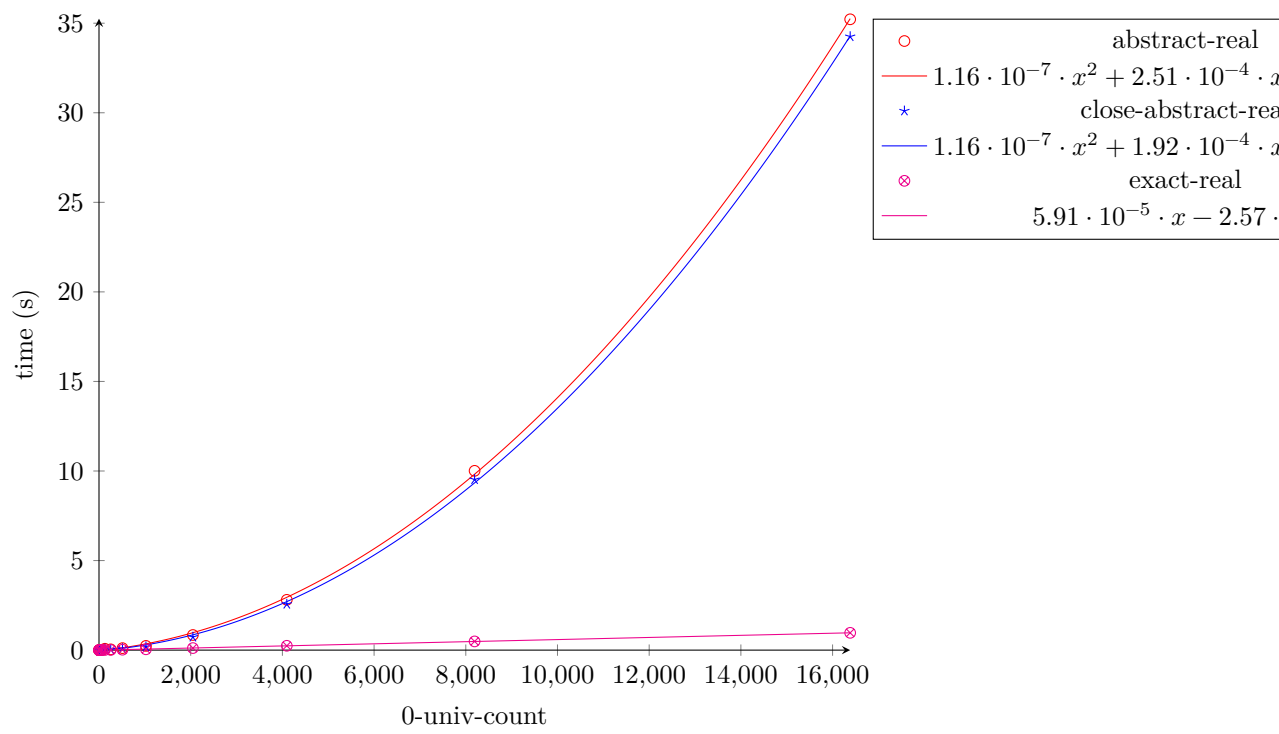Figure 1: timing-pattern

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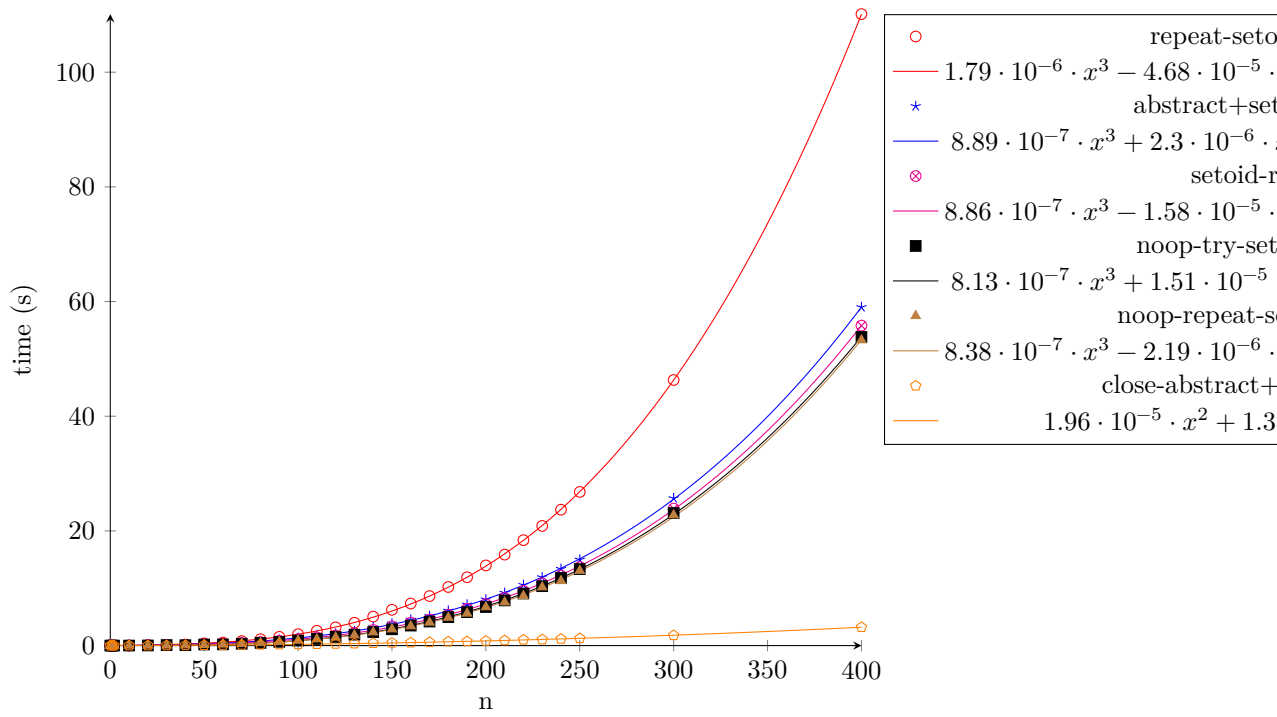
Figure 3: timing-repeat-setoid-rewrite-under-binders
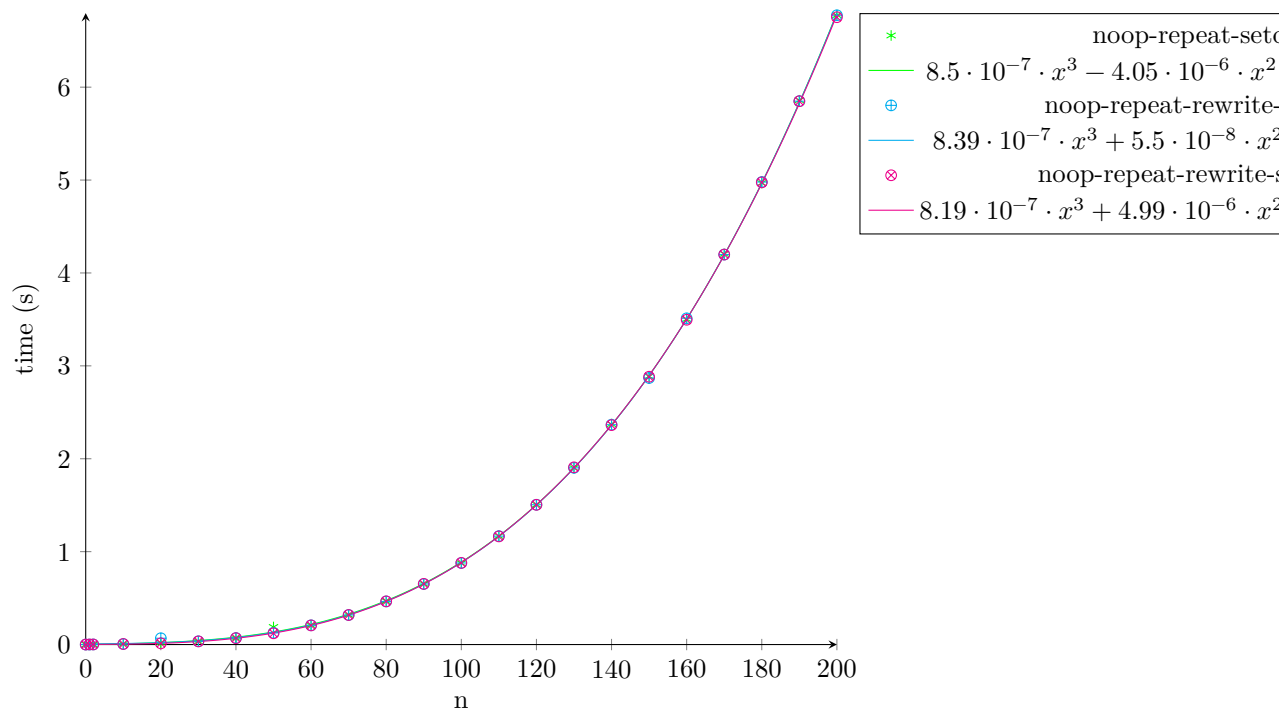
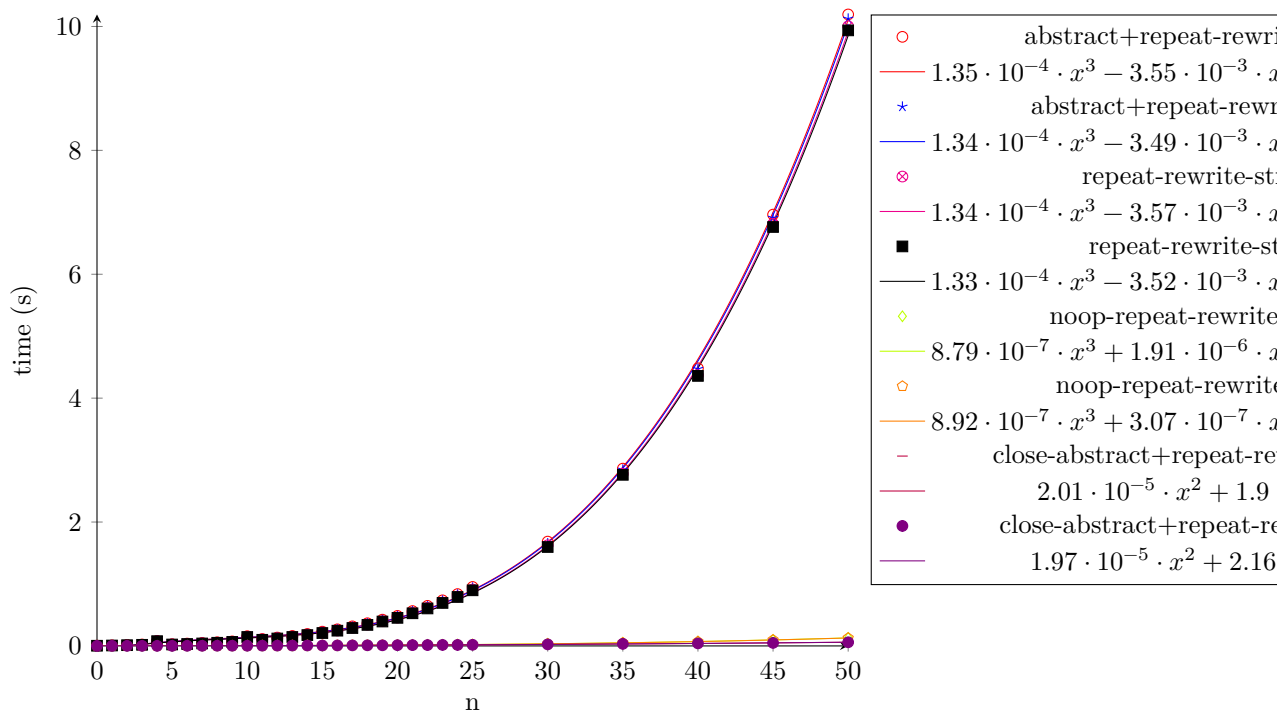Figure 4: timing-repeat-setoid-rewrite-under-binders-noop
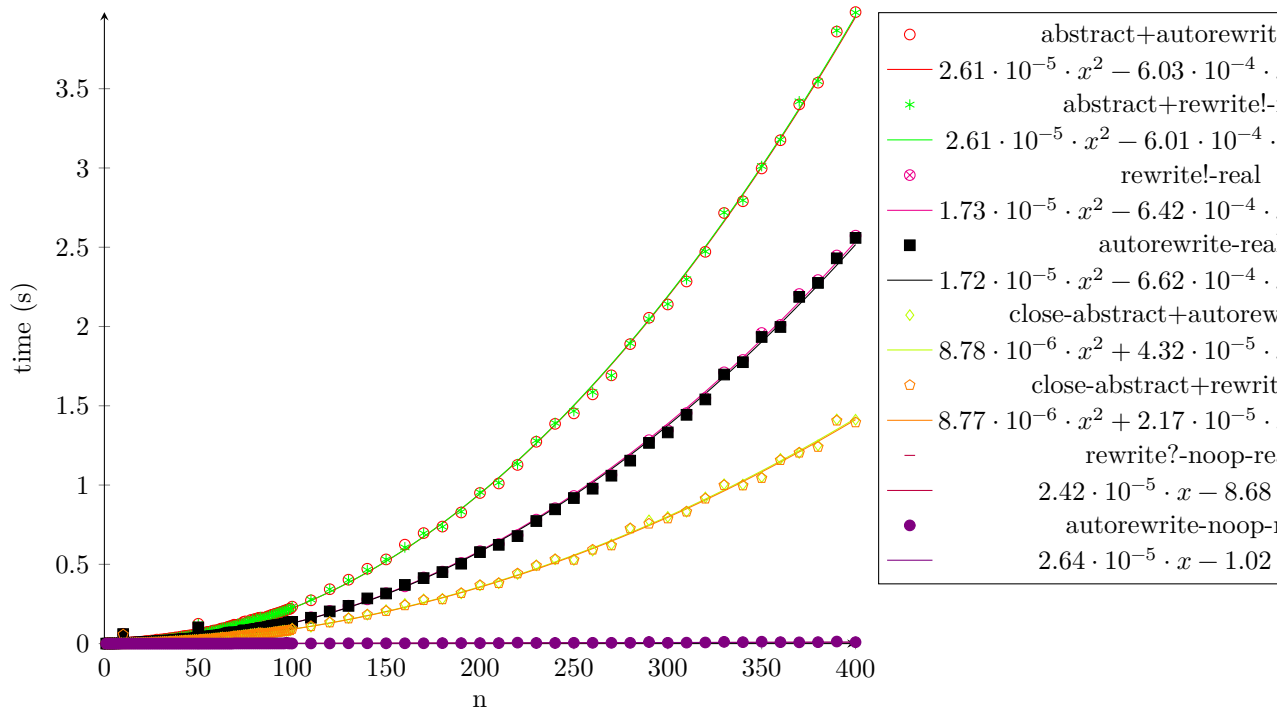
4

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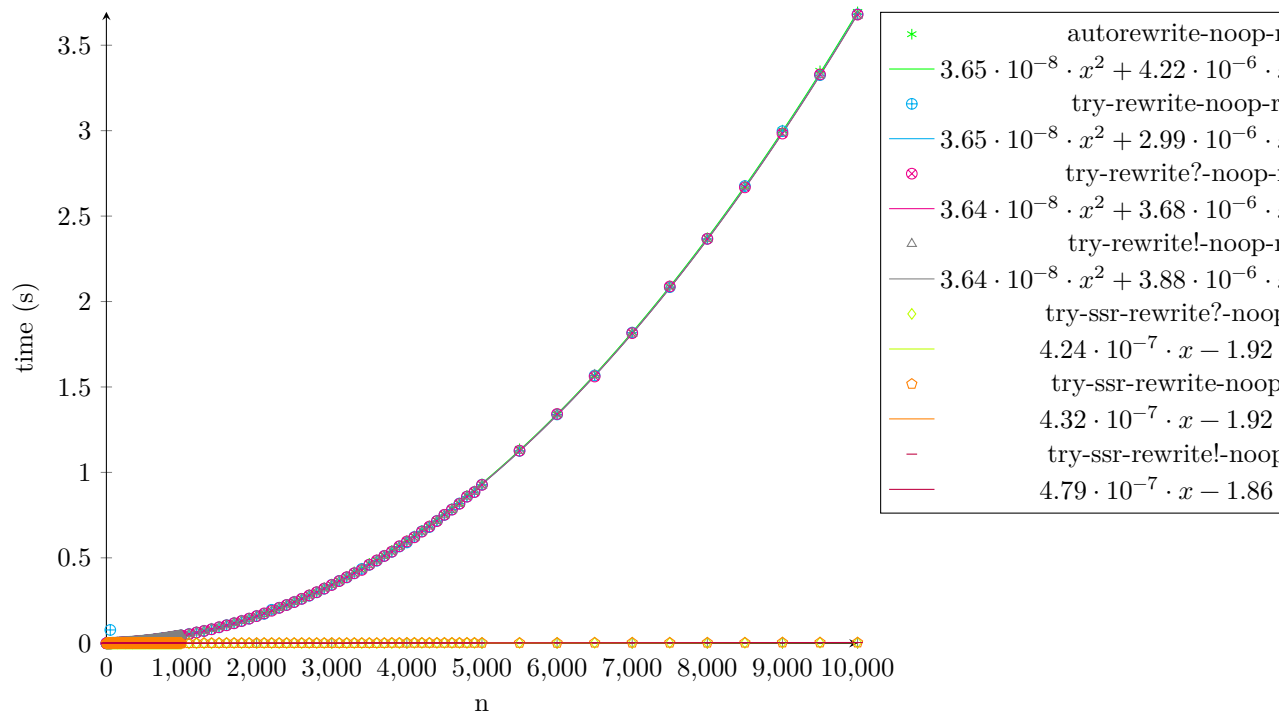
Figure 6: timing-rewrite-repeated-app-autorewrite

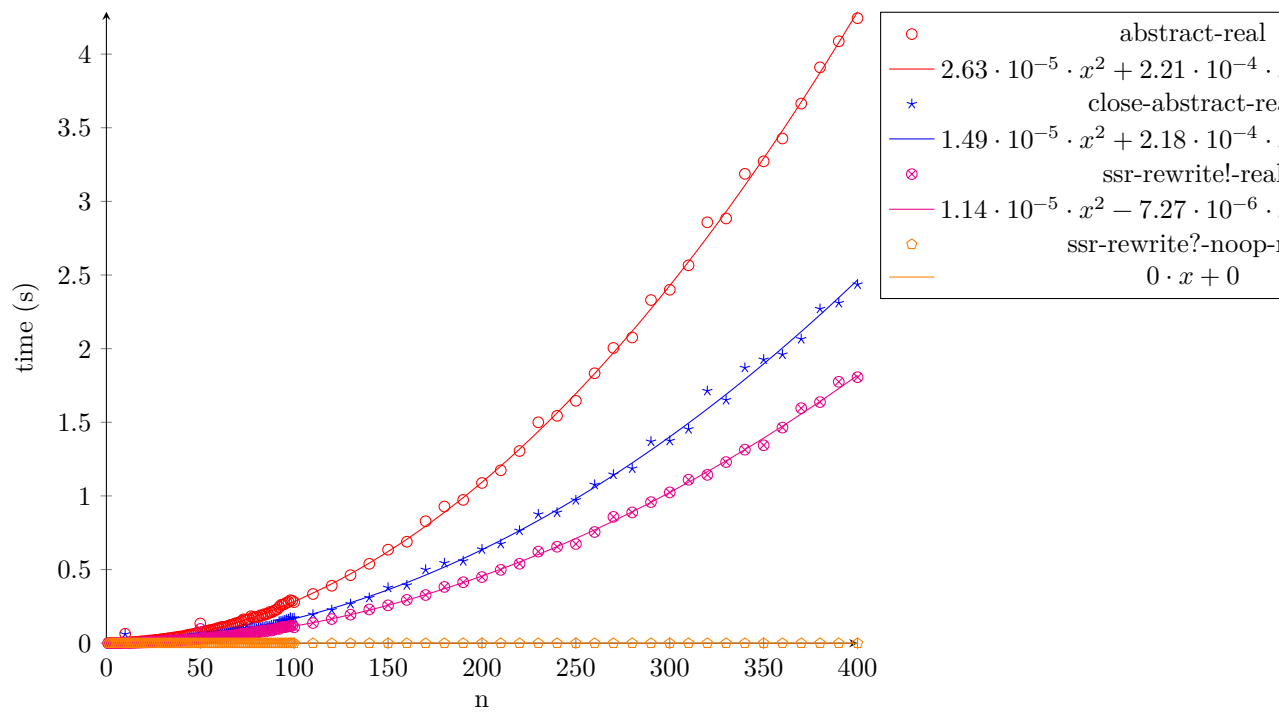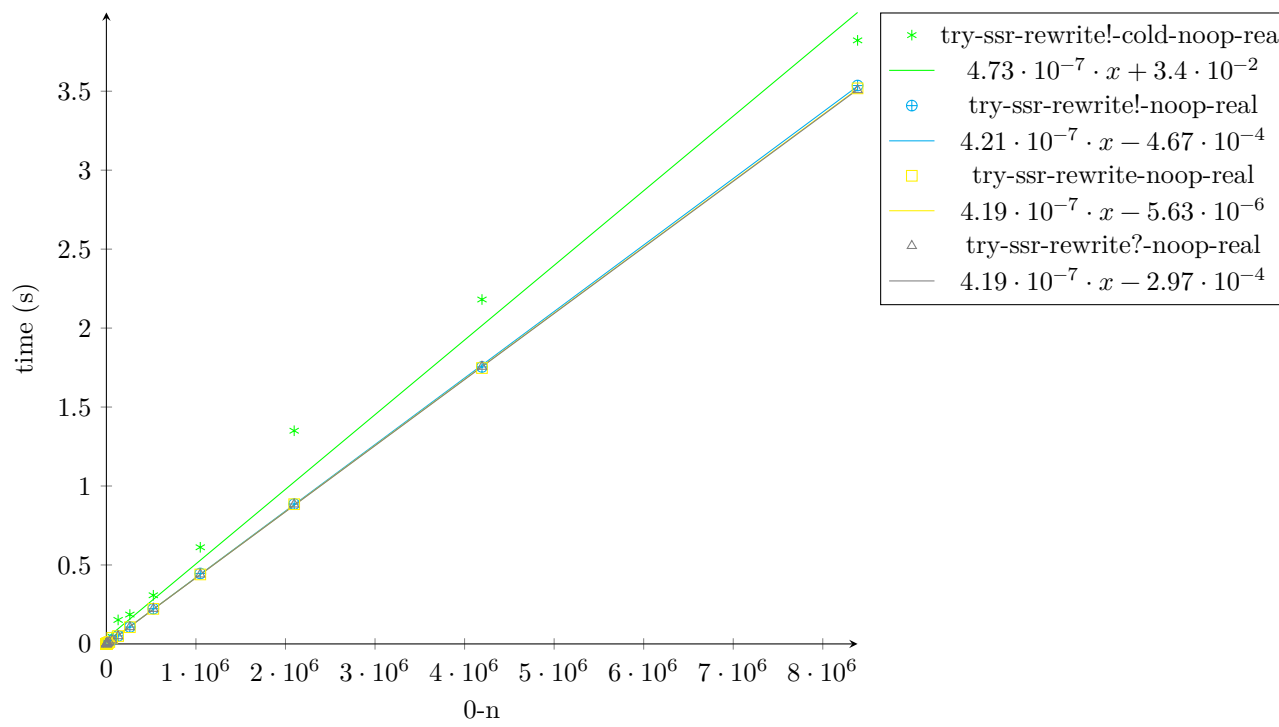Figure 7: timing-rewrite-repeated-app-autorewrite-noop

The figure contains the following legend and curve fit labels:

- autorewrite-noop-n
- $3.65 \cdot 10^{-8} \cdot x^2 + 4.22 \cdot 10^{-6} \cdot$
- try-rewrite-noop-n
- $3.65 \cdot 10^{-8} \cdot x^2 + 2.99 \cdot 10^{-6} \cdot$
- try-rewrite?-noop-
- $3.64 \cdot 10^{-8} \cdot x^2 + 3.68 \cdot 10^{-6} \cdot$
- try-rewrite!-noop-n
- $3.64 \cdot 10^{-8} \cdot x^2 + 3.88 \cdot 10^{-6} \cdot$
- try-ssr-rewrite?-noop
- $4.24 \cdot 10^{-7} \cdot x - 1.92$
- try-ssr-rewrite-noop
- $4.32 \cdot 10^{-7} \cdot x - 1.92$
- try-ssr-rewrite!-noop
- $4.79 \cdot 10^{-7} \cdot x - 1.86$

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

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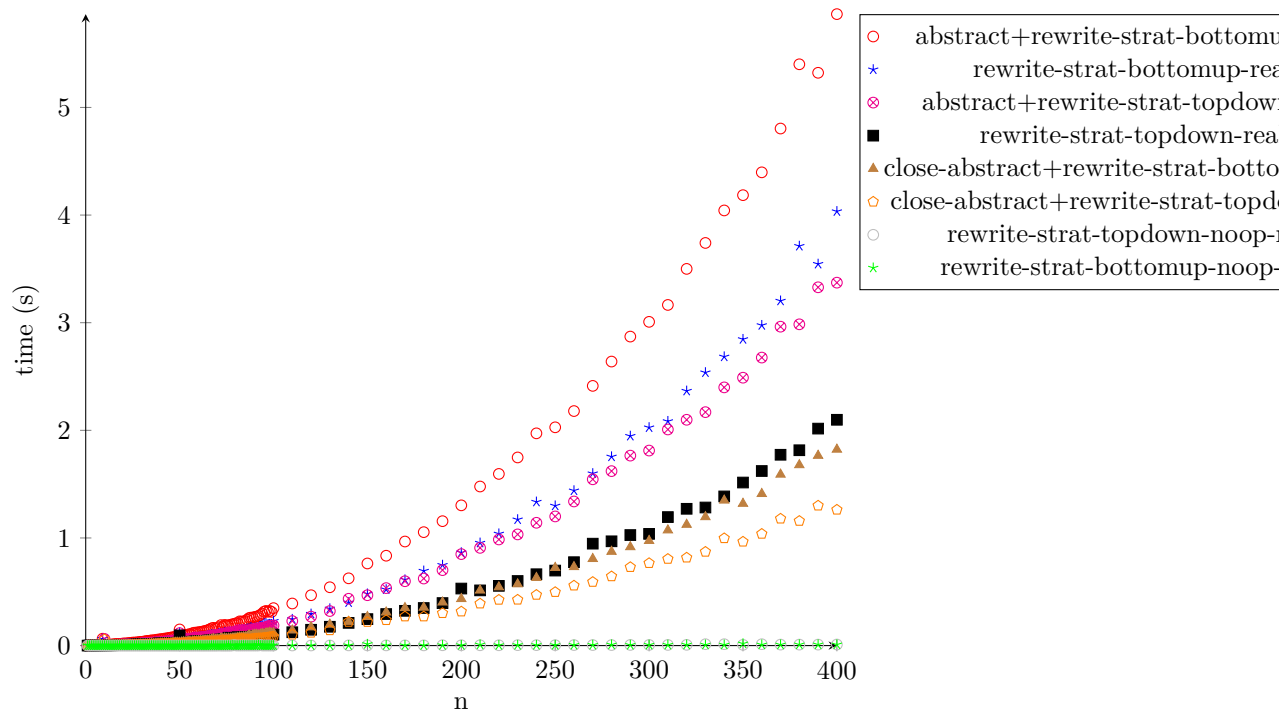Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

The plot legend:
- try-ssr-rewrite!-cold-noop-rea... $4.73 \cdot 10^{-7} \cdot x + 3.4 \cdot 10^{-2}$
- try-ssr-rewrite!-noop-real $4.21 \cdot 10^{-7} \cdot x - 4.67 \cdot 10^{-4}$
- try-ssr-rewrite-noop-real $4.19 \cdot 10^{-7} \cdot x - 5.63 \cdot 10^{-6}$
- try-ssr-rewrite?-noop-real $4.19 \cdot 10^{-7} \cdot x - 2.97 \cdot 10^{-4}$
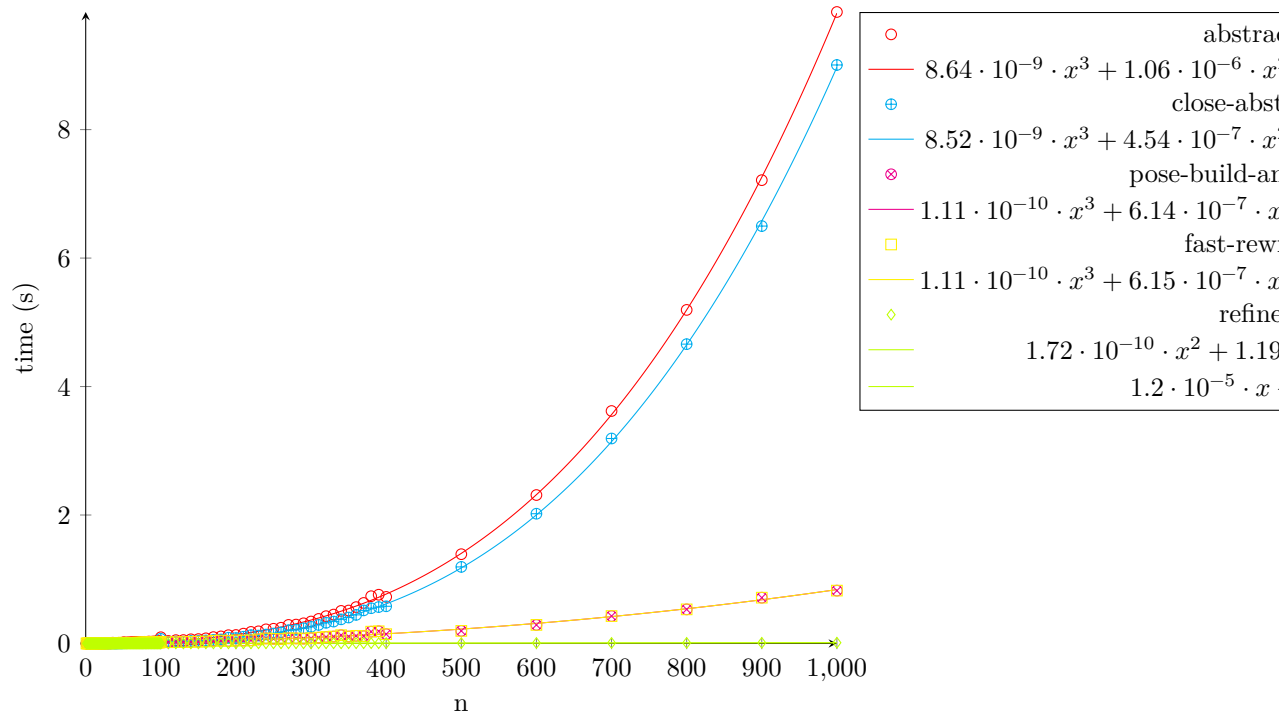
Figure 10: timing-rewrite-repeated-app-rewrite-strat

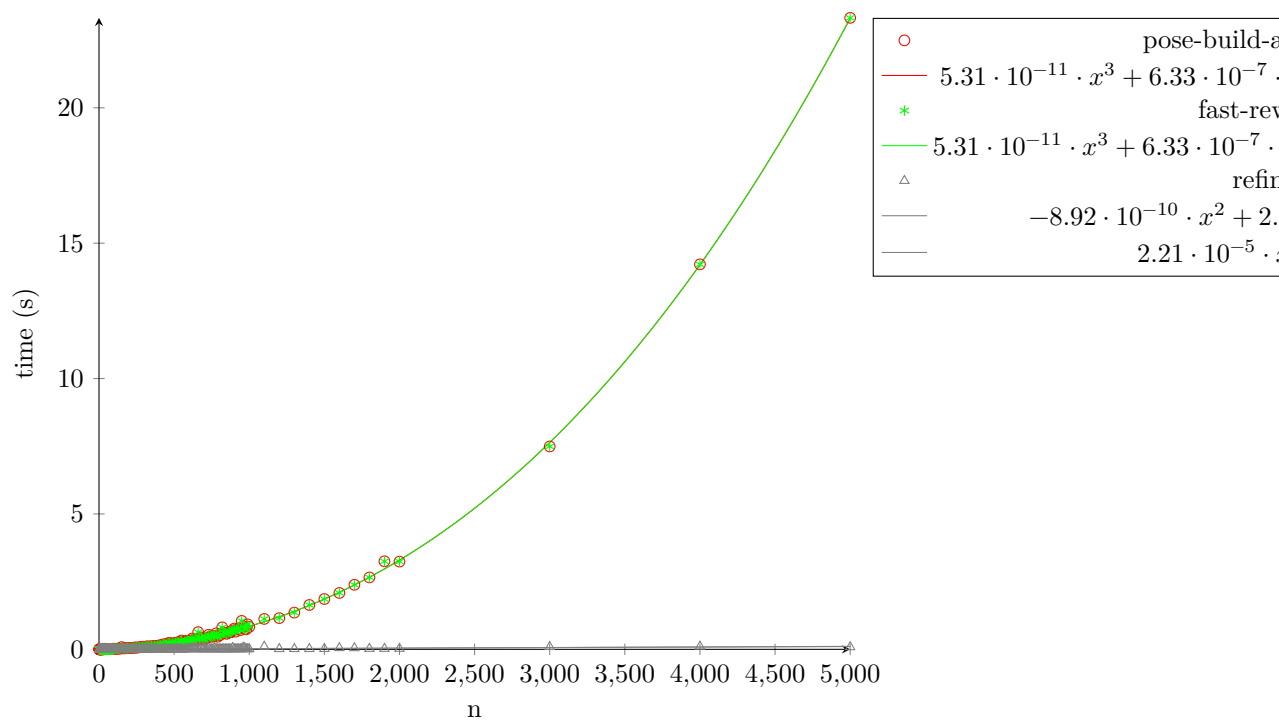Figure 11: timing-rewrite-repeated-app-fast-rewrite

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Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract
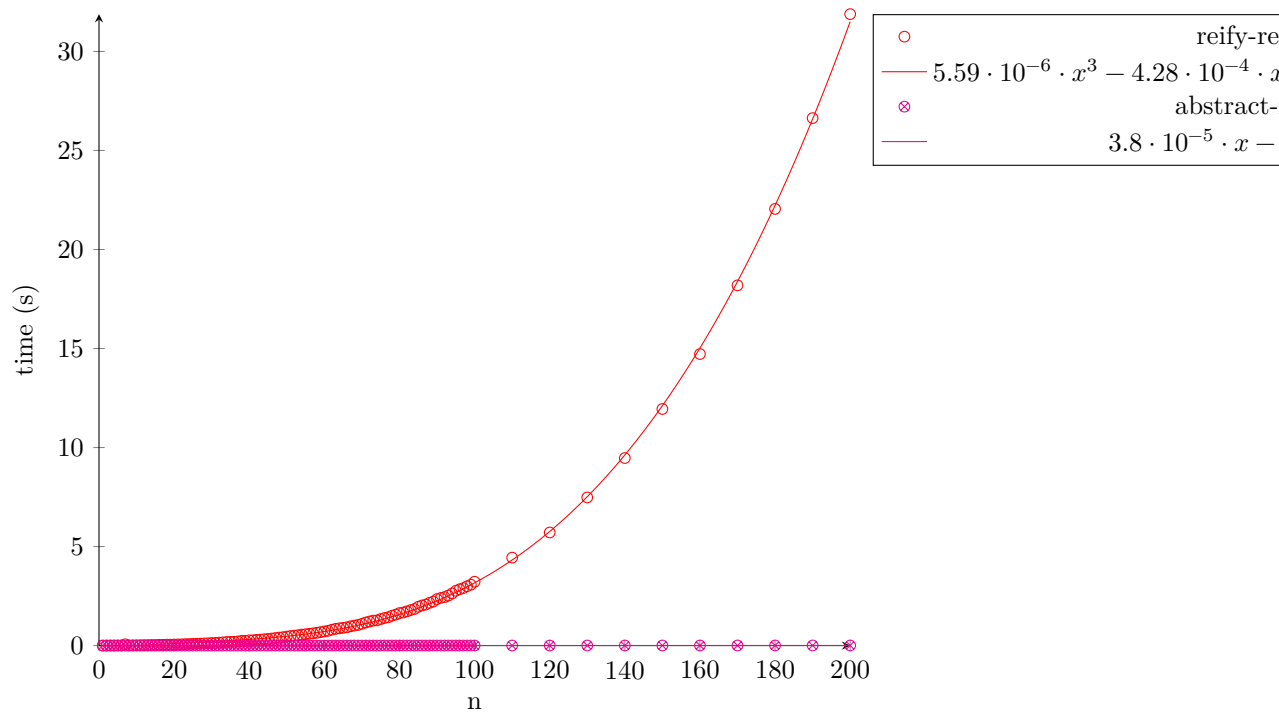
12
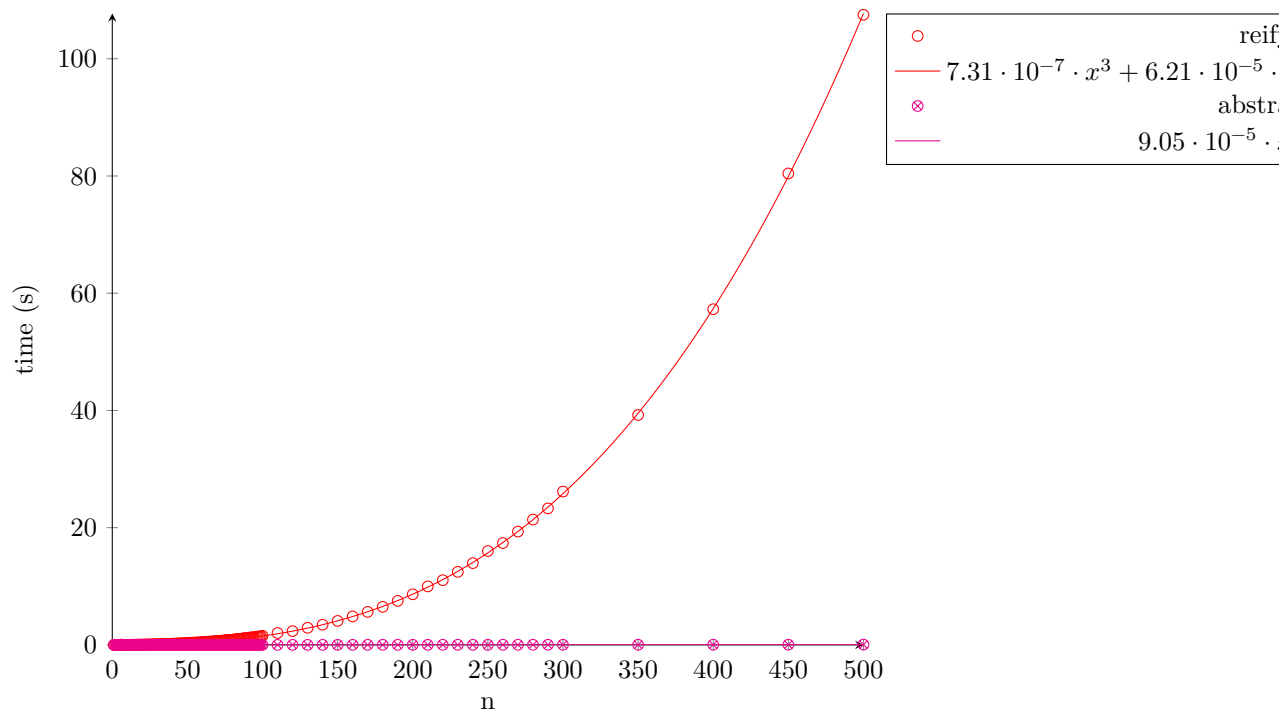
Figure 13: timing-typeclass-reification-let-in-HOAS
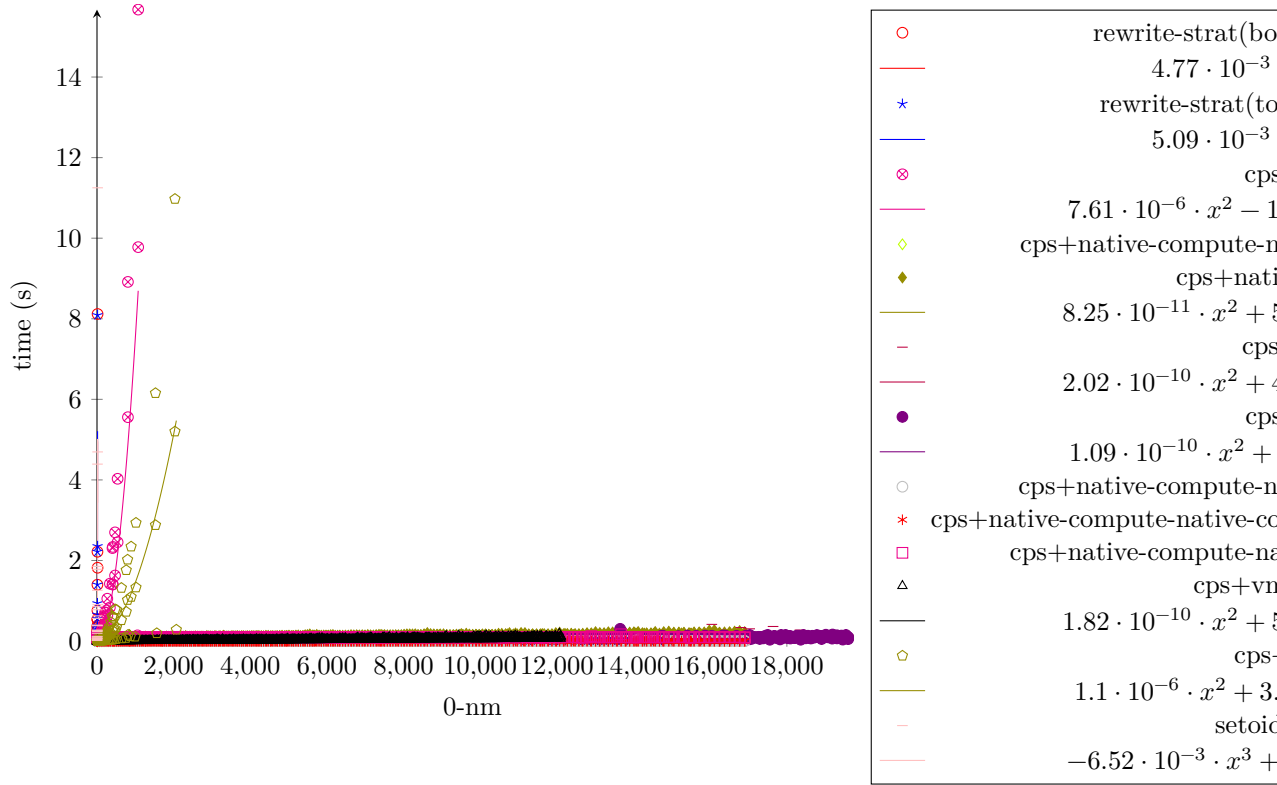
Figure 14: timing-typeclass-reification-let-in-PHOAS

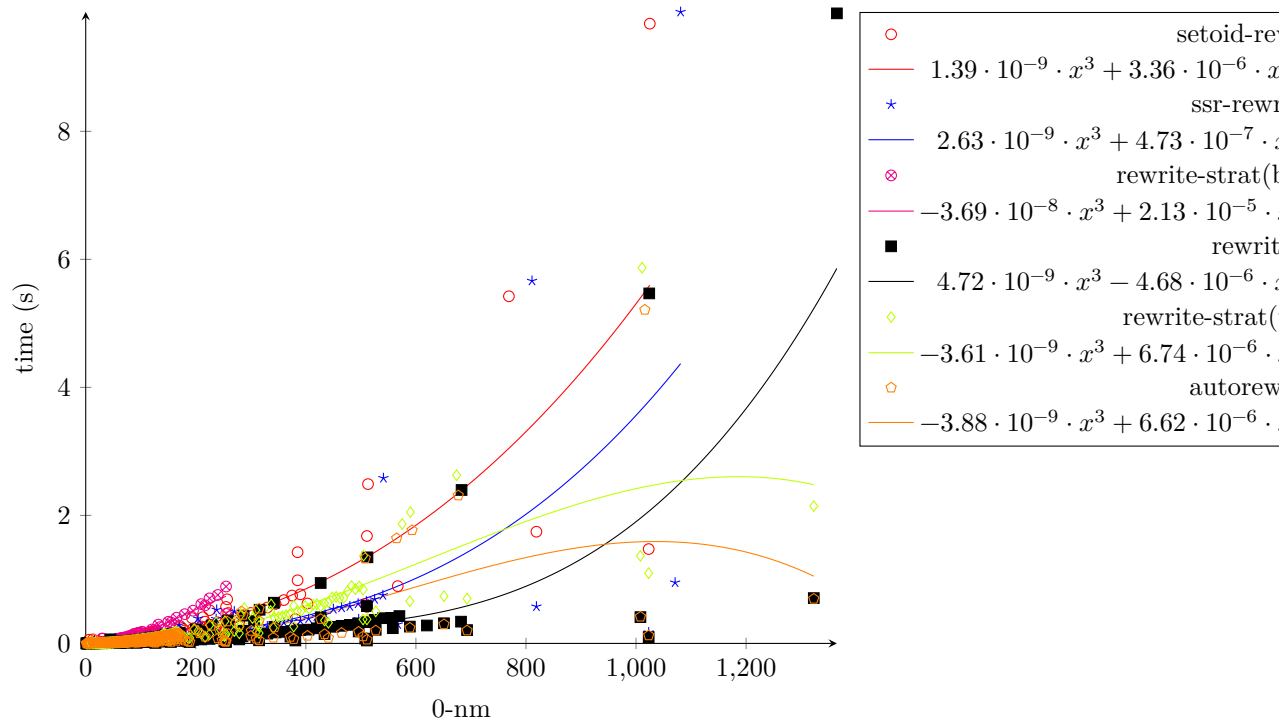Figure 15: timing-rewrite-lift-lets-map param-1-n 1, param-2-m 1

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
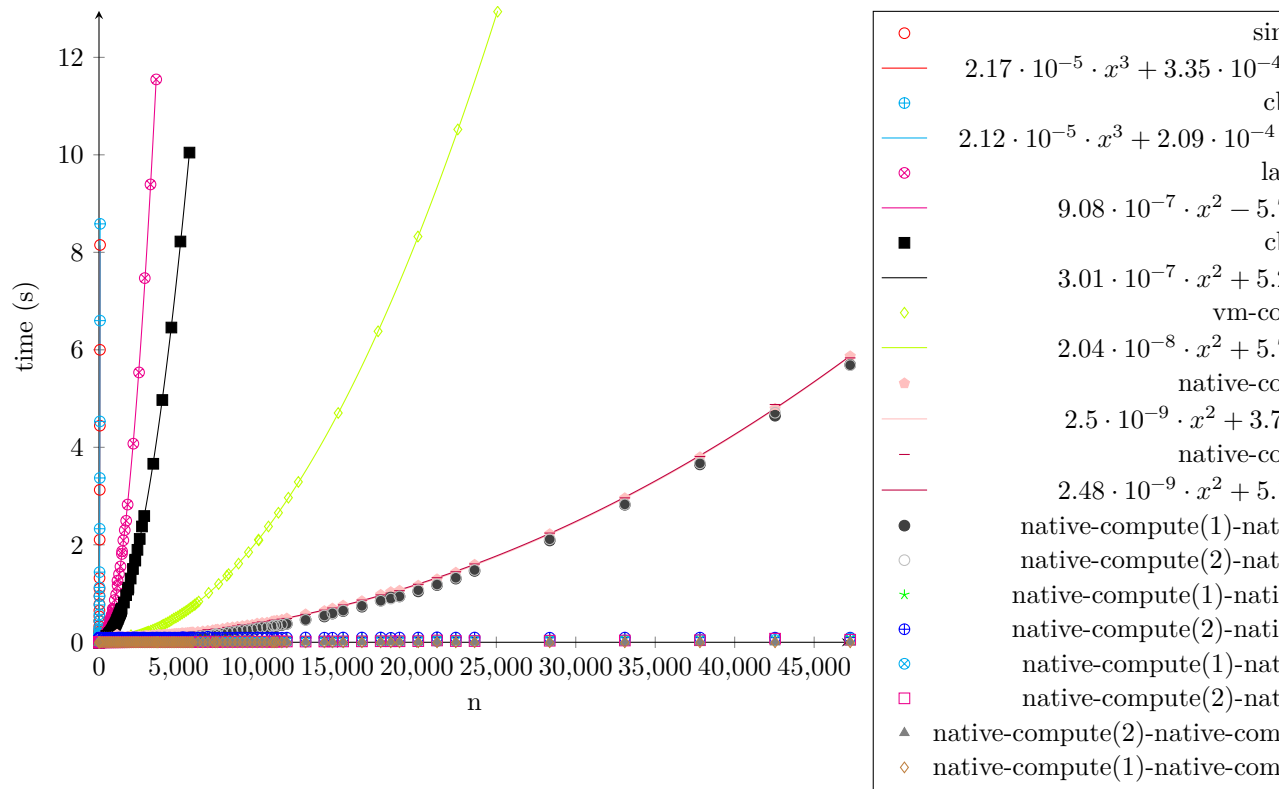
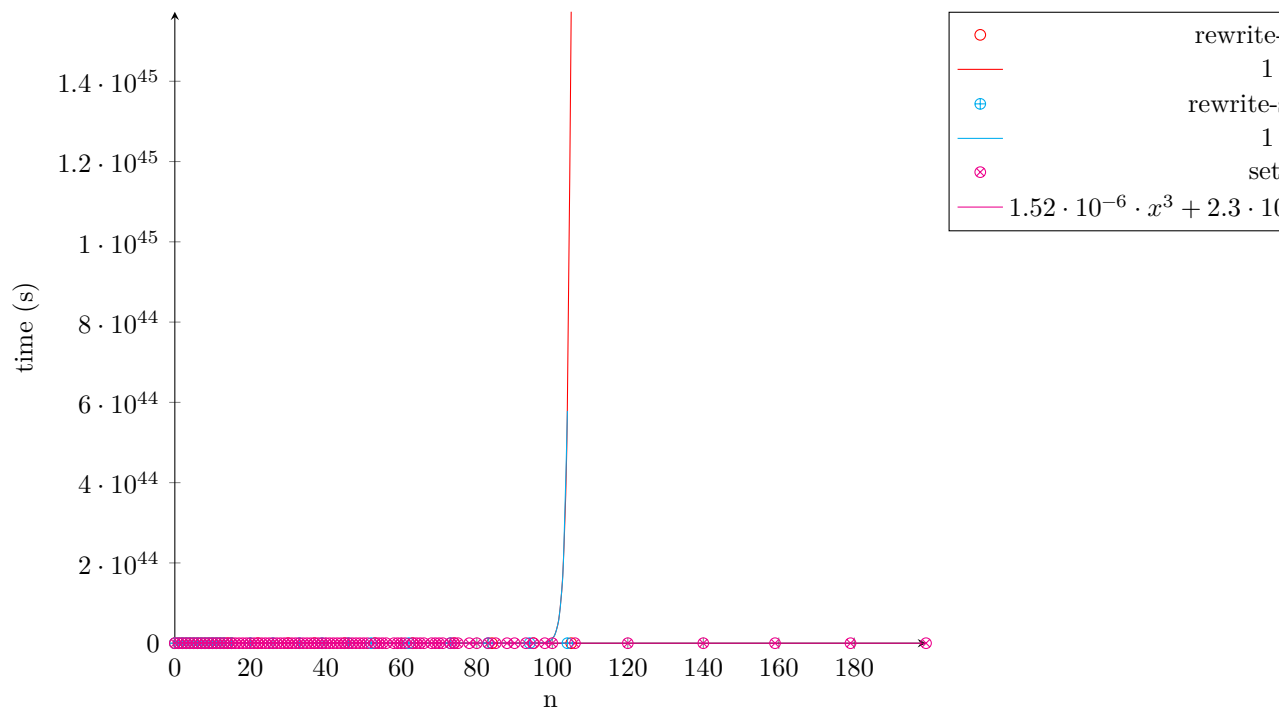Figure 17: timing-sieve-of-eratosthenes
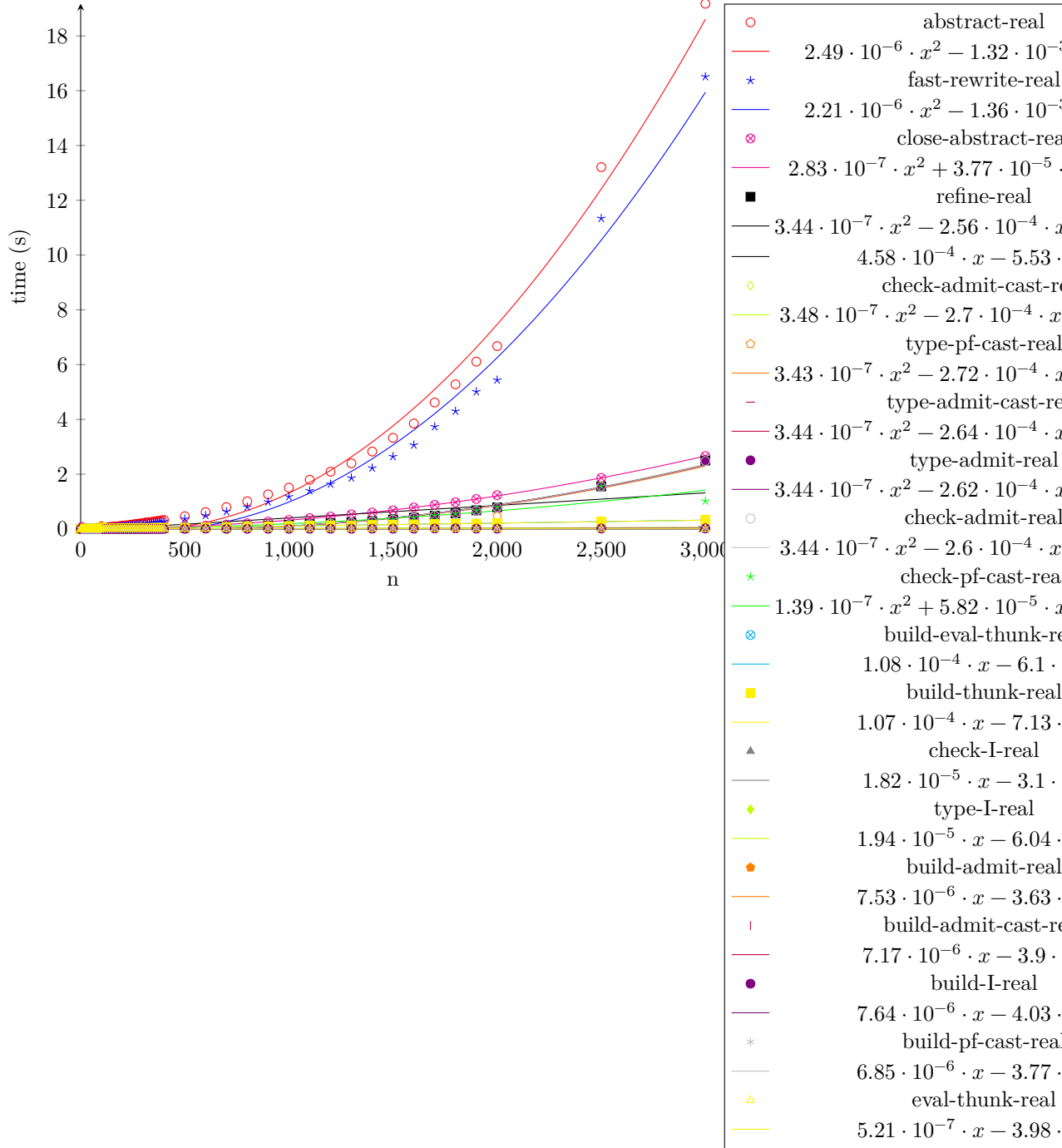
Figure 18: timing-rewrite-under-lets-plus-0

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