Figure 1: timing-pattern

1

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

repeat-seto

$2.31 \cdot 10^{-6} \cdot x^3 - 1.55 \cdot 10^{-}$

abstract+set

$1.16 \cdot 10^{-6} \cdot x^3 - 6.98 \cdot 10^{-}$

noop-try-set

$1.22 \cdot 10^{-6} \cdot x^3 - 9.35 \cdot 10^{-5} \cdot$

noop-repeat-s

$1.16 \cdot 10^{-6} \cdot x^3 - 6.99 \cdot 10^{-5}$

setoid-r

$1.16 \cdot 10^{-6} \cdot x^3 - 8.92 \cdot 10^{-}$

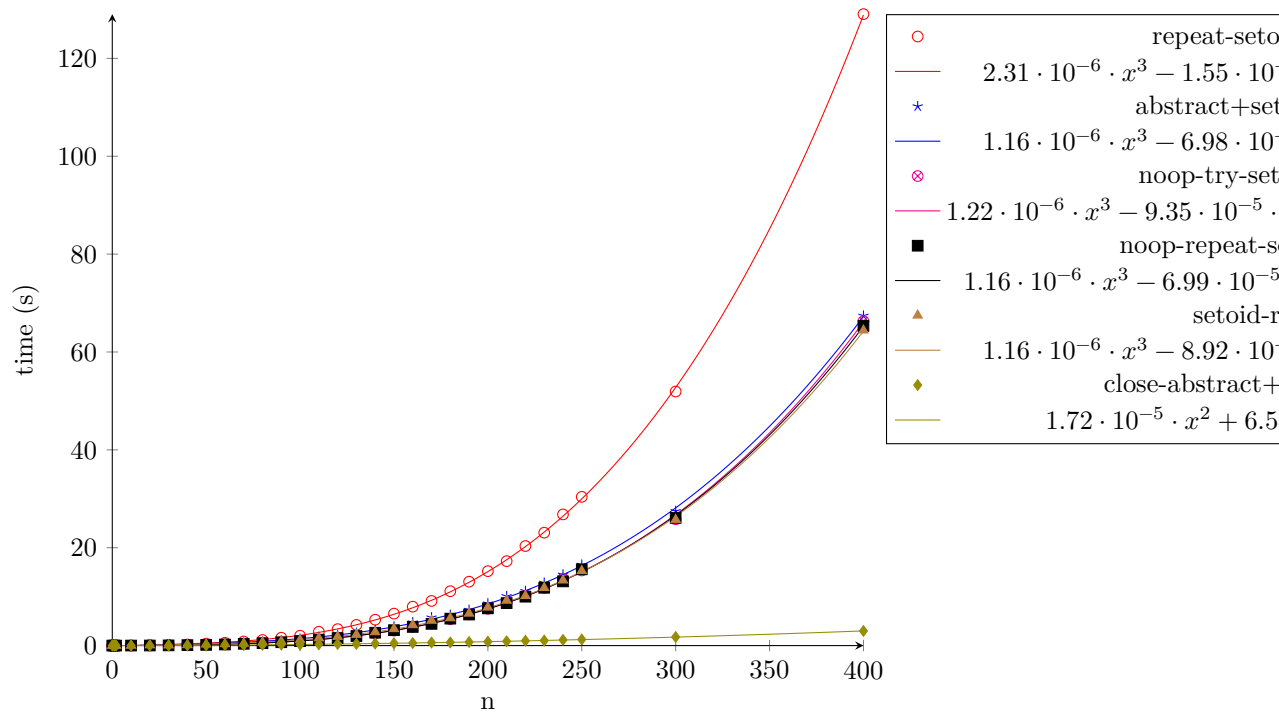close-abstract+

$1.72 \cdot 10^{-5} \cdot x^2 + 6.5$

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

3
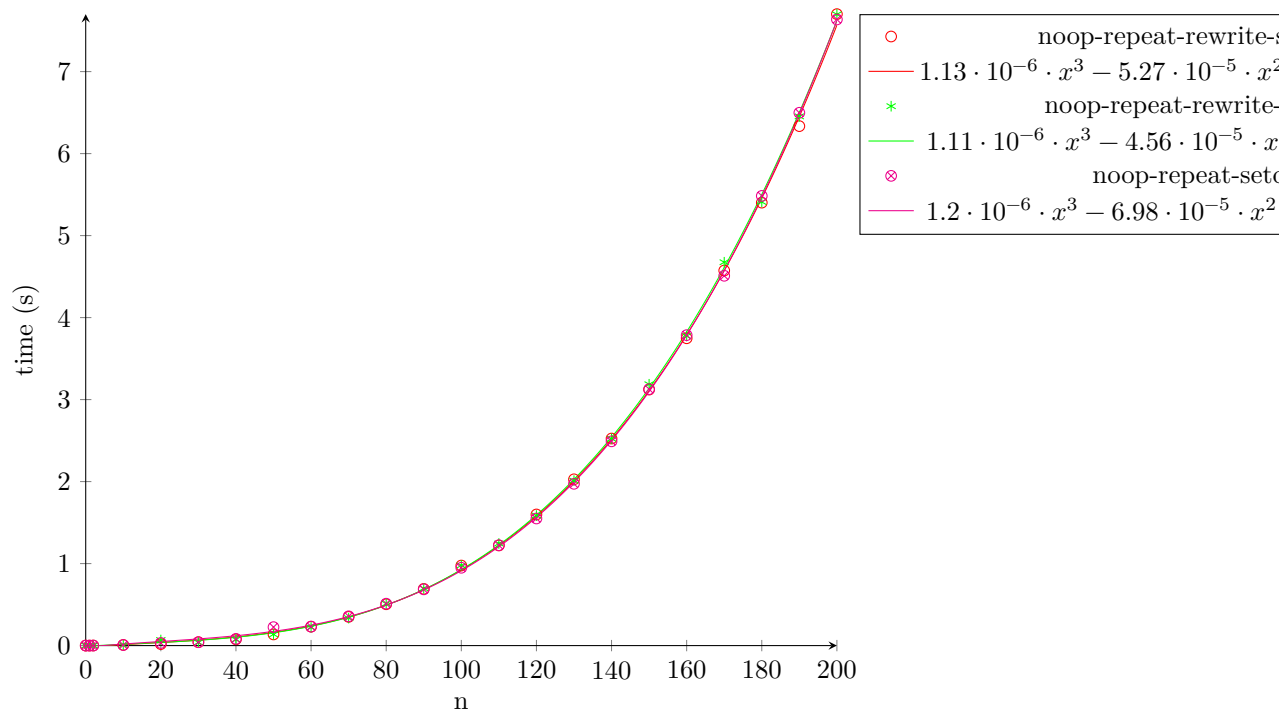
Figure 4: timing-repeat-setoid-rewrite-under-binders-noop
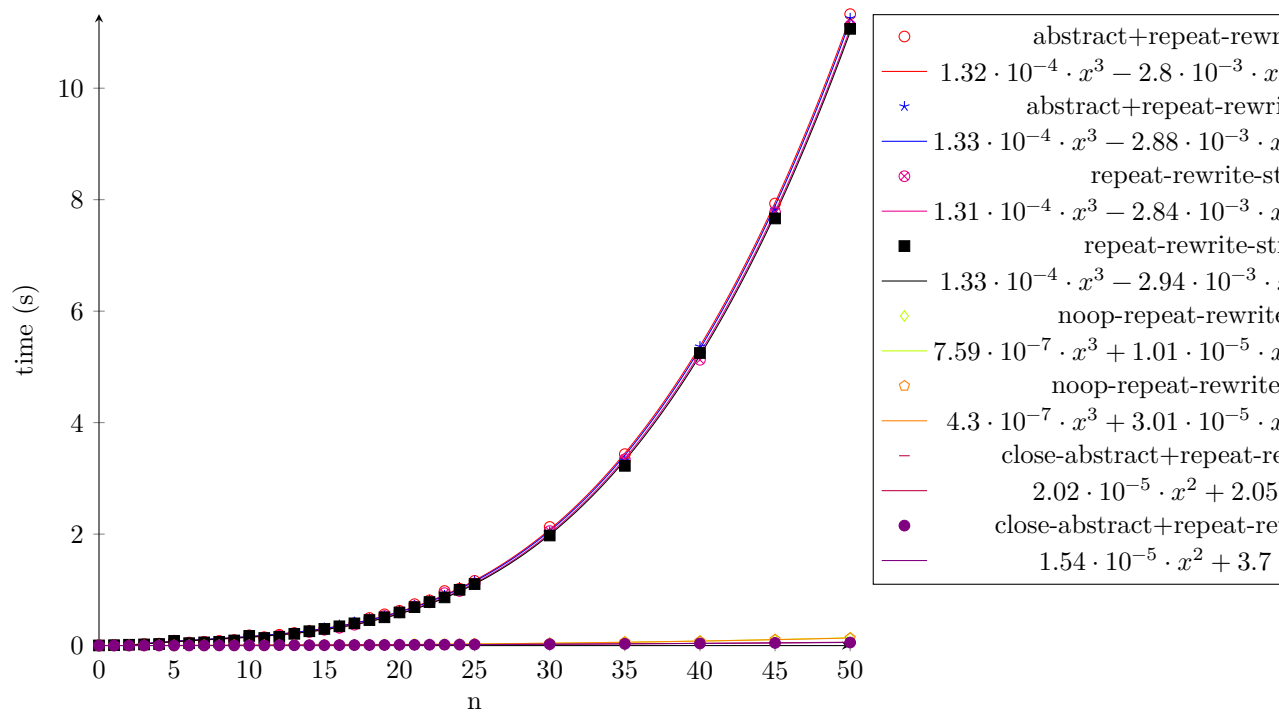
Figure 5: timing-rewrite-strat-under-binders

The figure shows a plot with axis labels "time (s)" (vertical) and "n" (horizontal), with the following legend entries:

- abstract+repeat-rewr...
- $1.32 \cdot 10^{-4} \cdot x^3 - 2.8 \cdot 10^{-3} \cdot x$
- abstract+repeat-rewri...
- $1.33 \cdot 10^{-4} \cdot x^3 - 2.88 \cdot 10^{-3} \cdot x$
- repeat-rewrite-st...
- $1.31 \cdot 10^{-4} \cdot x^3 - 2.84 \cdot 10^{-3} \cdot x$
- repeat-rewrite-st...
- $1.33 \cdot 10^{-4} \cdot x^3 - 2.94 \cdot 10^{-3} \cdot x$
- noop-repeat-rewrite...
- $7.59 \cdot 10^{-7} \cdot x^3 + 1.01 \cdot 10^{-5} \cdot x$
- noop-repeat-rewrite...
- $4.3 \cdot 10^{-7} \cdot x^3 + 3.01 \cdot 10^{-5} \cdot x$
- close-abstract+repeat-re...
- $2.02 \cdot 10^{-5} \cdot x^2 + 2.05$
- close-abstract+repeat-re...
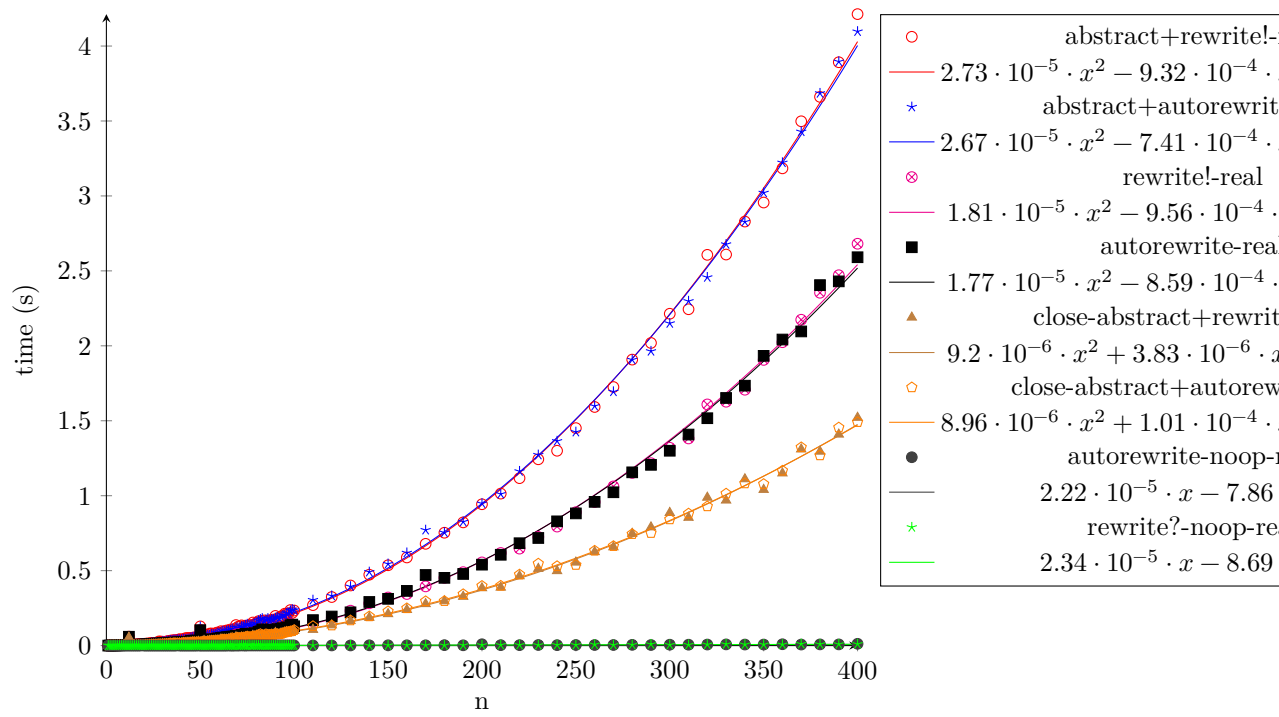- $1.54 \cdot 10^{-5} \cdot x^2 + 3.7$

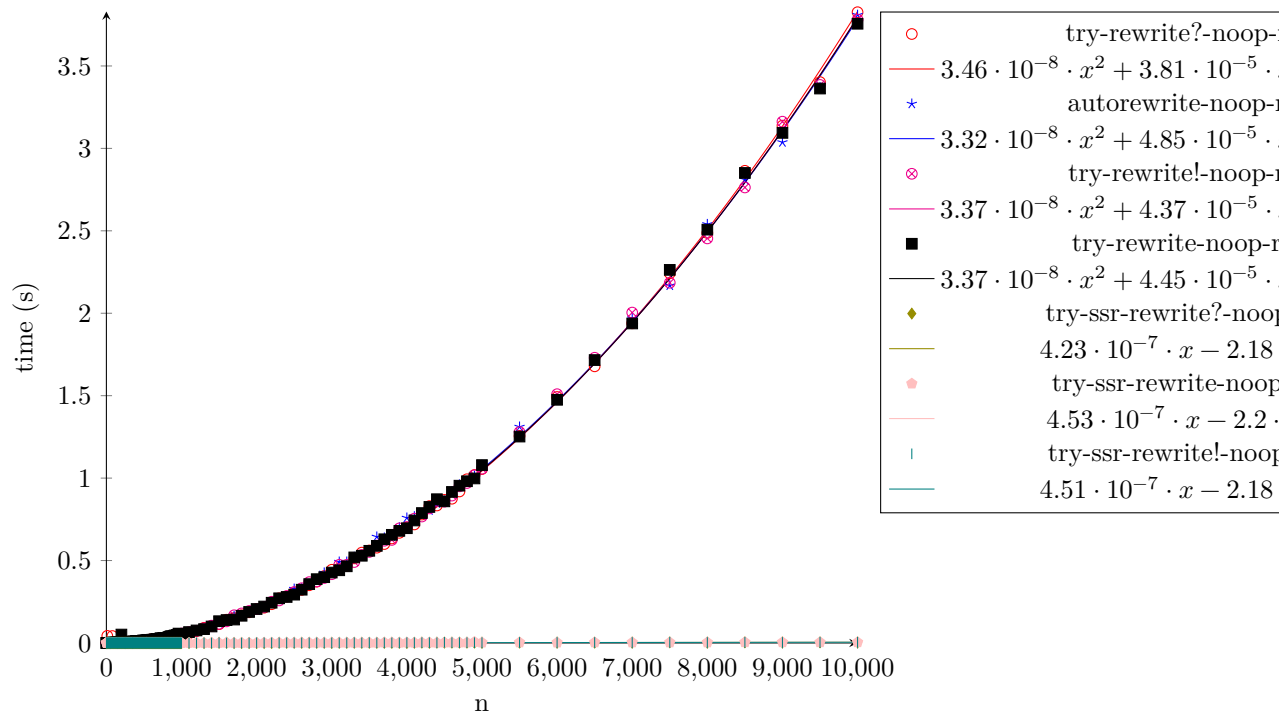Figure 6: timing-rewrite-repeated-app-autorewrite

6

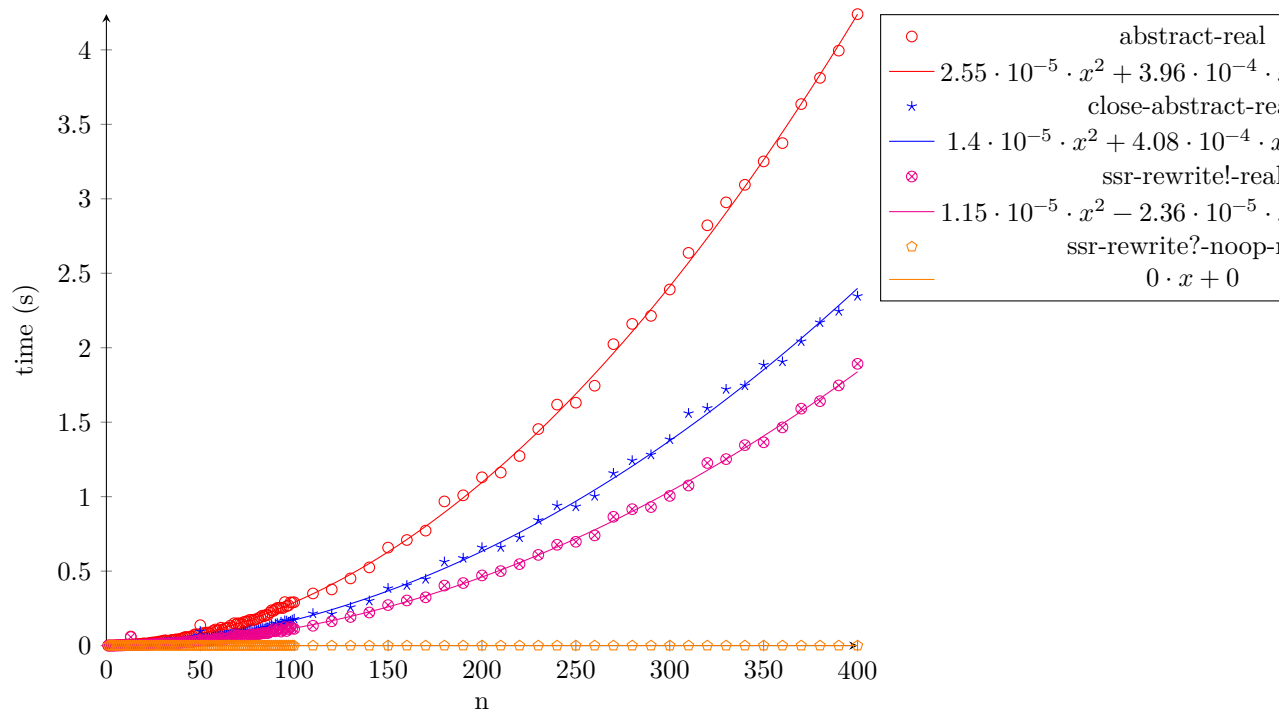Figure 7: timing-rewrite-repeated-app-autorewrite-noop

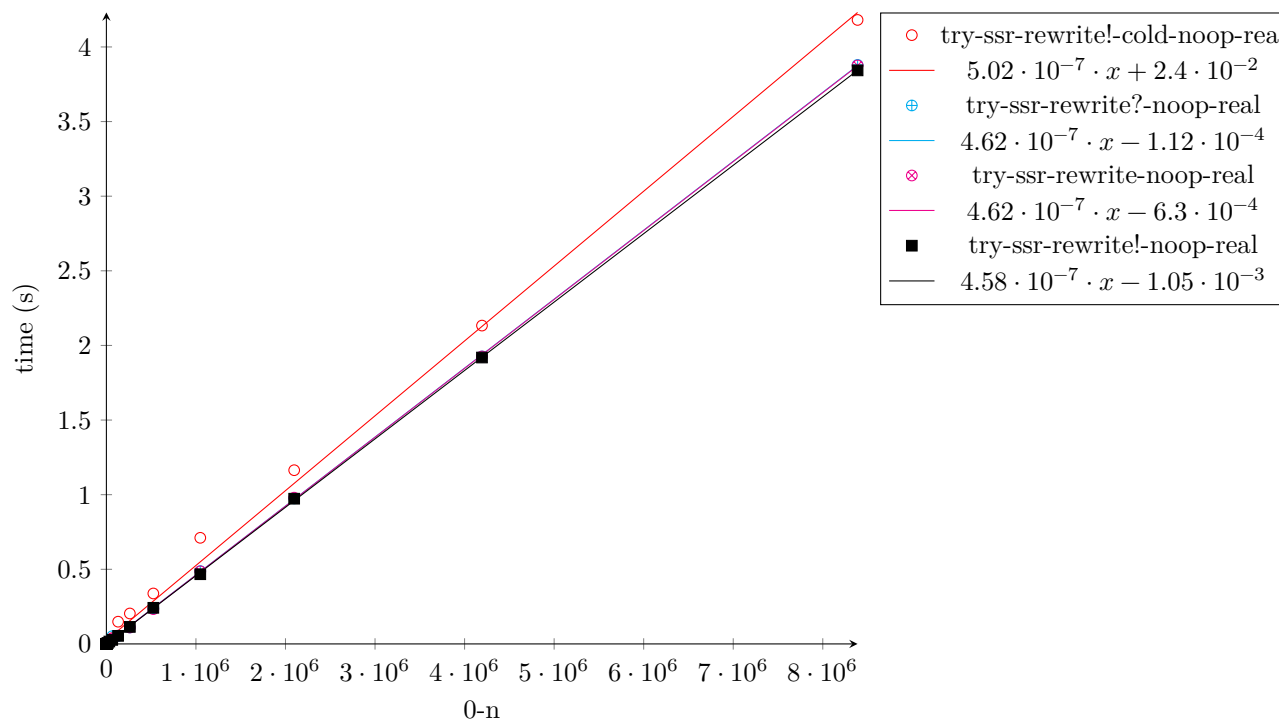Figure 8: timing-rewrite-repeated-app-ssrrewrite

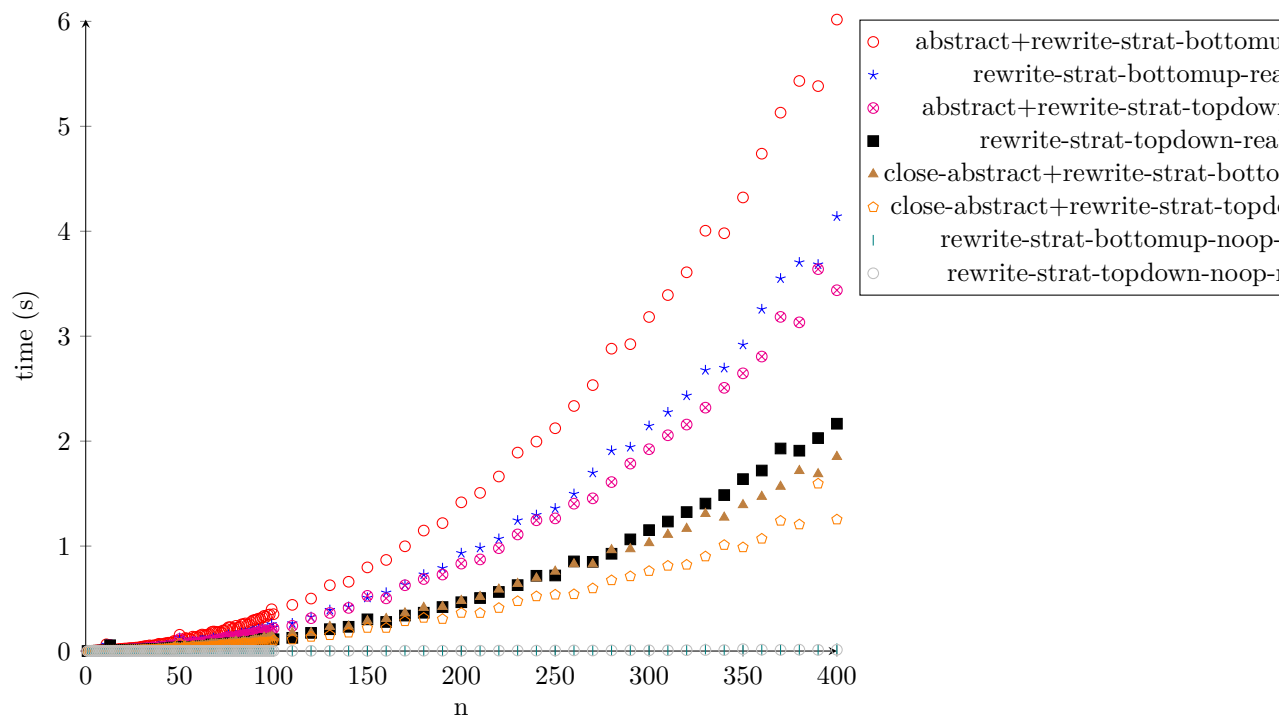Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn   1

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

time (s)

18

16

14

12

10

8

6

4

2

0   100   200   300   400   500   600   700   800   900   1,000

n

abstra

$2.16 \cdot 10^{-8} \cdot x^3 - 4.46 \cdot 10^{-6} \cdot$

close-abs

$2.15 \cdot 10^{-8} \cdot x^3 - 7.26 \cdot 10^{-6} \cdot$

pose-build-a

$1.59 \cdot 10^{-10} \cdot x^3 + 2.81 \cdot 10^{-6} \cdot$

fast-rev

$1.6 \cdot 10^{-10} \cdot x^3 + 2.81 \cdot 10^{-6} \cdot$

refin

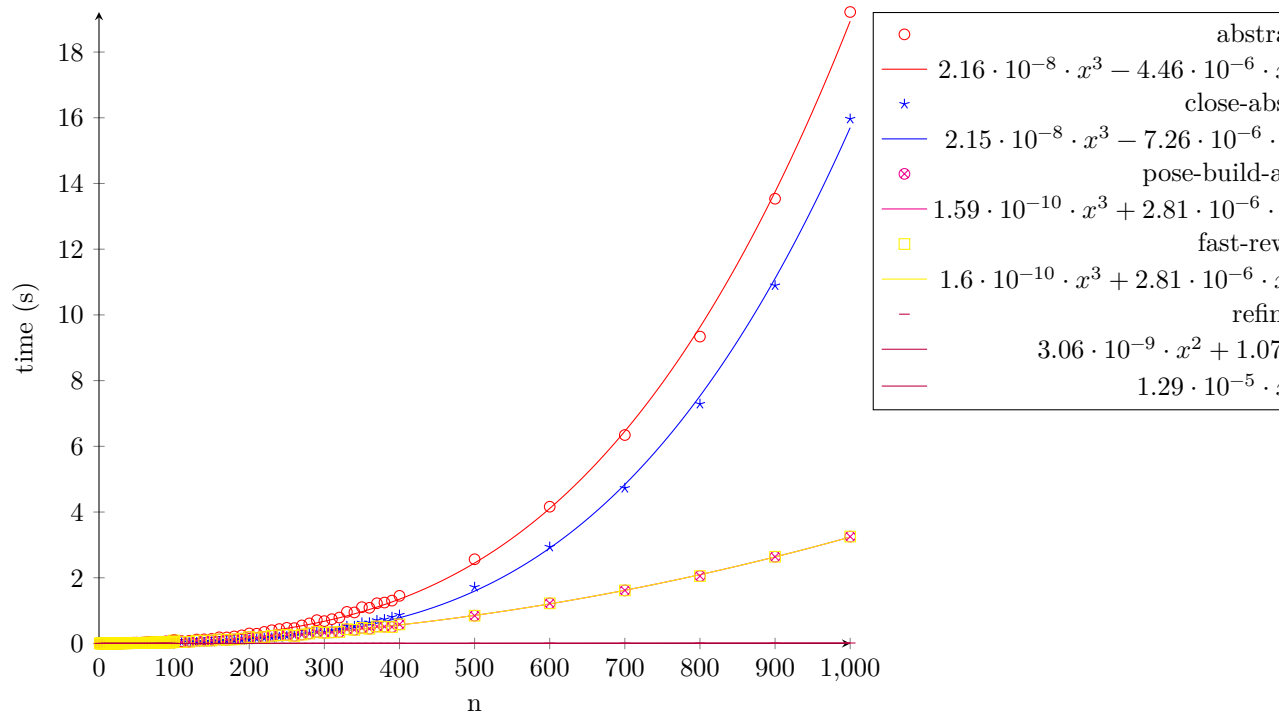$3.06 \cdot 10^{-9} \cdot x^2 + 1.07$

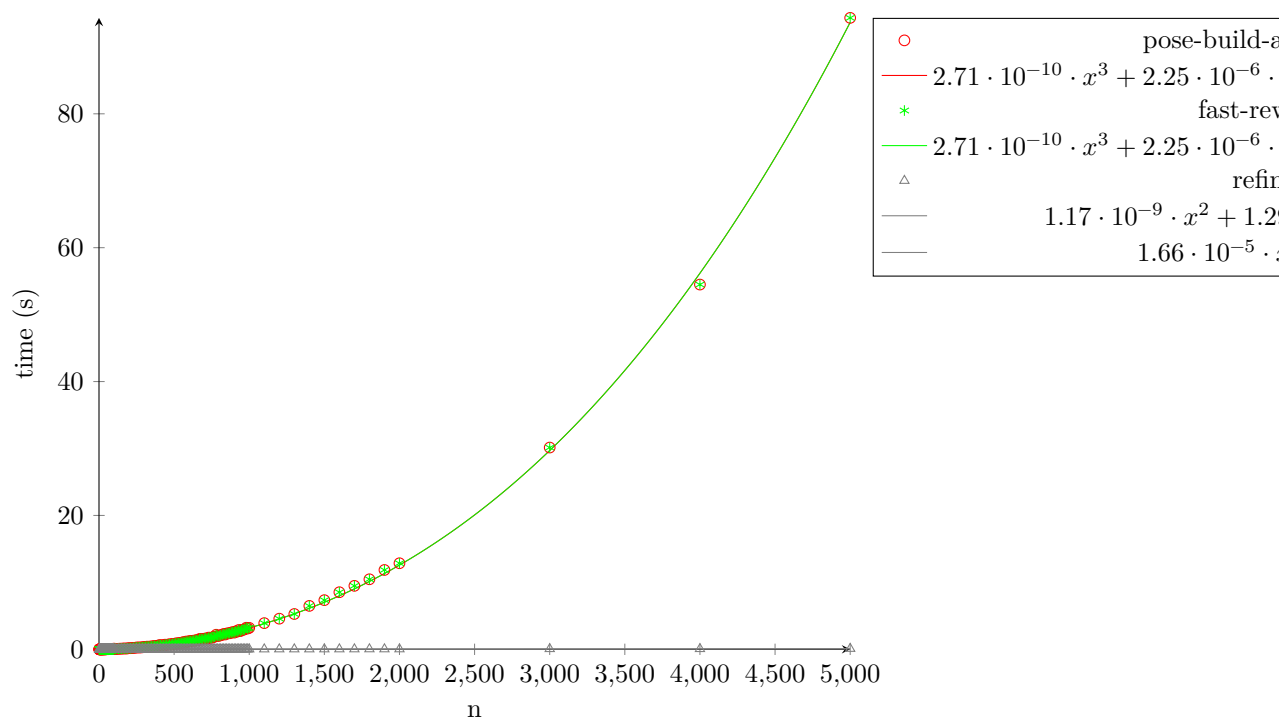$1.29 \cdot 10^{-5} \cdot$

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

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