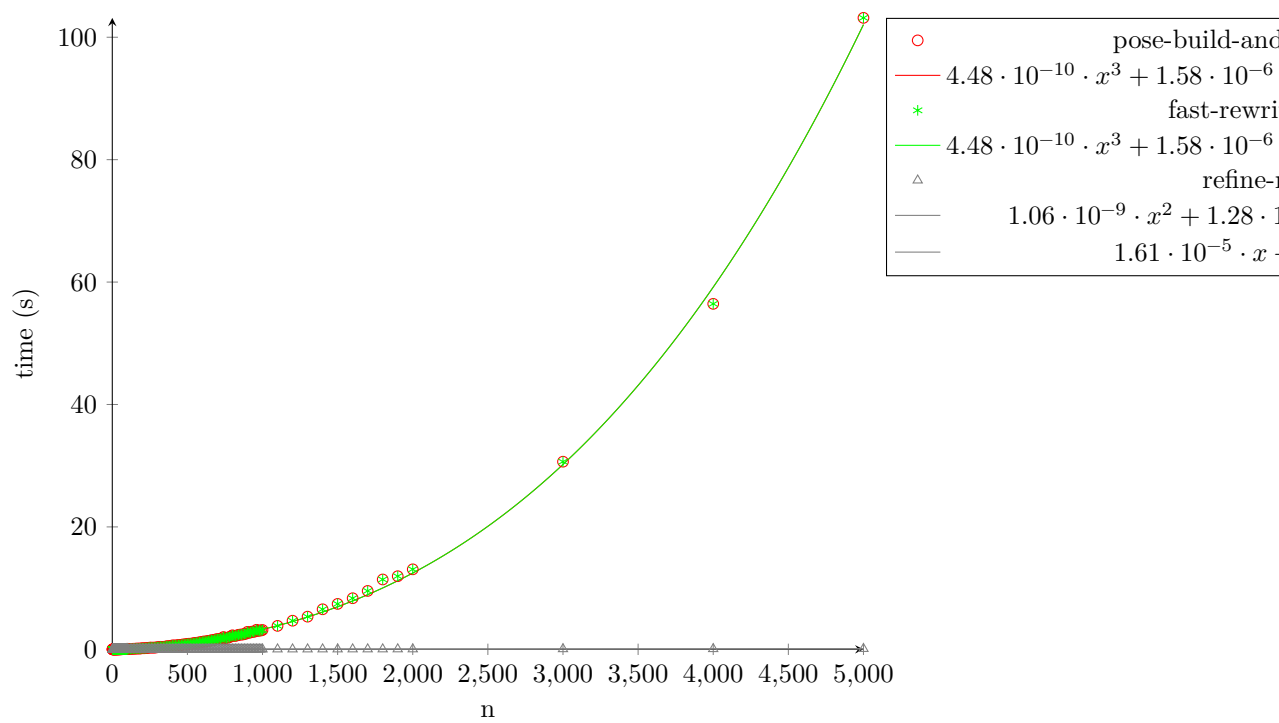Figure 11: timing-rewrite-repeated-app-fast-rewrite

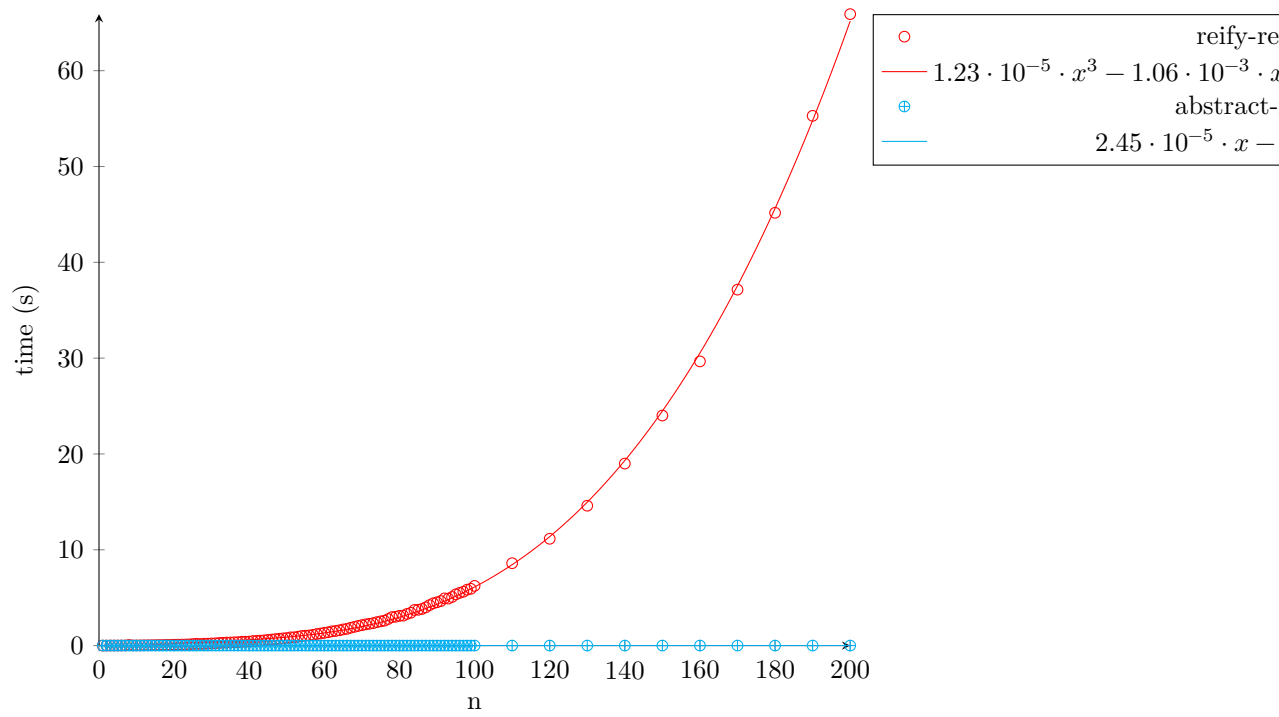Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract
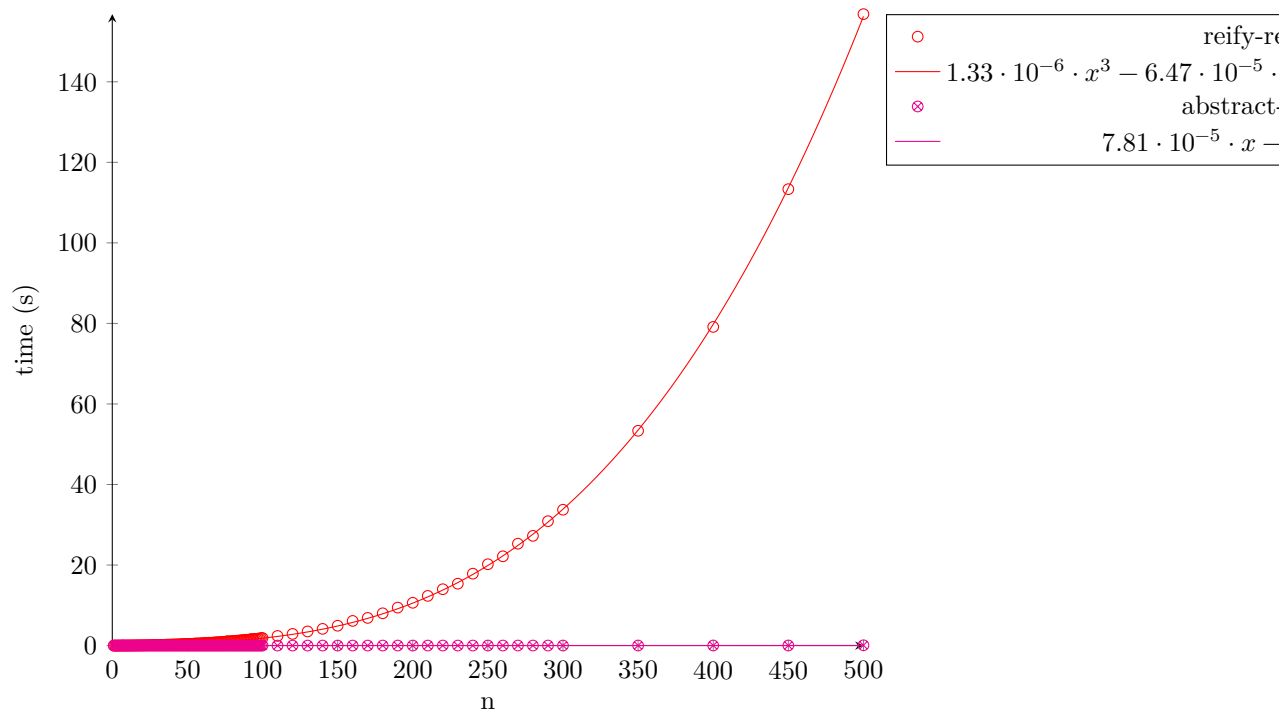
Figure 13: timing-typeclass-reification-let-in-HOAS

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