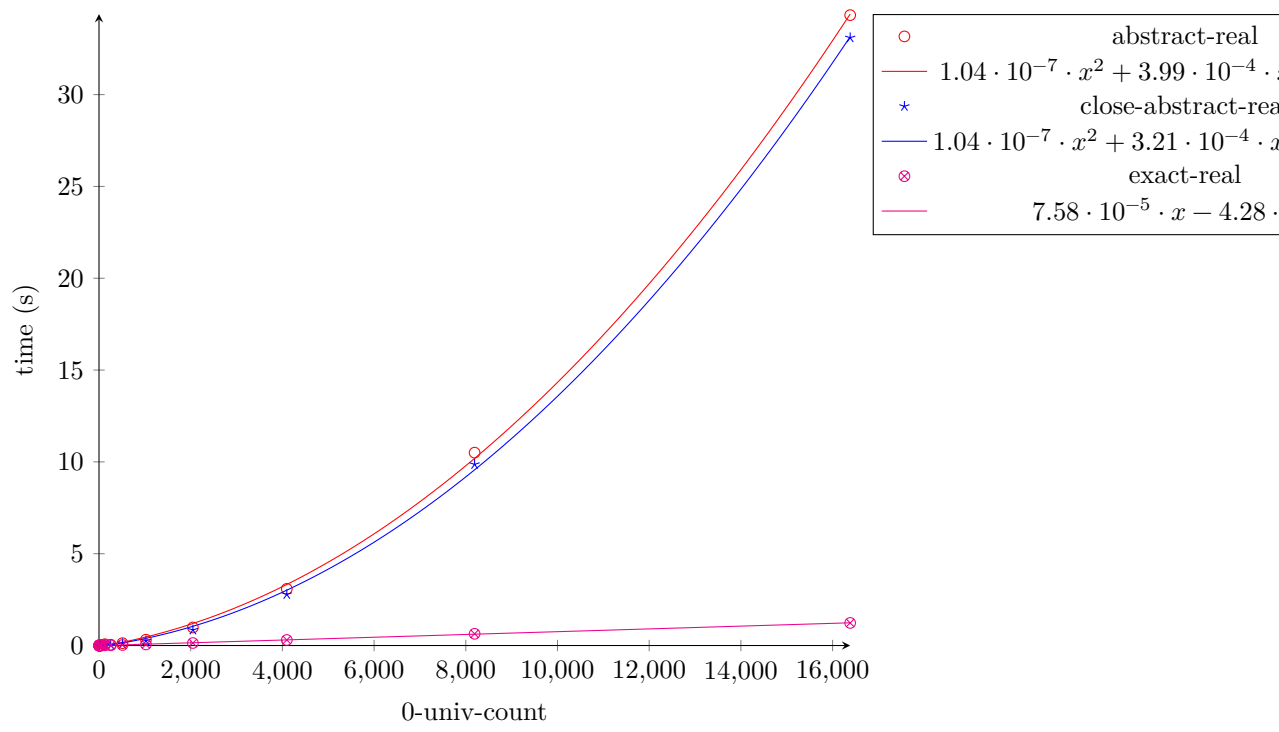Figure 1: timing-pattern

Figure 2: timing-n-polymorphic-universes param-1-n 0
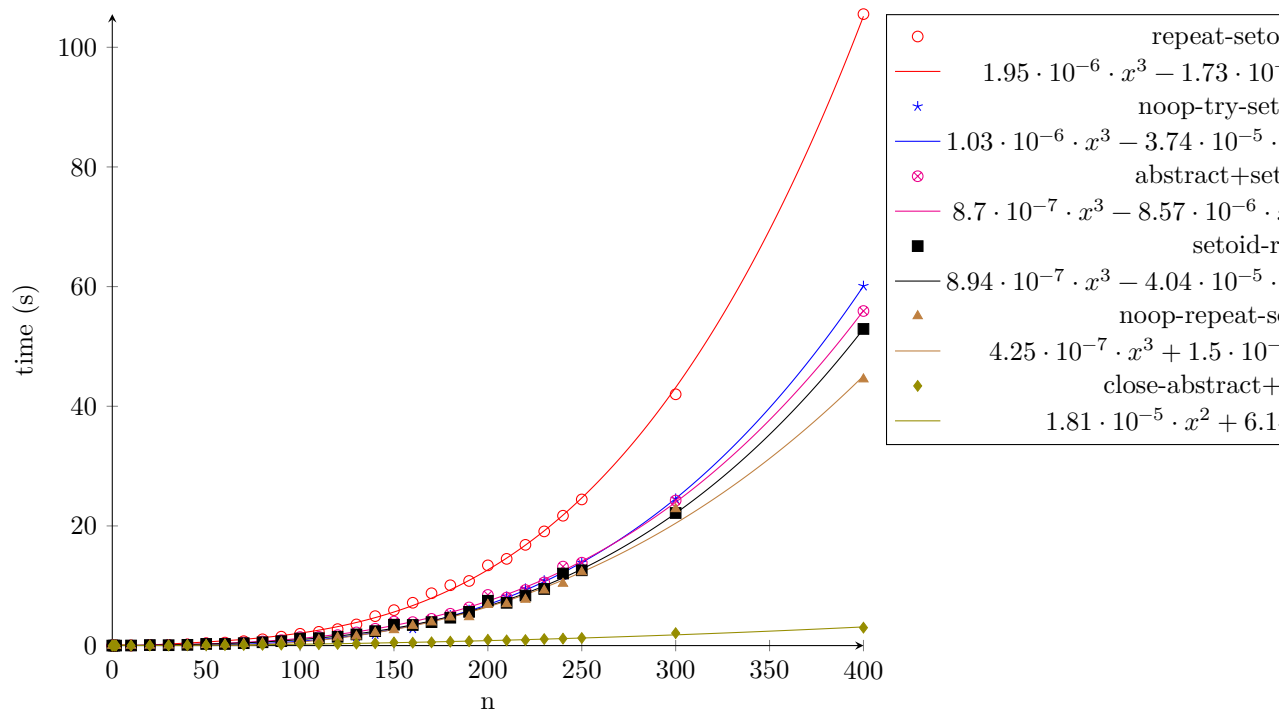
Figure 3: timing-repeat-setoid-rewrite-under-binders
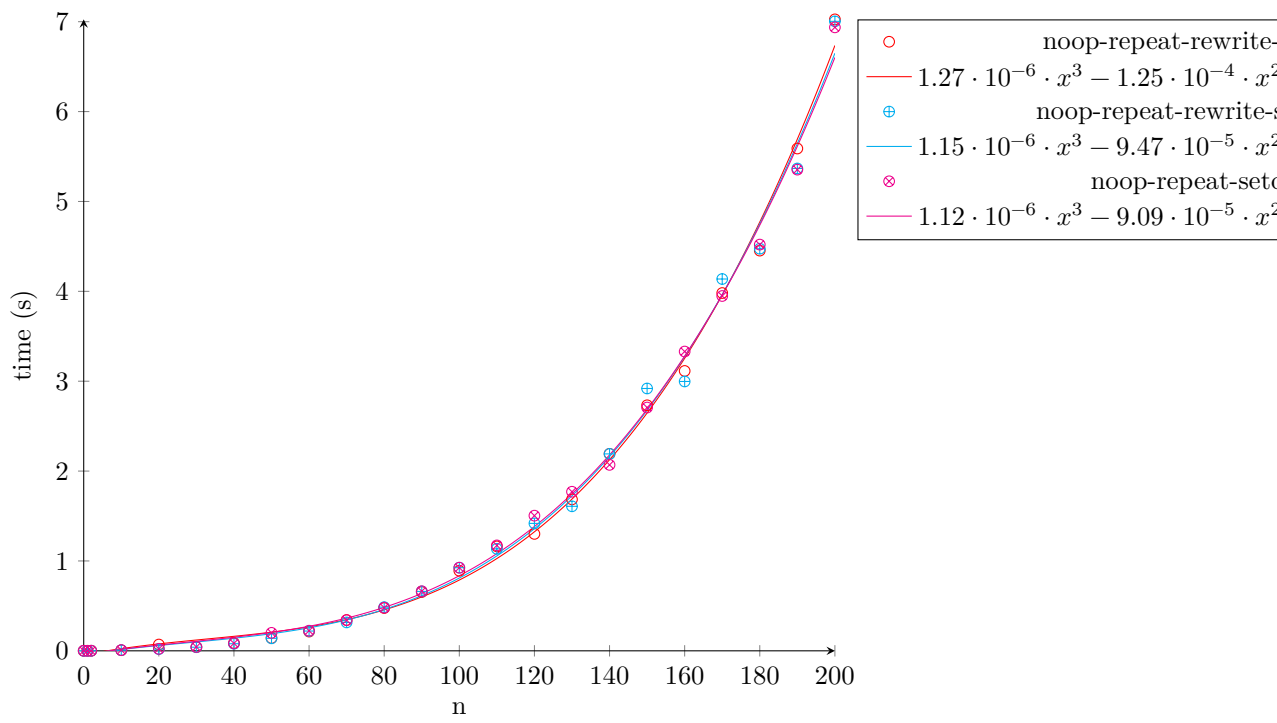
Figure 4: timing-repeat-setoid-rewrite-under-binders-noop
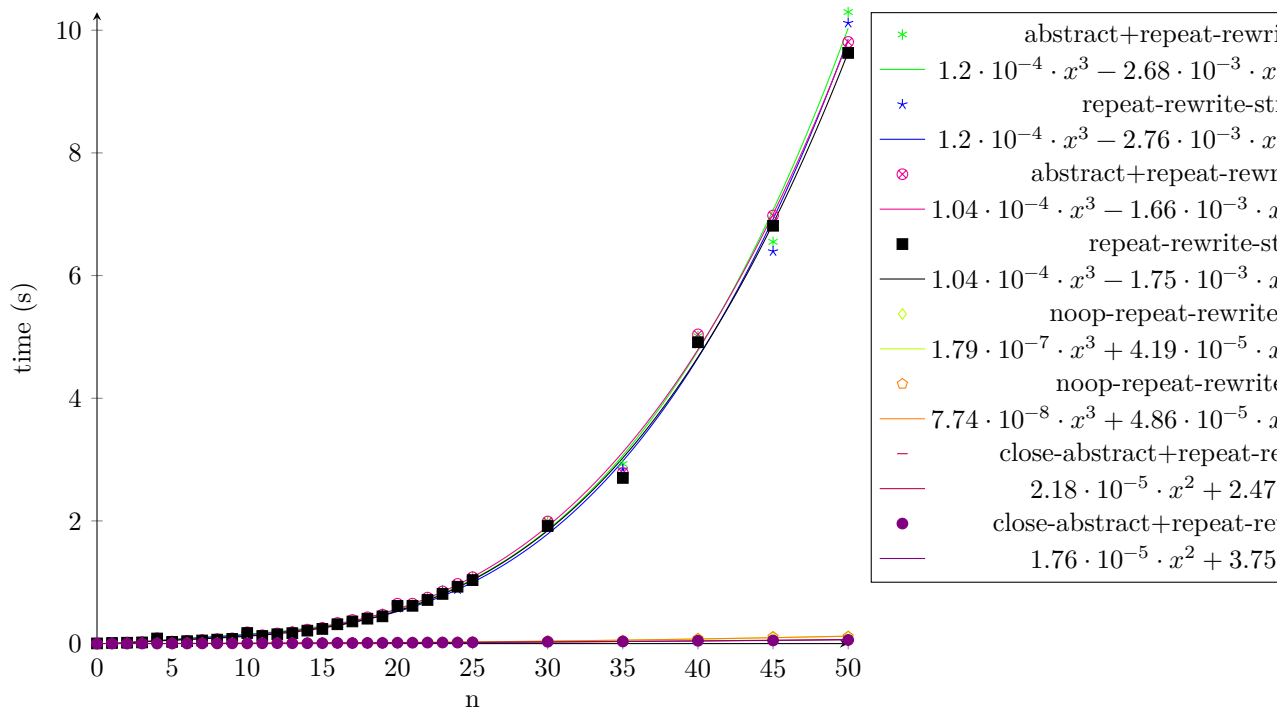
4

Figure 5: timing-rewrite-strat-under-binders
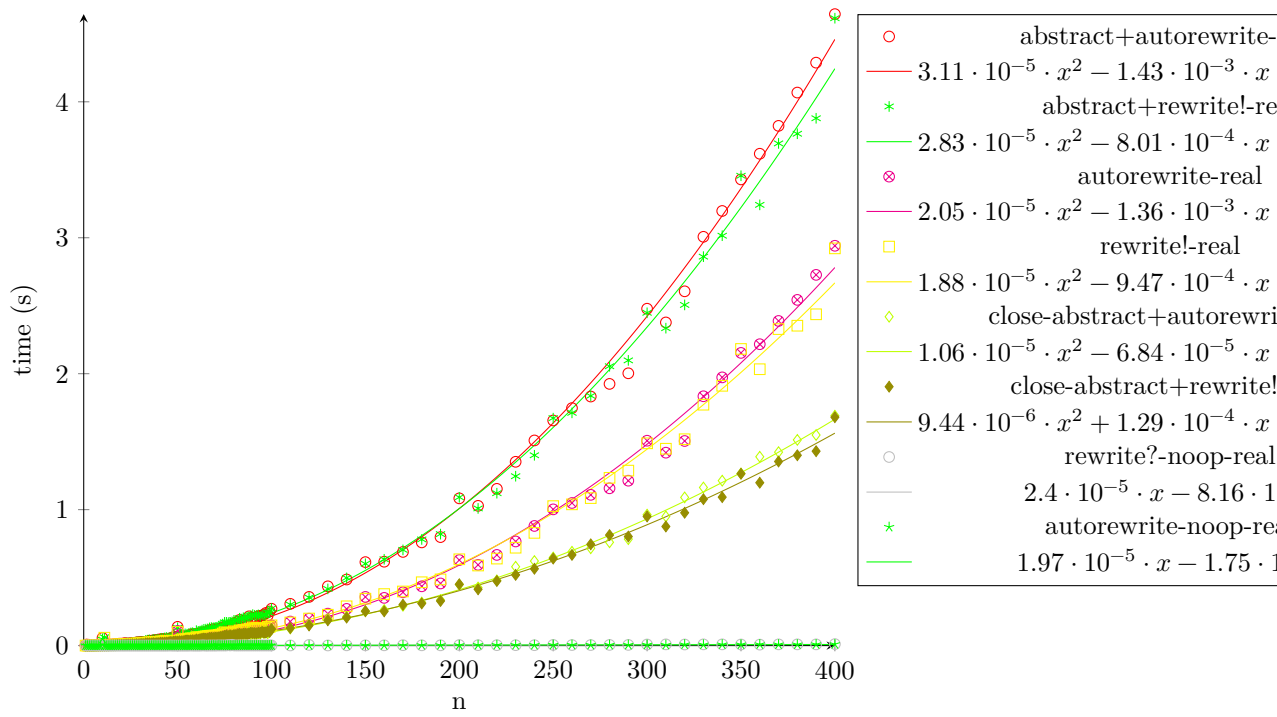
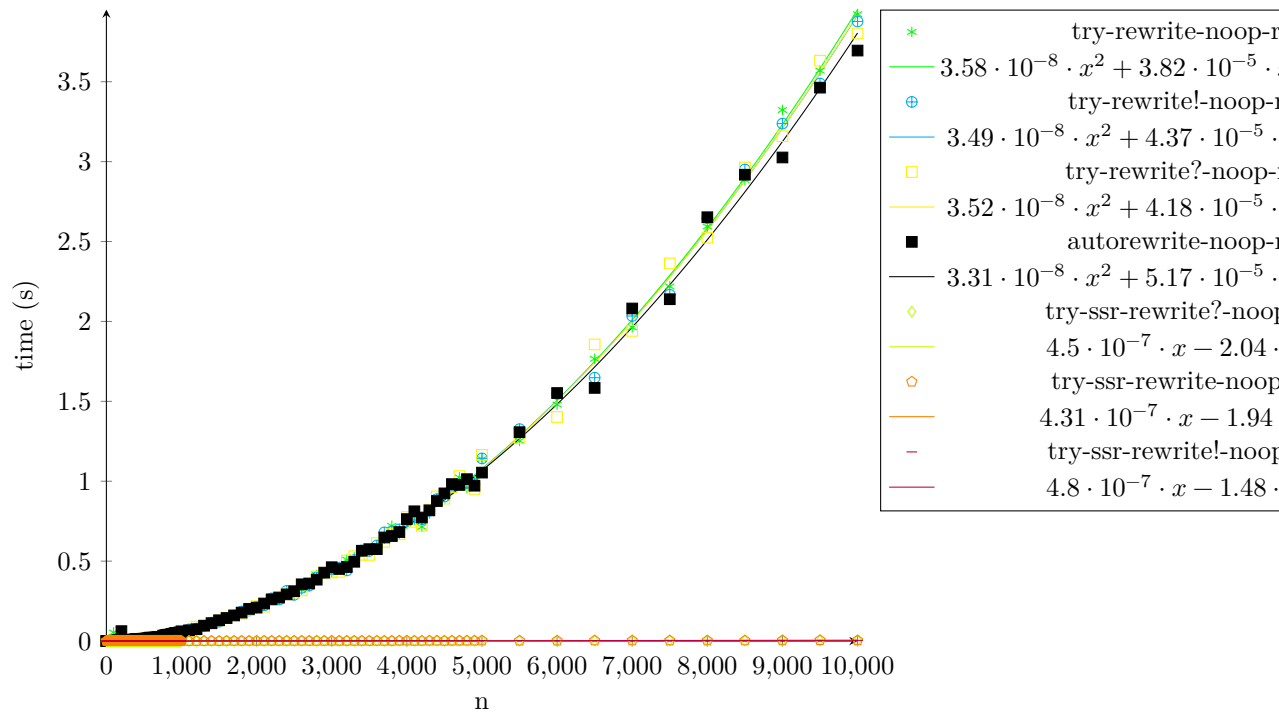Figure 6: timing-rewrite-repeated-app-autorewrite

6

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

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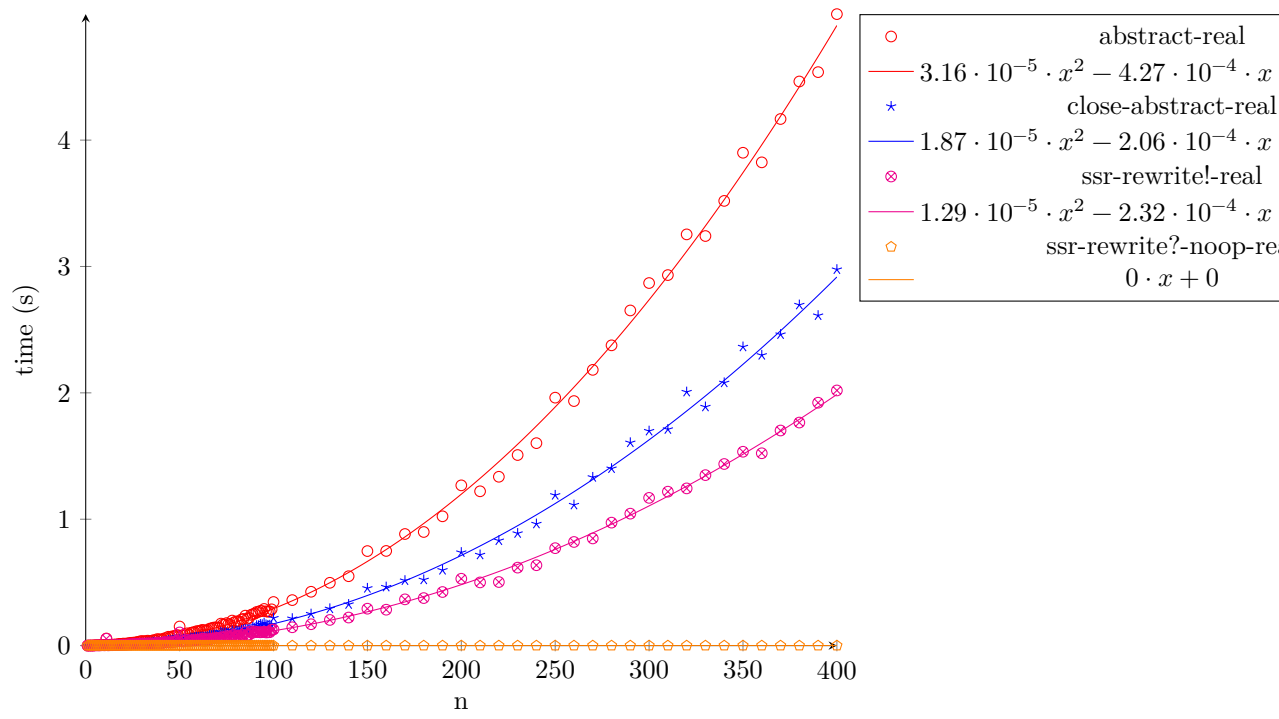
Figure 8: timing-rewrite-repeated-app-ssrrewrite

8
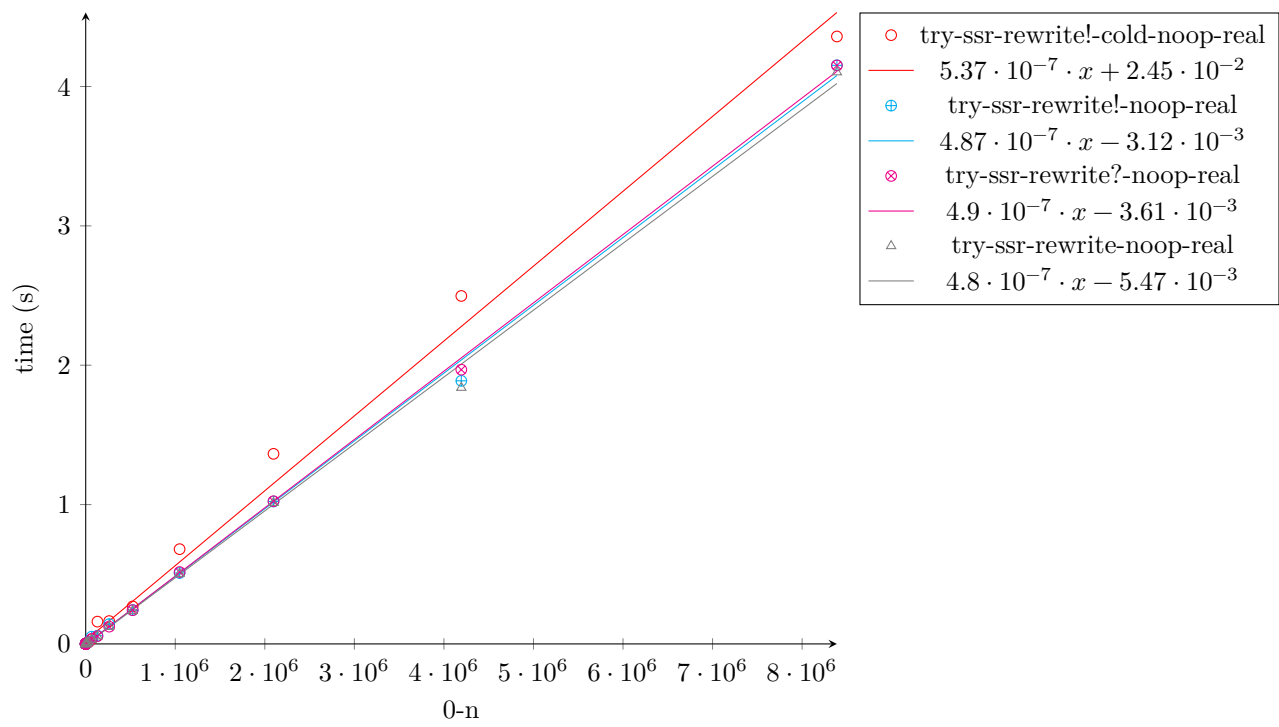
Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1
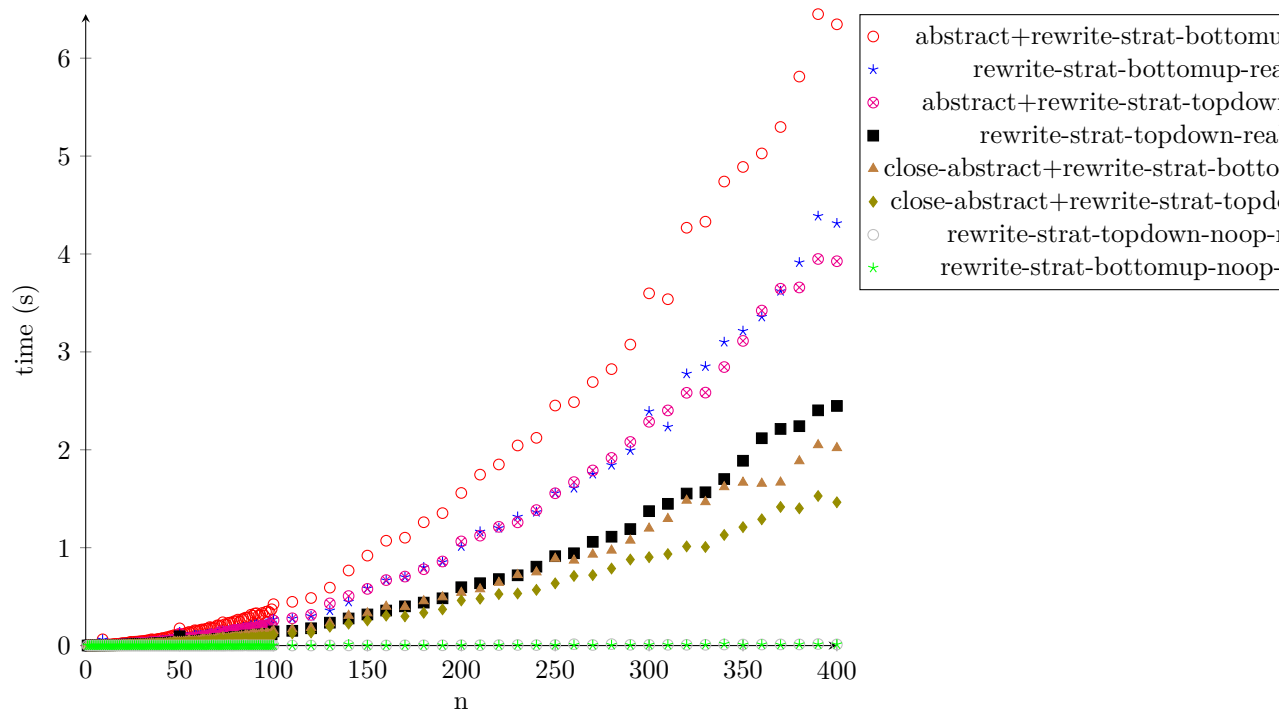
Figure 10: timing-rewrite-repeated-app-rewrite-strat

The legend entries visible in the figure:
- abstract+rewrite-strat-bottomu
- rewrite-strat-bottomup-rea
- abstract+rewrite-strat-topdow
- rewrite-strat-topdown-rea
- close-abstract+rewrite-strat-botto
- close-abstract+rewrite-strat-topd
- rewrite-strat-topdown-noop-
- rewrite-strat-bottomup-noop-
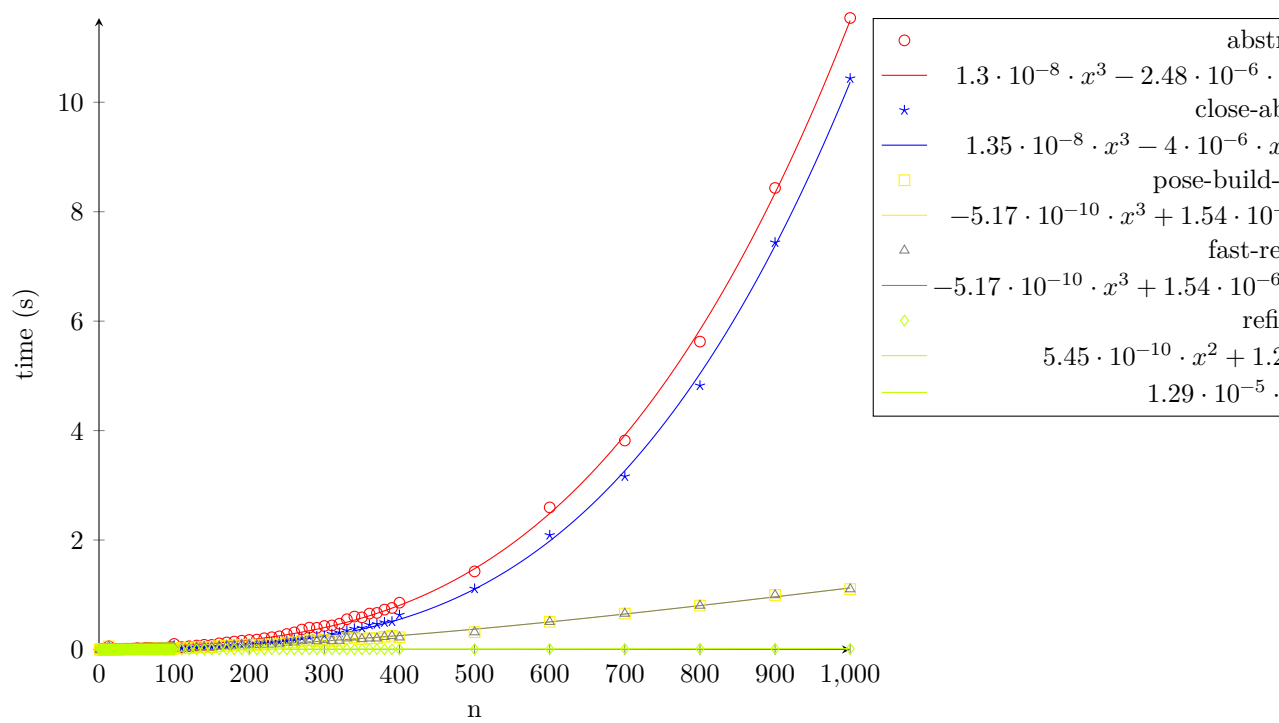
Figure 11: timing-rewrite-repeated-app-fast-rewrite
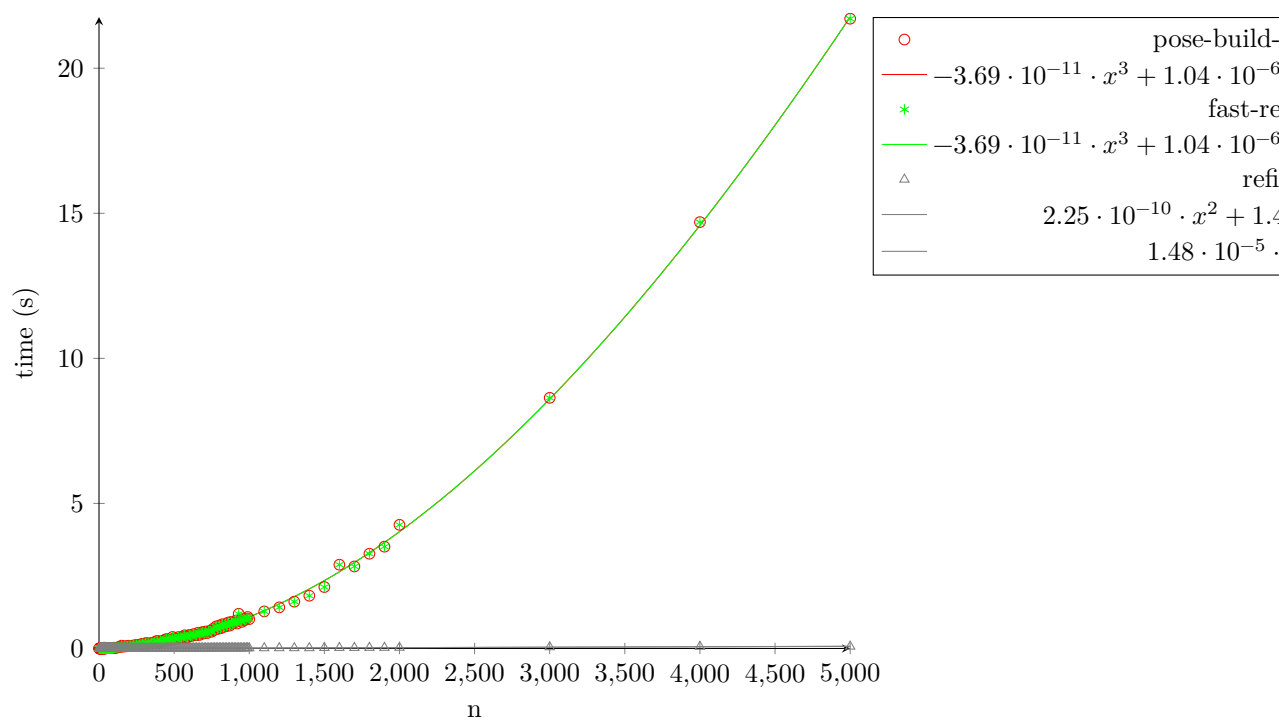
Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract
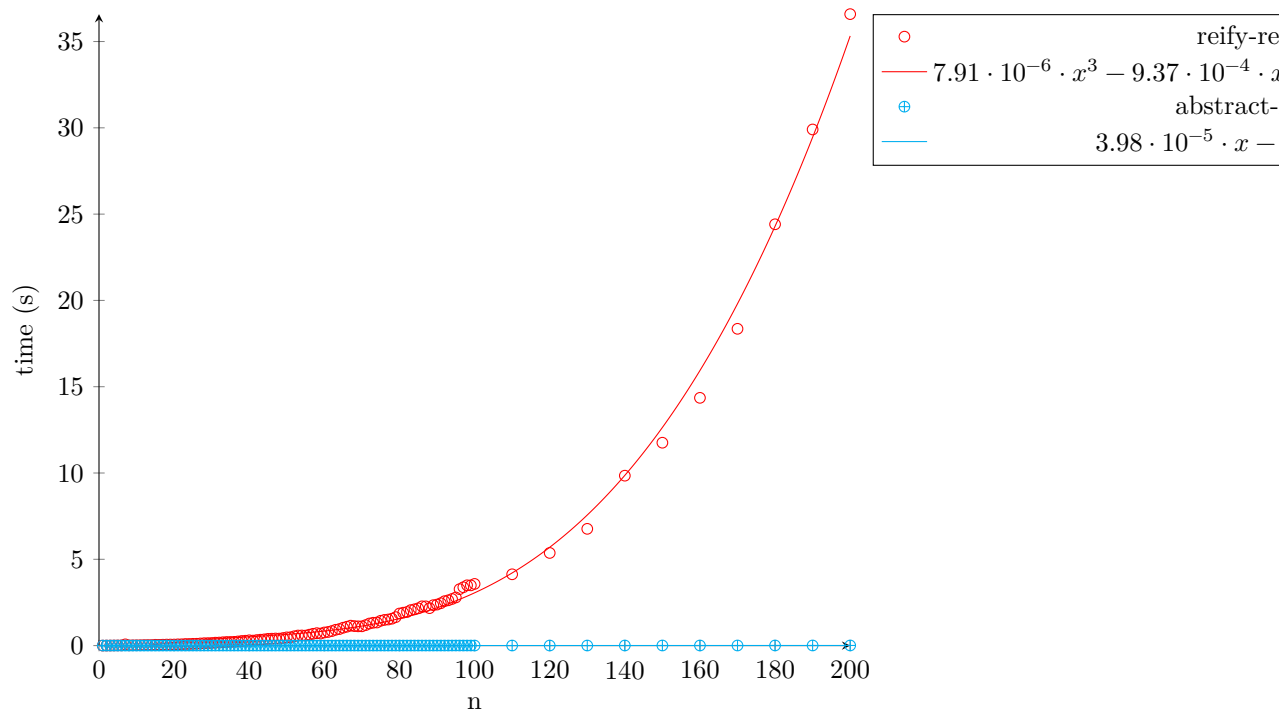
Figure 13: timing-typeclass-reification-let-in-HOAS

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

Figure 15: timing-rewrite-lift-lets-map param-1-n 1, param-2-m 1

Figure 16: timing-rewrite-plus-0-tree param-1-n 0, param-2-m 1, param-3-input-size 5, param-4-output-size 3, param-5-num-rewrites 1

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Figure 17: timing-sieve-of-eratosthenes

Figure 18: timing-rewrite-under-lets-plus-0

The plot legend contains the following entries:

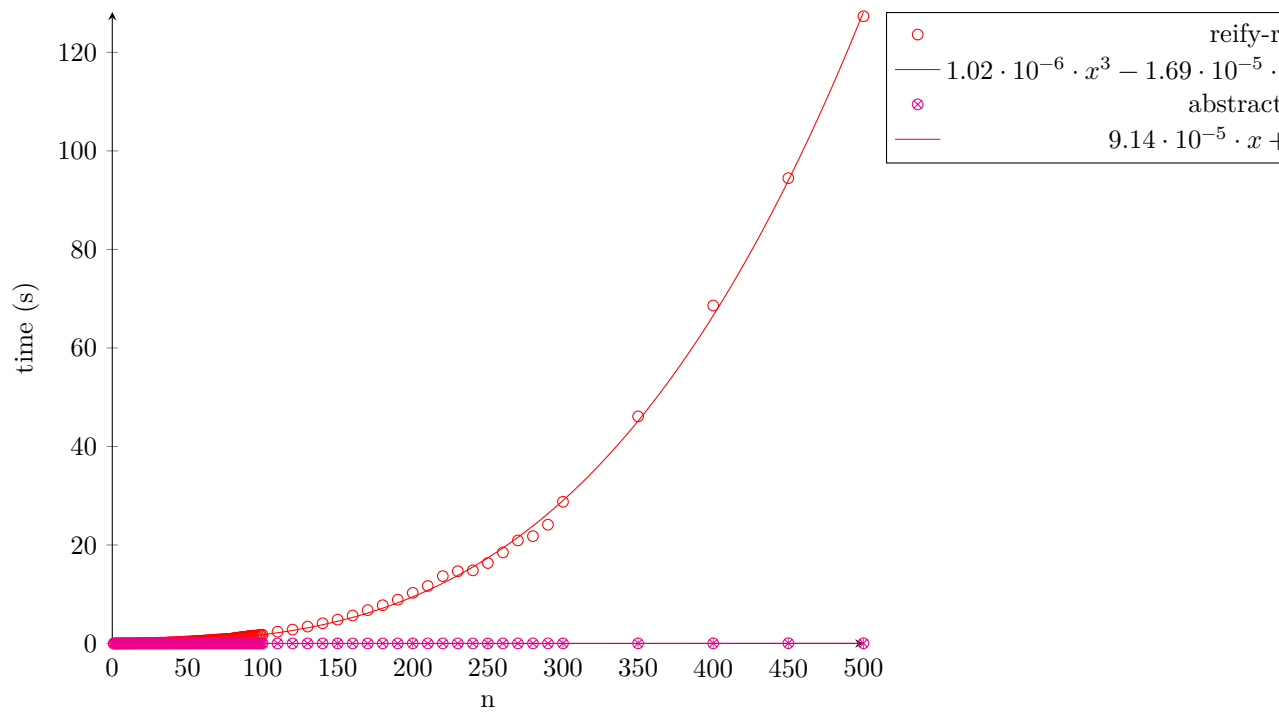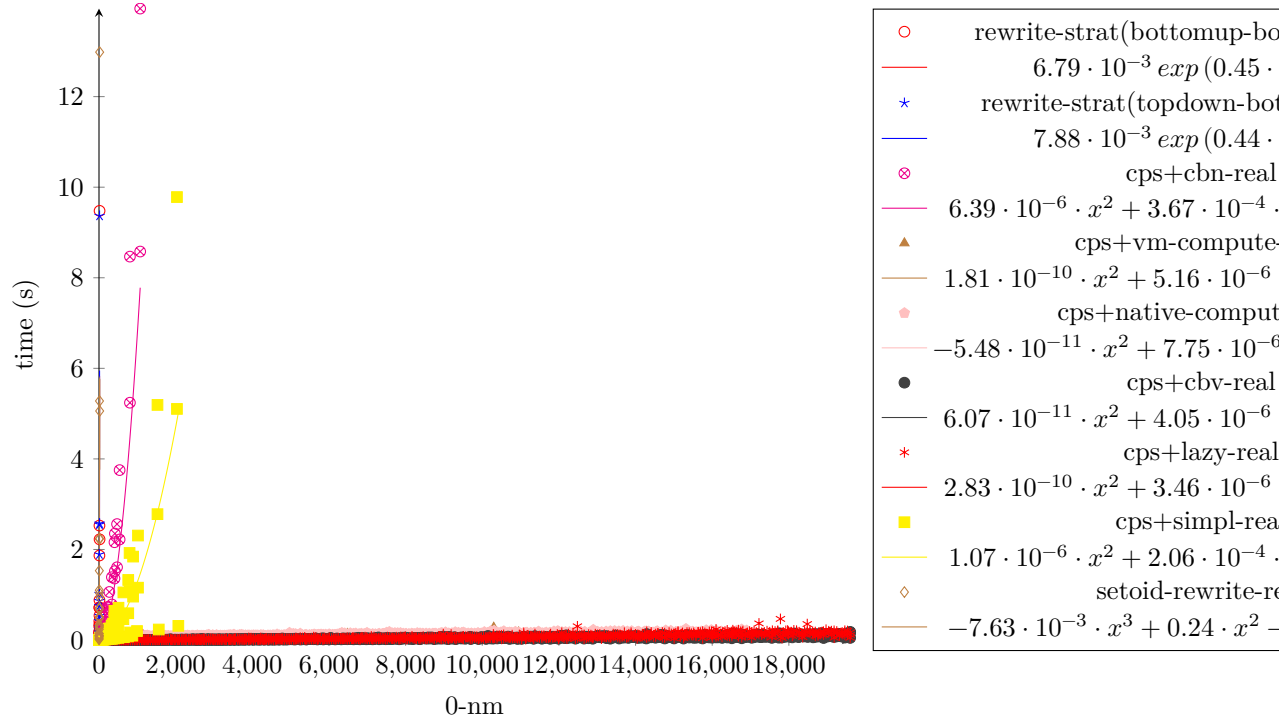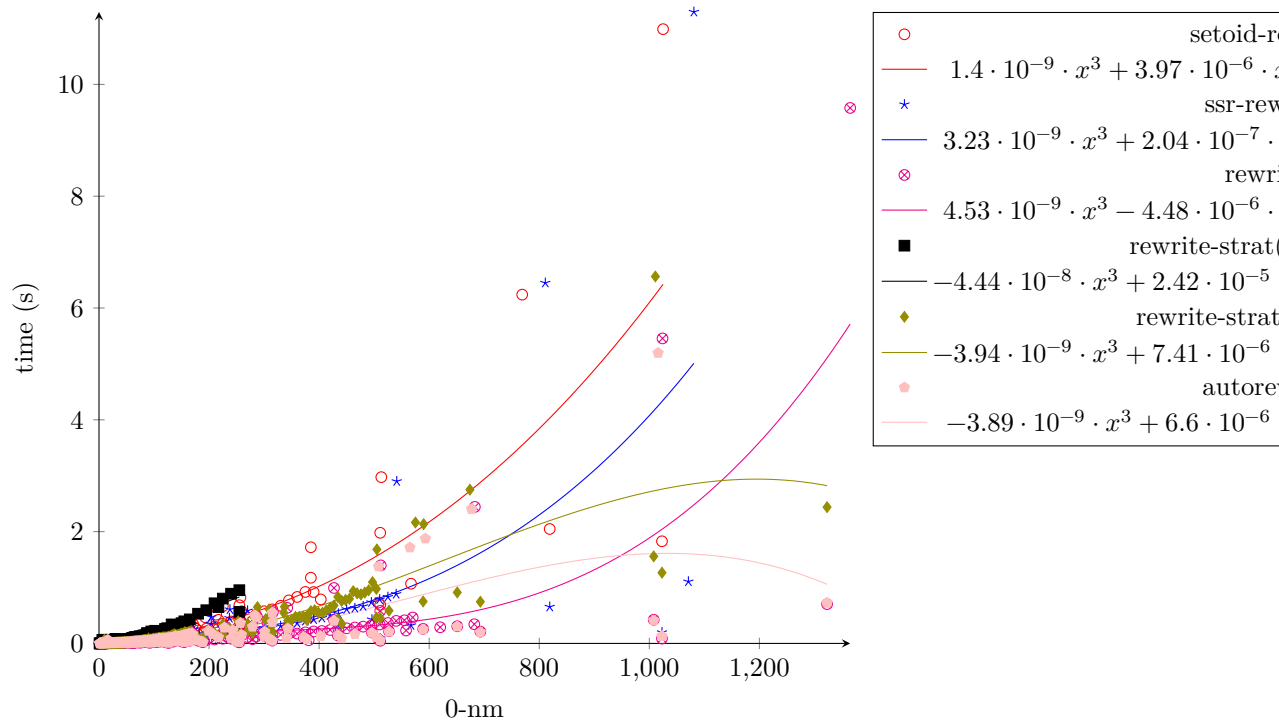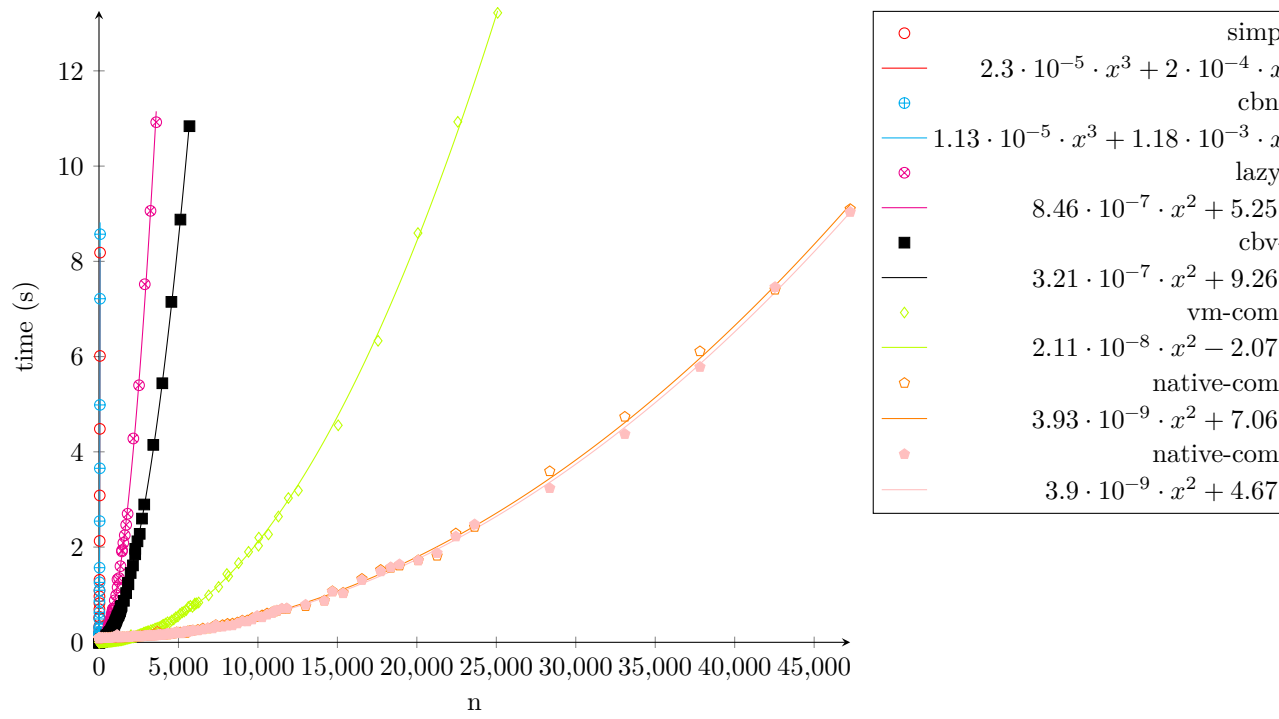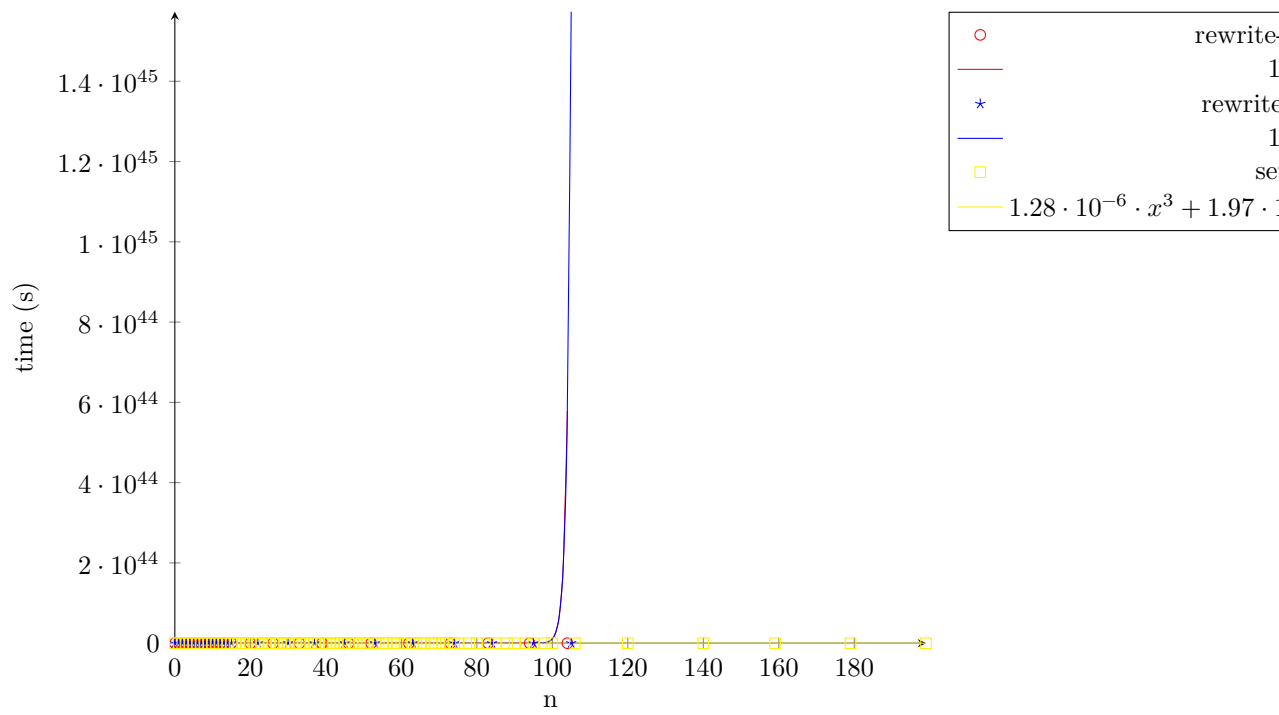- abstract-real
- $1.94 \cdot 10^{-6} \cdot x^2 + 3.98 \cdot 10^{-4} \cdot x$
- fast-rewrite-real
- $1.61 \cdot 10^{-6} \cdot x^2 + 3.29 \cdot 10^{-4} \cdot x$
- close-abstract-real
- $3.29 \cdot 10^{-7} \cdot x^2 + 6.82 \cdot 10^{-5} \cdot x$
- type-admit-cast-real
- $2.47 \cdot 10^{-7} \cdot x^2 + 2.82 \cdot 10^{-6} \cdot x$
- check-pf-cast-real
- $2.45 \cdot 10^{-7} \cdot x^2 - 5.08 \cdot 10^{-7} \cdot x$
- type-admit-real
- $2.49 \cdot 10^{-7} \cdot x^2 - 5.64 \cdot 10^{-7} \cdot x$
- check-admit-real
- $2.44 \cdot 10^{-7} \cdot x^2 + 1.51 \cdot 10^{-5} \cdot x$
- check-admit-cast-real
- $2.32 \cdot 10^{-7} \cdot x^2 - 6.8 \cdot 10^{-7} \cdot x$
- type-pf-cast-real
- $2.22 \cdot 10^{-7} \cdot x^2 + 4.65 \cdot 10^{-5} \cdot x$
- refine-real
- $1.72 \cdot 10^{-7} \cdot x^2 + 9.09 \cdot 10^{-5} \cdot x$
- $4.48 \cdot 10^{-4} \cdot x - 4.55$
- build-eval-thunk-real
- $1.02 \cdot 10^{-4} \cdot x - 5.21$
- build-thunk-real
- $1.01 \cdot 10^{-4} \cdot x - 5.88$
- check-I-real
- $2.08 \cdot 10^{-5} \cdot x - 6.73$
- type-I-real
- $1.95 \cdot 10^{-5} \cdot x - 5.75$
- build-I-real
- $8.83 \cdot 10^{-6} \cdot x - 4.01$
- build-pf-cast-real
- $8.94 \cdot 10^{-6} \cdot x - 4.84$
- build-admit-real
- $8.38 \cdot 10^{-6} \cdot x - 3.38$
- build-admit-cast-real
- $8.39 \cdot 10^{-6} \cdot x - 4.41$
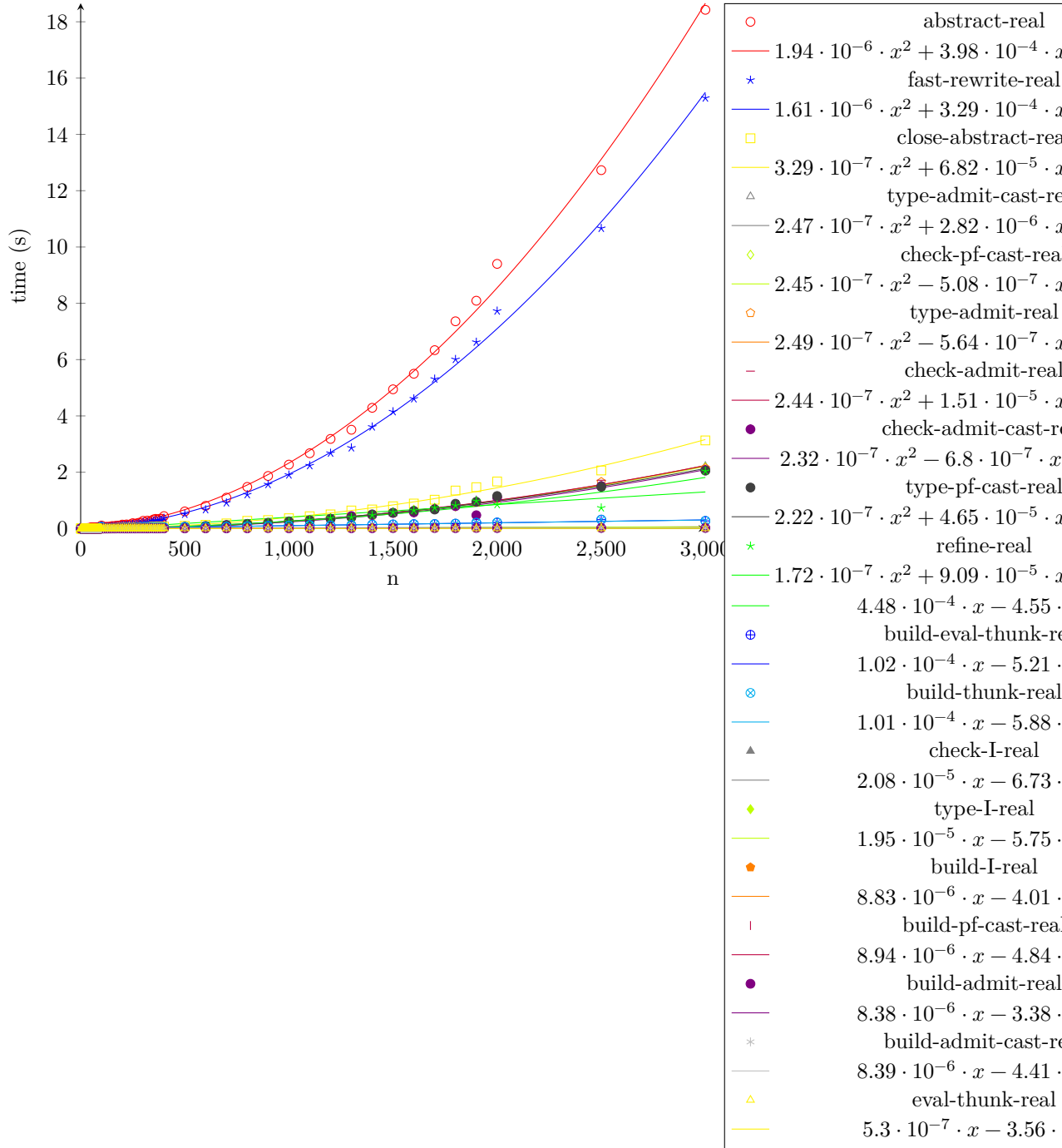- eval-thunk-real
- $5.3 \cdot 10^{-7} \cdot x - 3.56$

Figure 19: timing-rewrite-repeated-app-fast-rewrite-ltac2

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