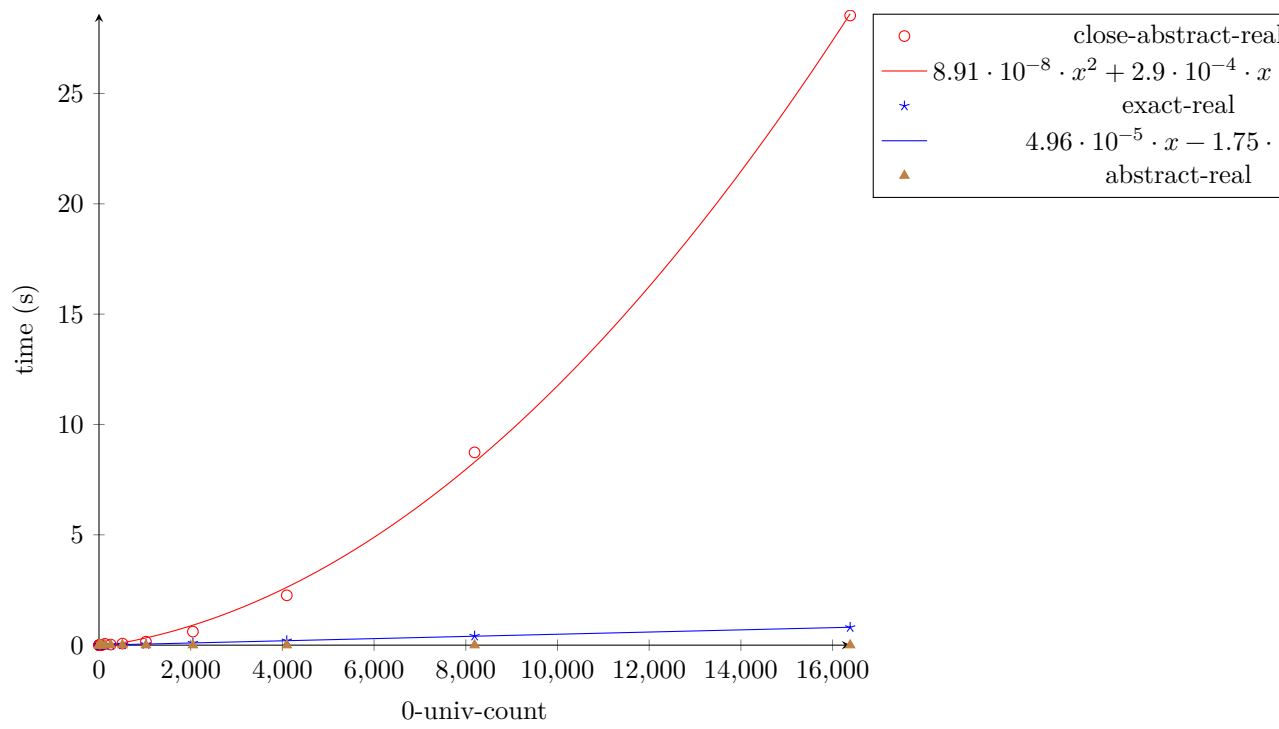Figure 1: timing-pattern

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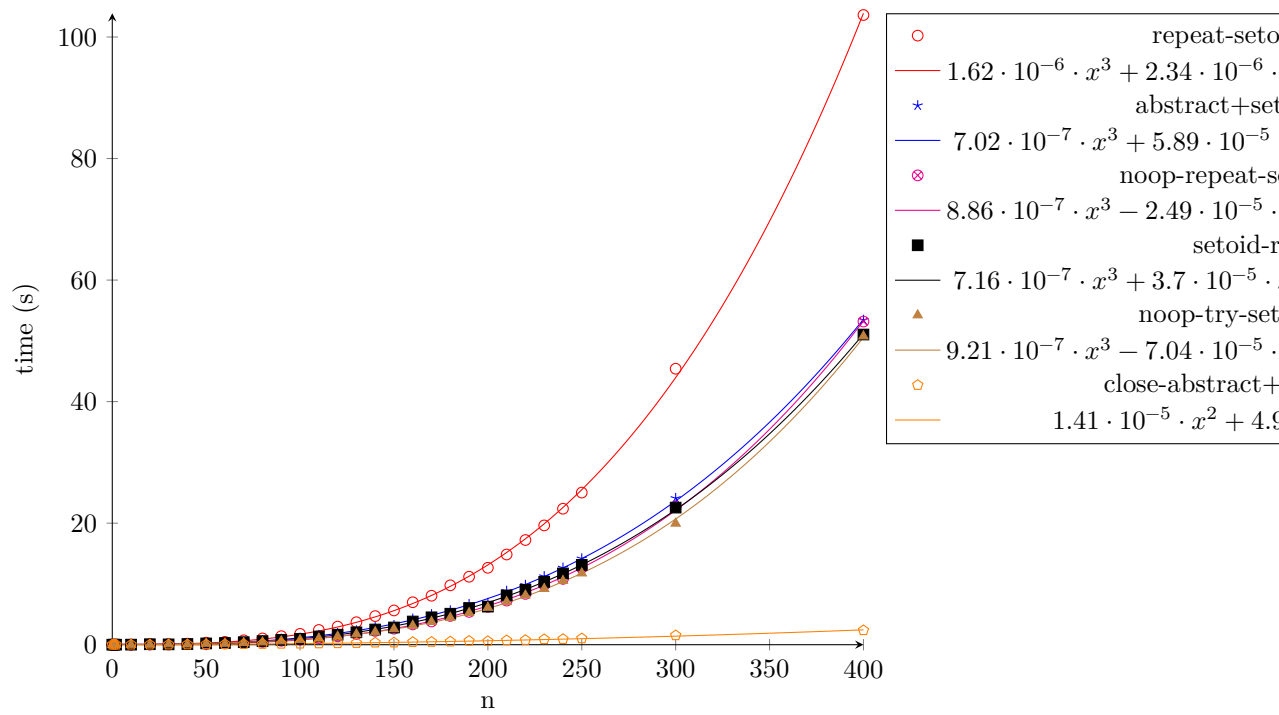
Figure 3: timing-repeat-setoid-rewrite-under-binders
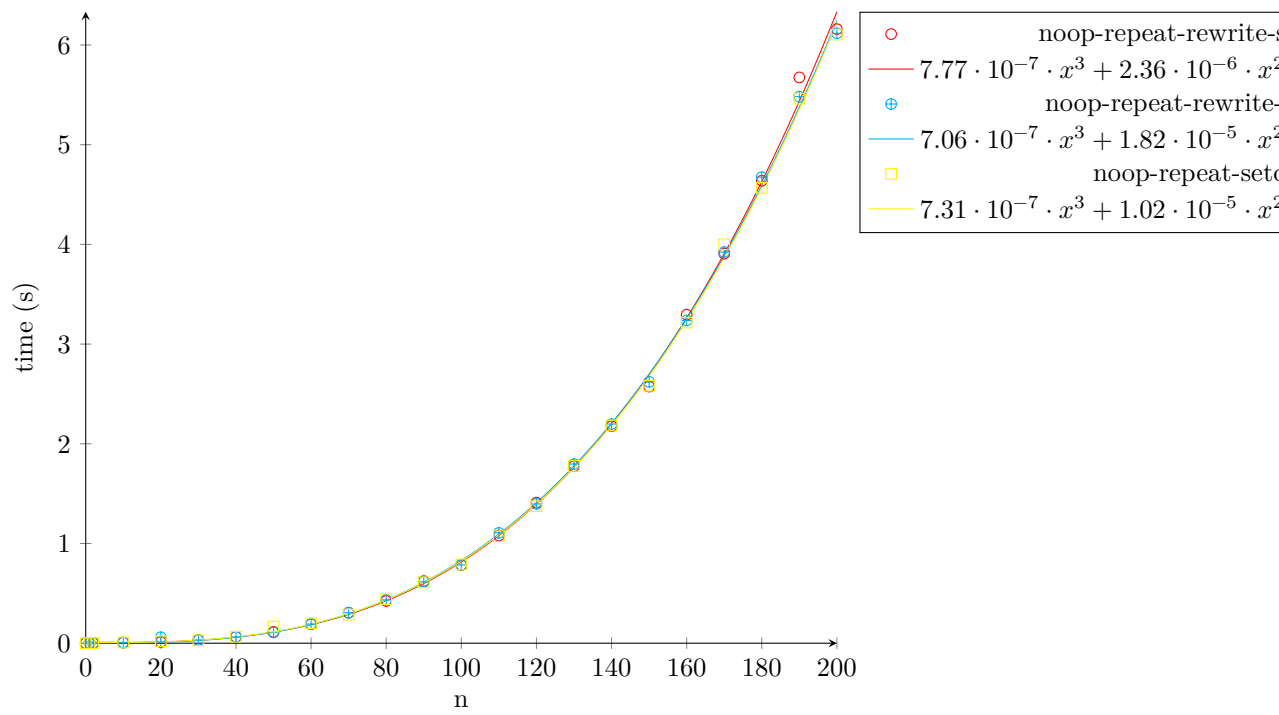
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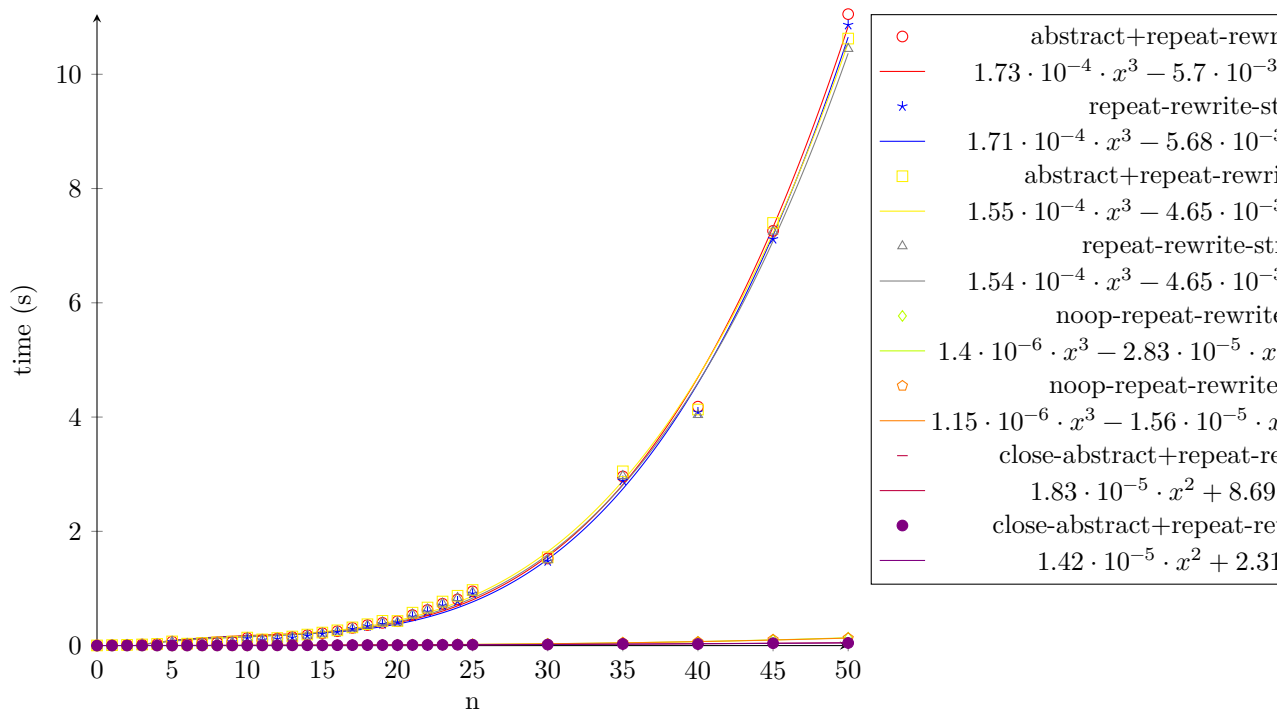Figure 4: timing-repeat-setoid-rewrite-under-binders-noop
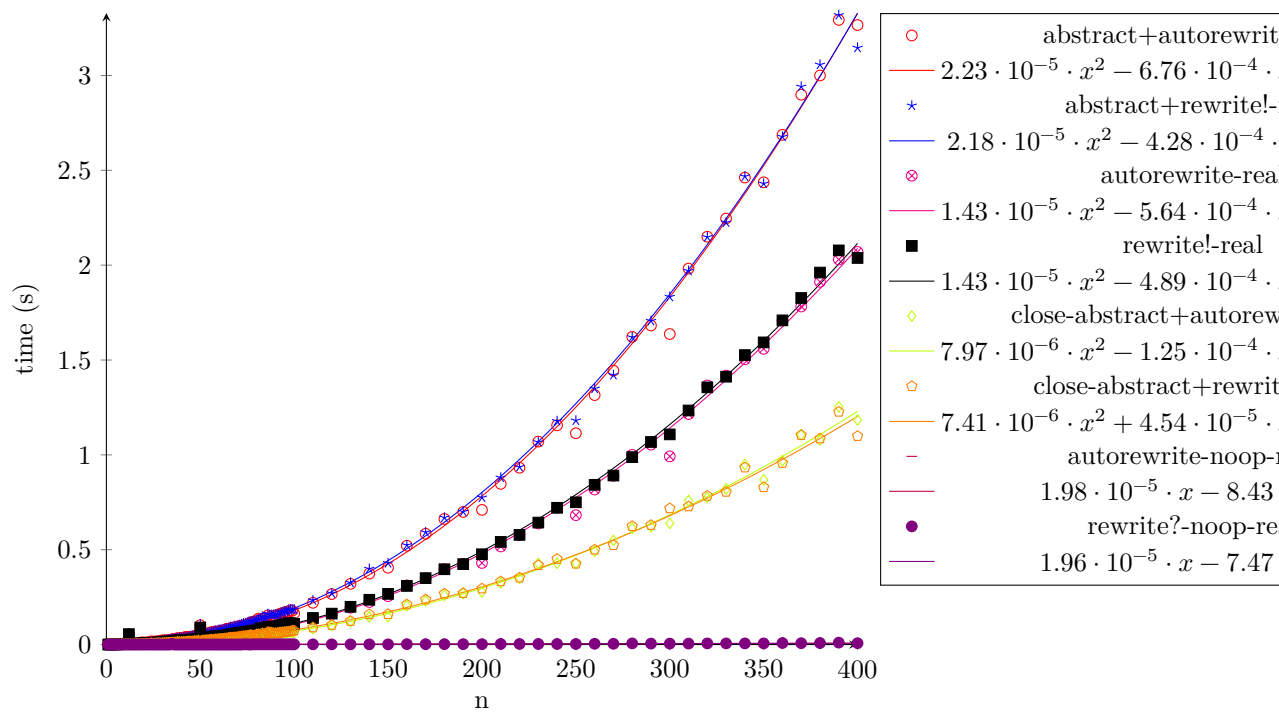
4

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

The legend of the figure contains the following entries:

- abstract+repeat-rewr... $1.73 \cdot 10^{-4} \cdot x^3 - 5.7 \cdot 10^{-3}$
- repeat-rewrite-st... $1.71 \cdot 10^{-4} \cdot x^3 - 5.68 \cdot 10^{-3}$
- abstract+repeat-rewri... $1.55 \cdot 10^{-4} \cdot x^3 - 4.65 \cdot 10^{-3}$
- repeat-rewrite-str... $1.54 \cdot 10^{-4} \cdot x^3 - 4.65 \cdot 10^{-3}$
- noop-repeat-rewrite... $1.4 \cdot 10^{-6} \cdot x^3 - 2.83 \cdot 10^{-5} \cdot x$
- noop-repeat-rewrite... $1.15 \cdot 10^{-6} \cdot x^3 - 1.56 \cdot 10^{-5} \cdot x$
- close-abstract+repeat-re... $1.83 \cdot 10^{-5} \cdot x^2 + 8.69$
- close-abstract+repeat-re... $1.42 \cdot 10^{-5} \cdot x^2 + 2.31$

Figure 6: timing-rewrite-repeated-app-autorewrite
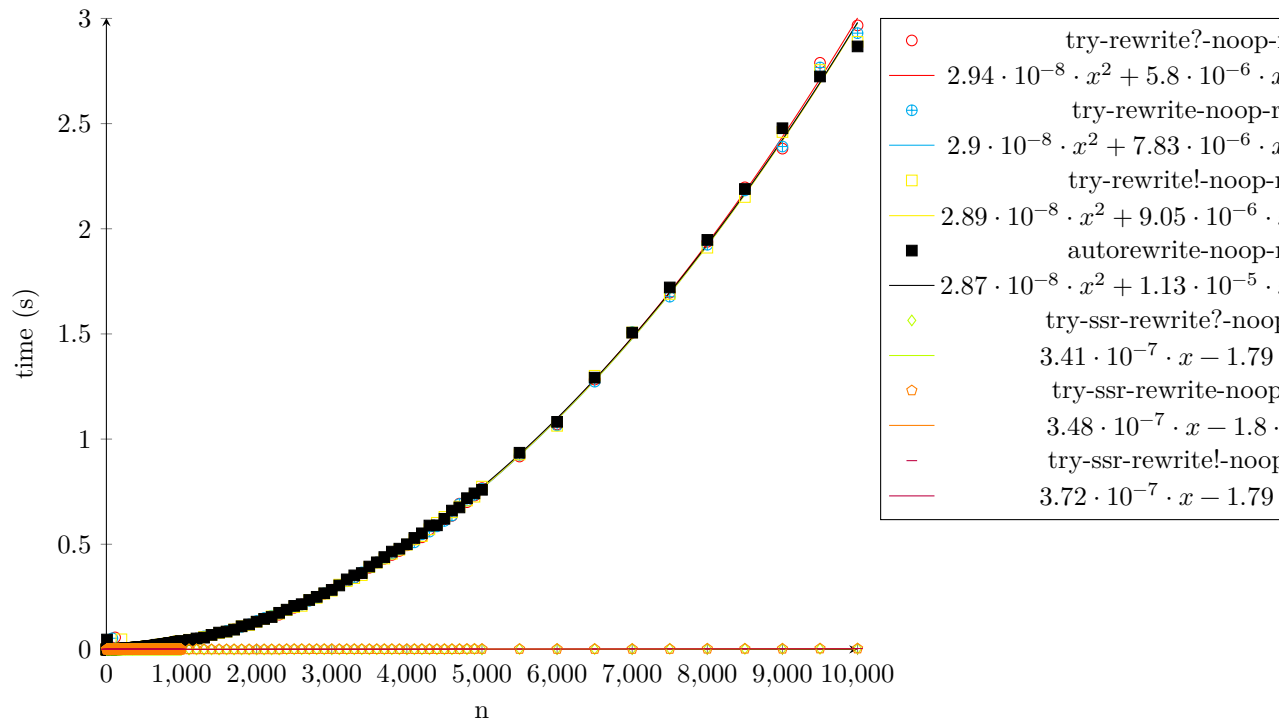
Figure 7: timing-rewrite-repeated-app-autorewrite-noop

The plot legend contains the following entries:

- try-rewrite?-noop- ... $2.94 \cdot 10^{-8} \cdot x^2 + 5.8 \cdot 10^{-6} \cdot x$ ...
- try-rewrite-noop- ... $2.9 \cdot 10^{-8} \cdot x^2 + 7.83 \cdot 10^{-6} \cdot x$ ...
- try-rewrite!-noop- ... $2.89 \cdot 10^{-8} \cdot x^2 + 9.05 \cdot 10^{-6} \cdot x$ ...
- autorewrite-noop- ... $2.87 \cdot 10^{-8} \cdot x^2 + 1.13 \cdot 10^{-5} \cdot x$ ...
- try-ssr-rewrite?-noop ... $3.41 \cdot 10^{-7} \cdot x - 1.79$ ...
- try-ssr-rewrite-noop ... $3.48 \cdot 10^{-7} \cdot x - 1.8$ ...
- try-ssr-rewrite!-noop ... $3.72 \cdot 10^{-7} \cdot x - 1.79$ ...

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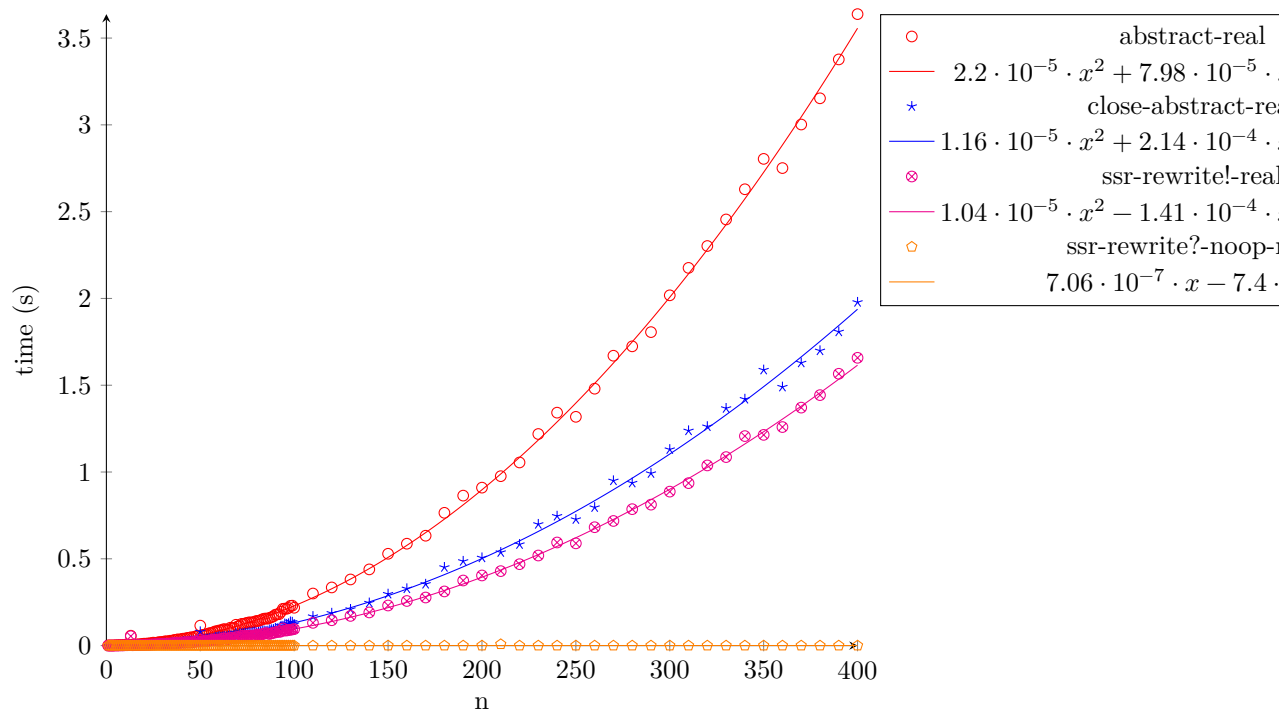
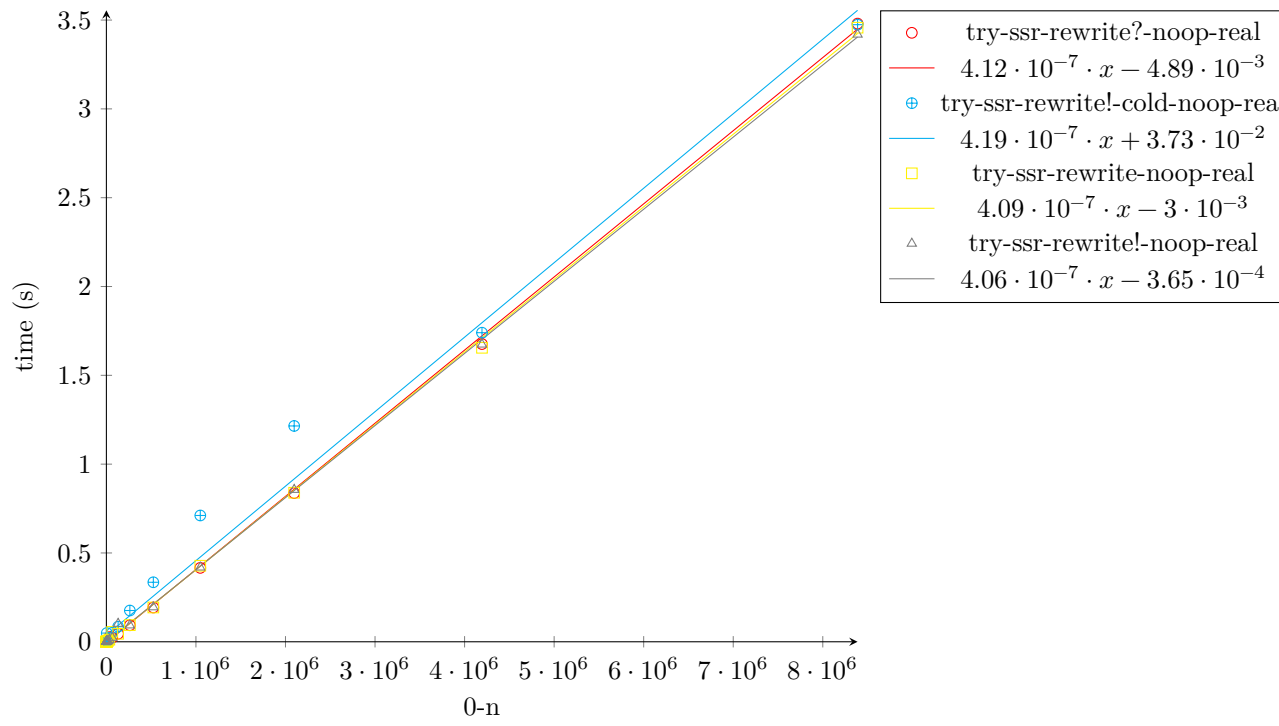Figure 8: timing-rewrite-repeated-app-ssrrewrite

8

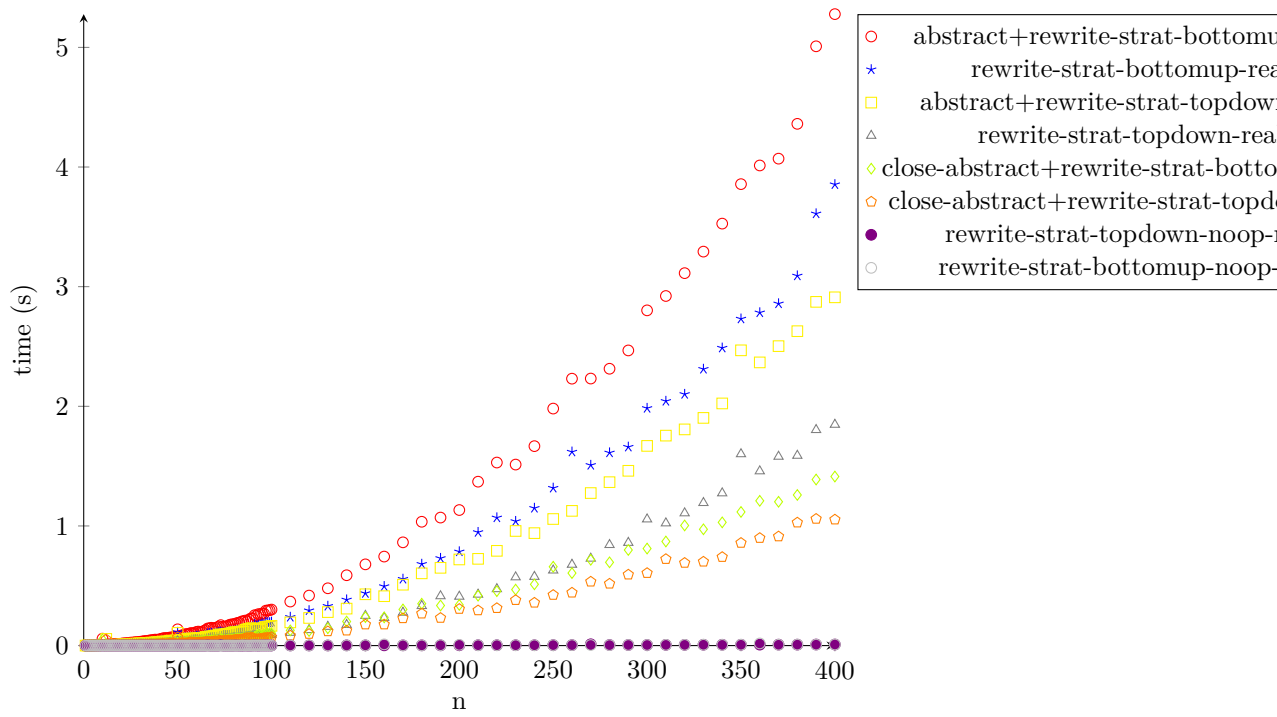Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

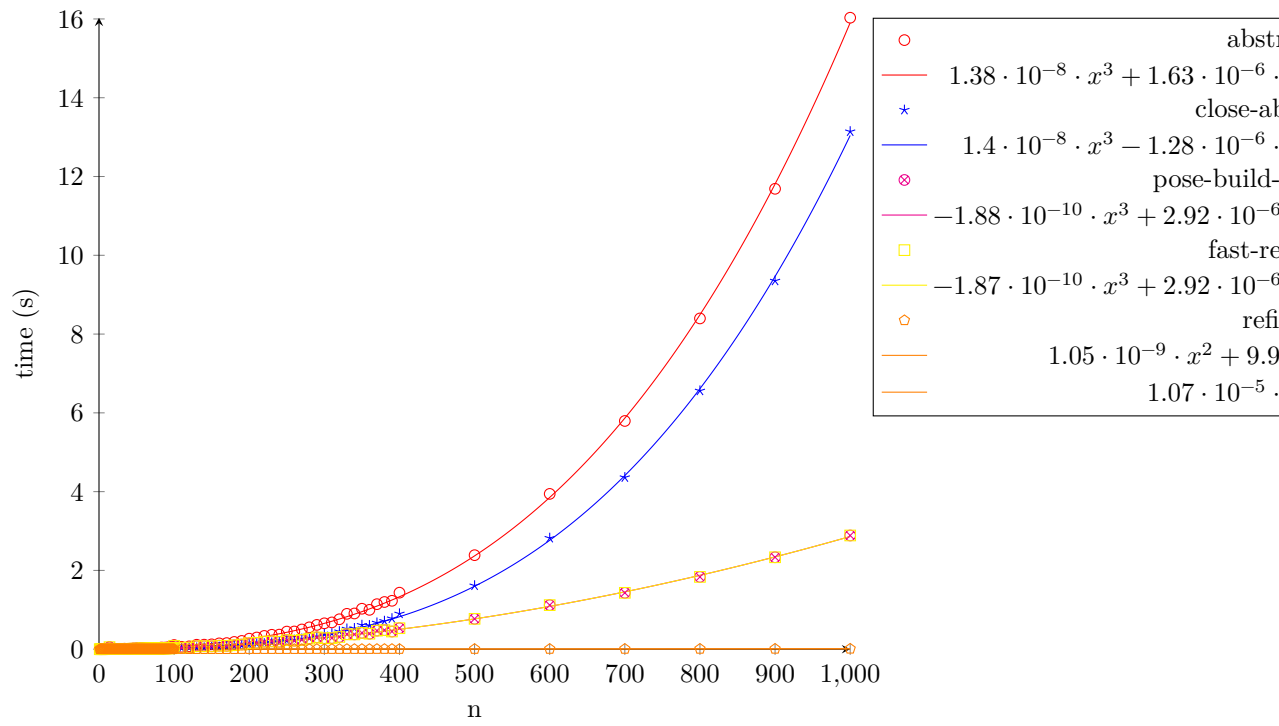Figure 10: timing-rewrite-repeated-app-rewrite-strat

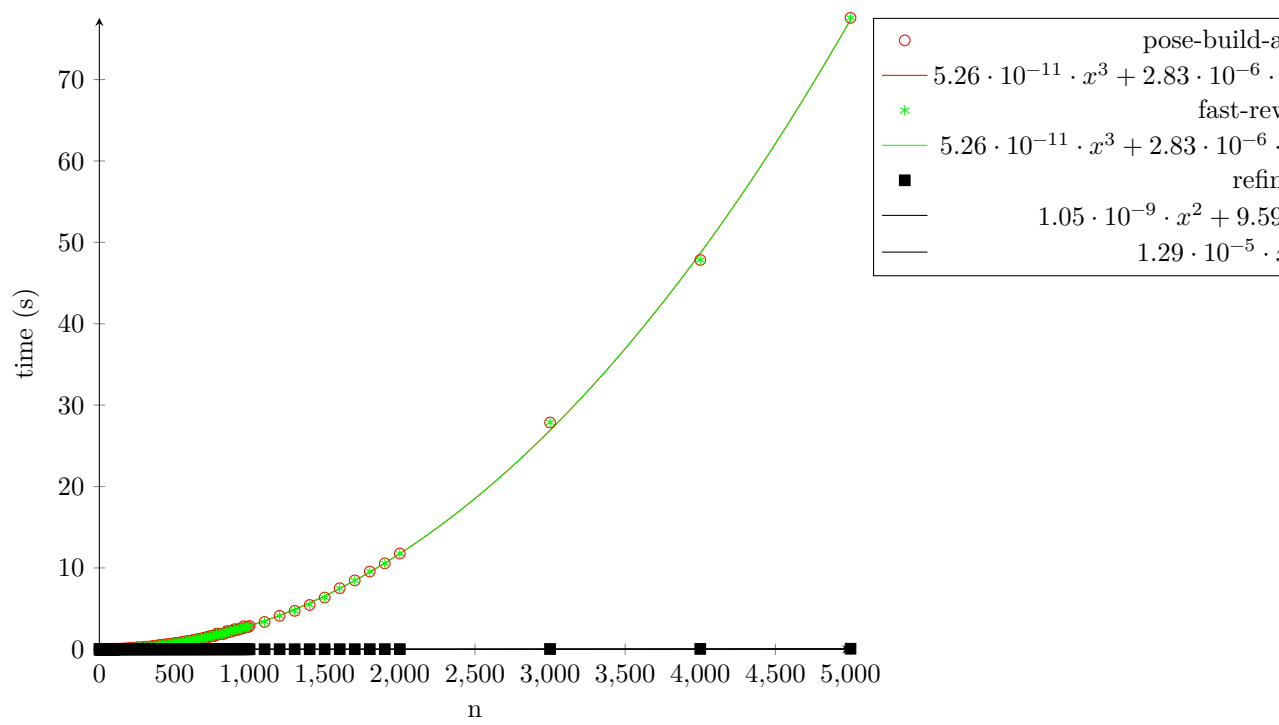Figure 11: timing-rewrite-repeated-app-fast-rewrite

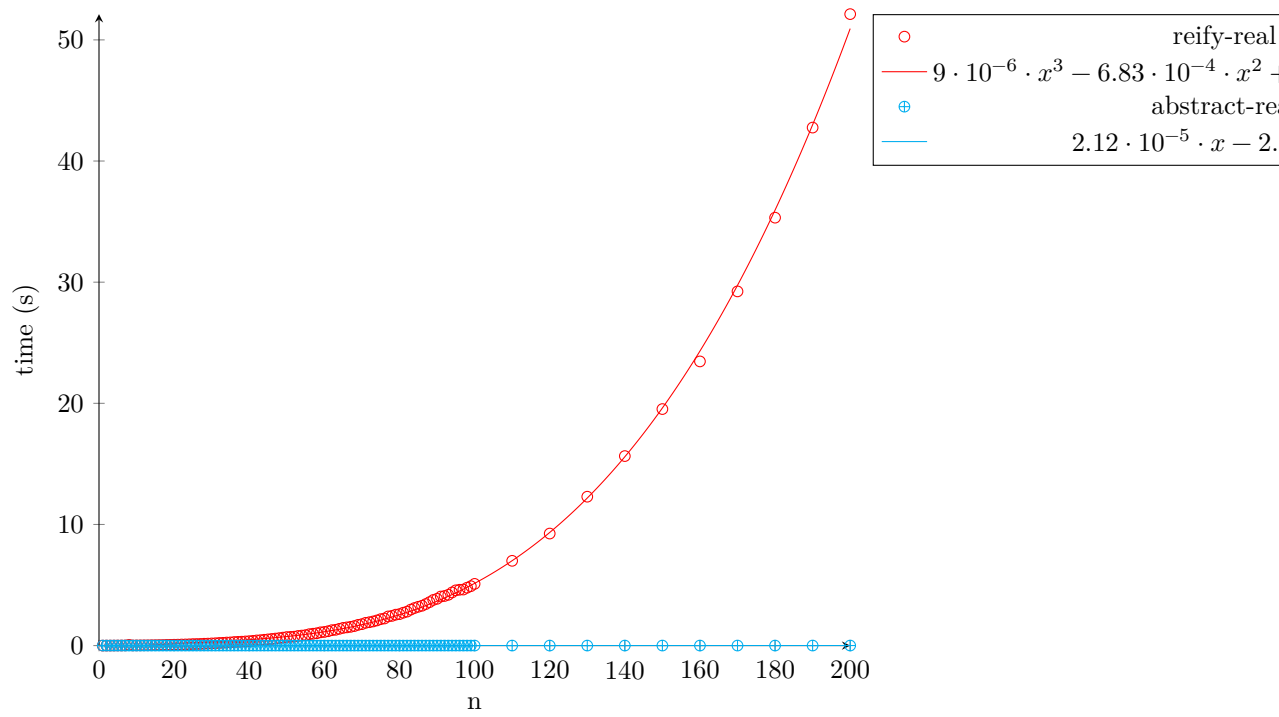Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract
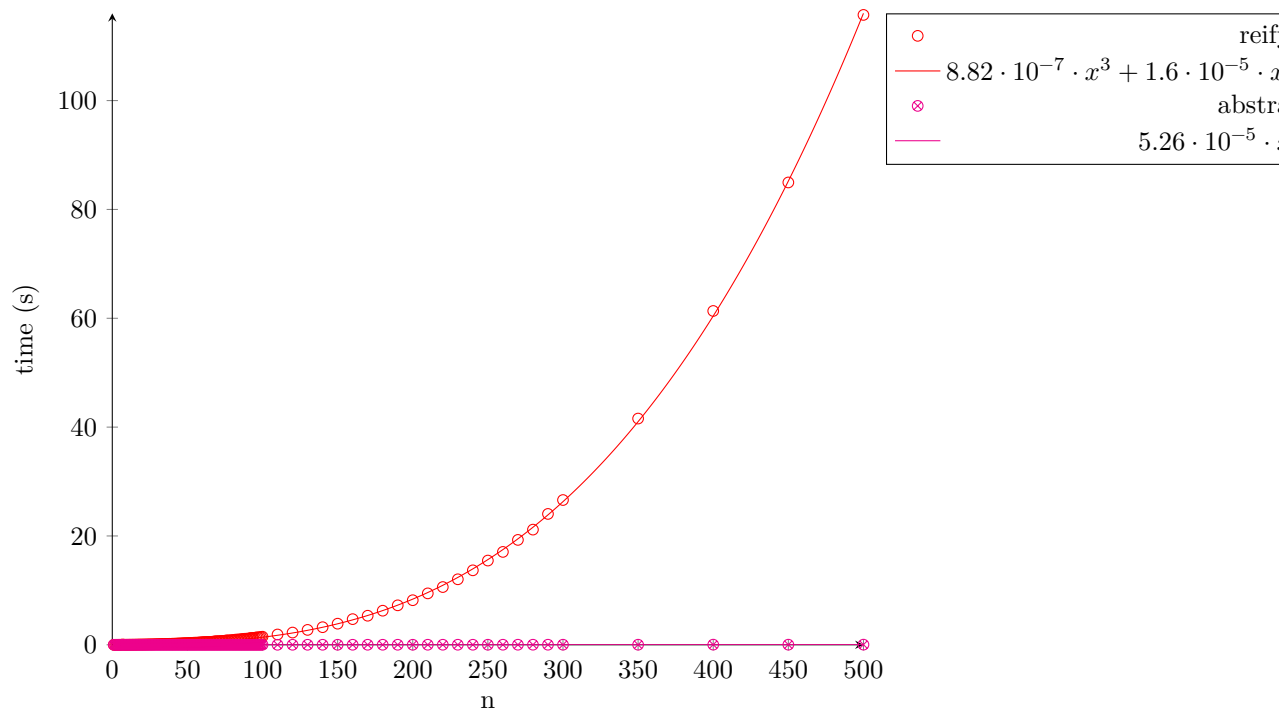
Figure 13: timing-typeclass-reification-let-in-HOAS

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