

Figure 1: timing-pattern

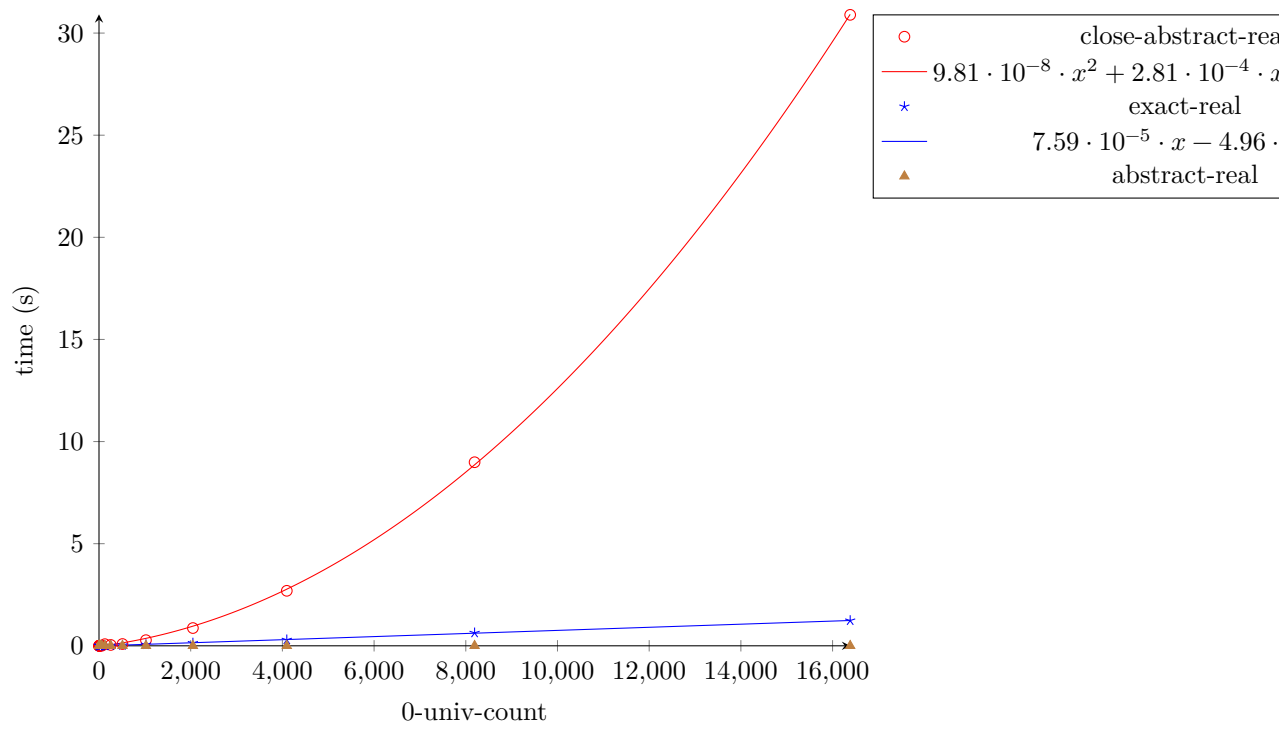


Figure 2: timing-n-polymorphic-universes param-1-n 0

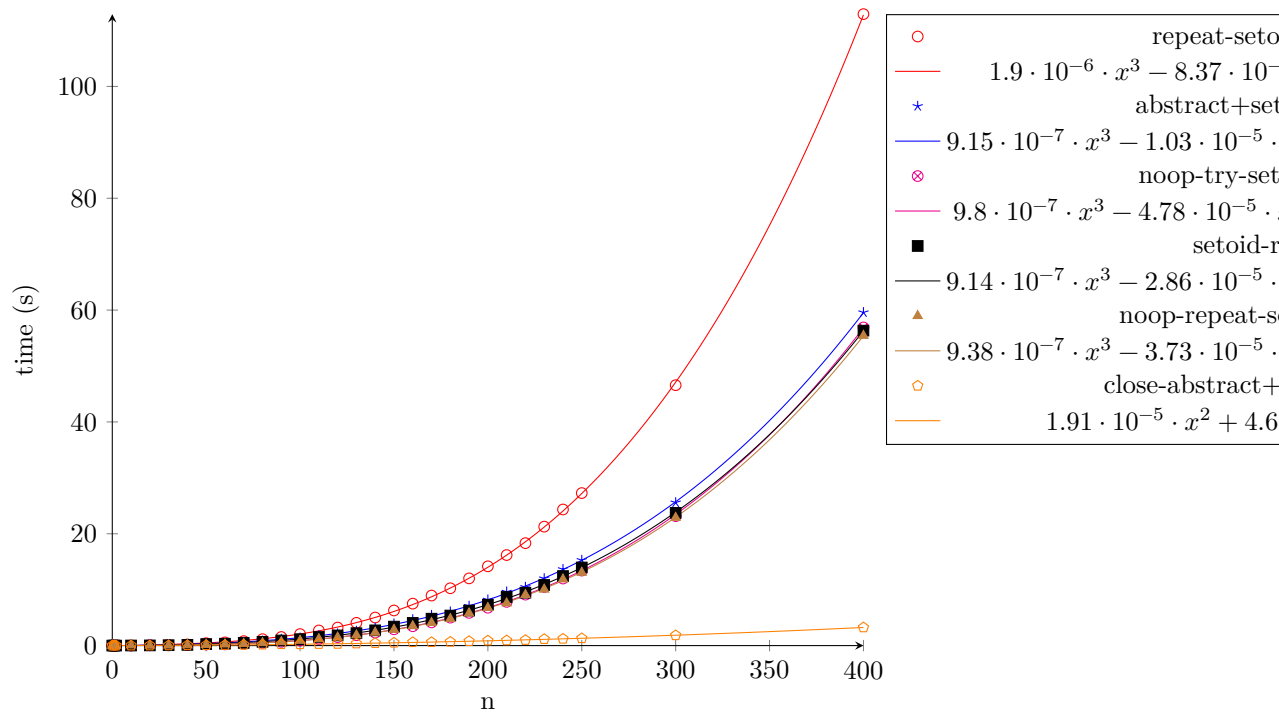


Figure 3: timing-repeat-setoid-rewrite-under-binders

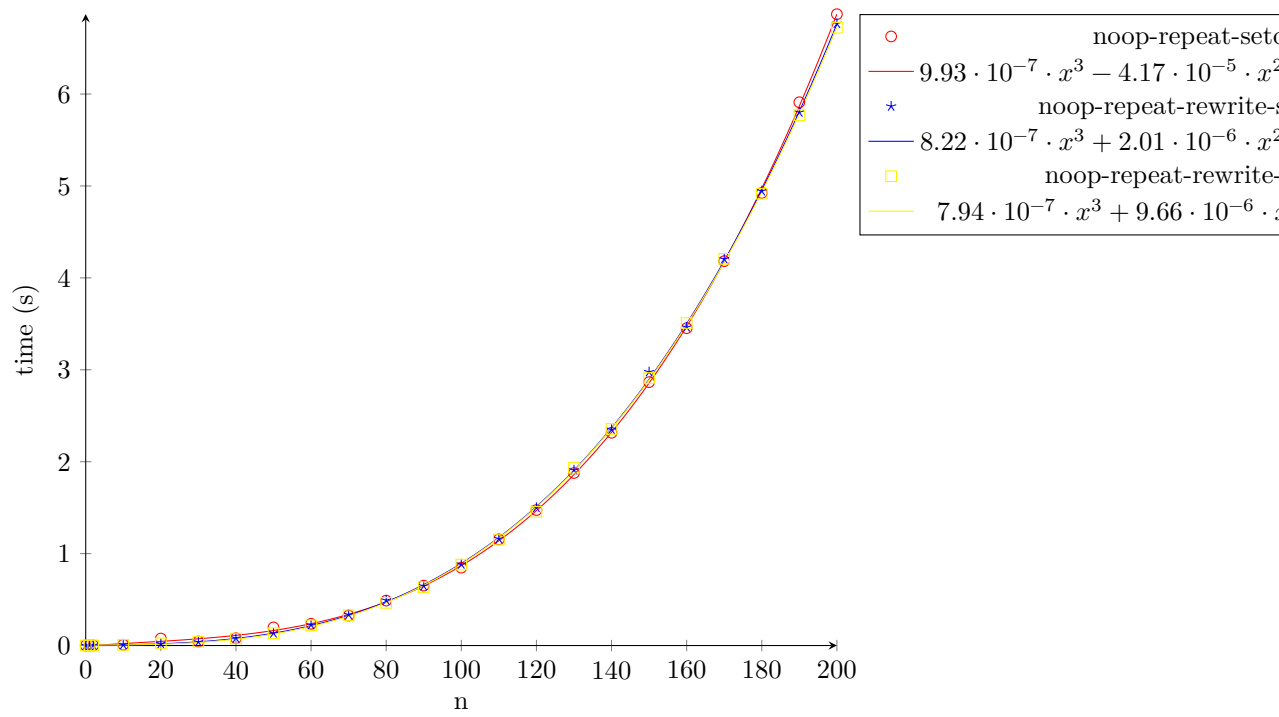


Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

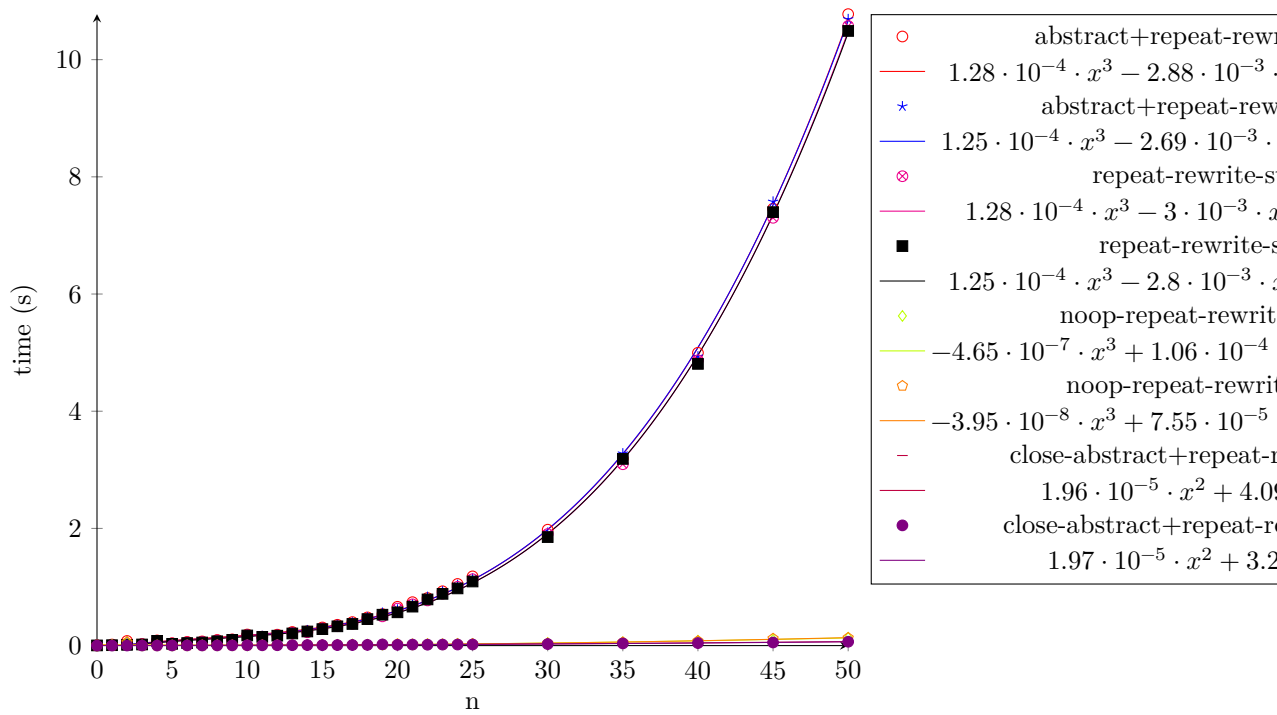


Figure 5: timing-rewrite-strat-under-binders

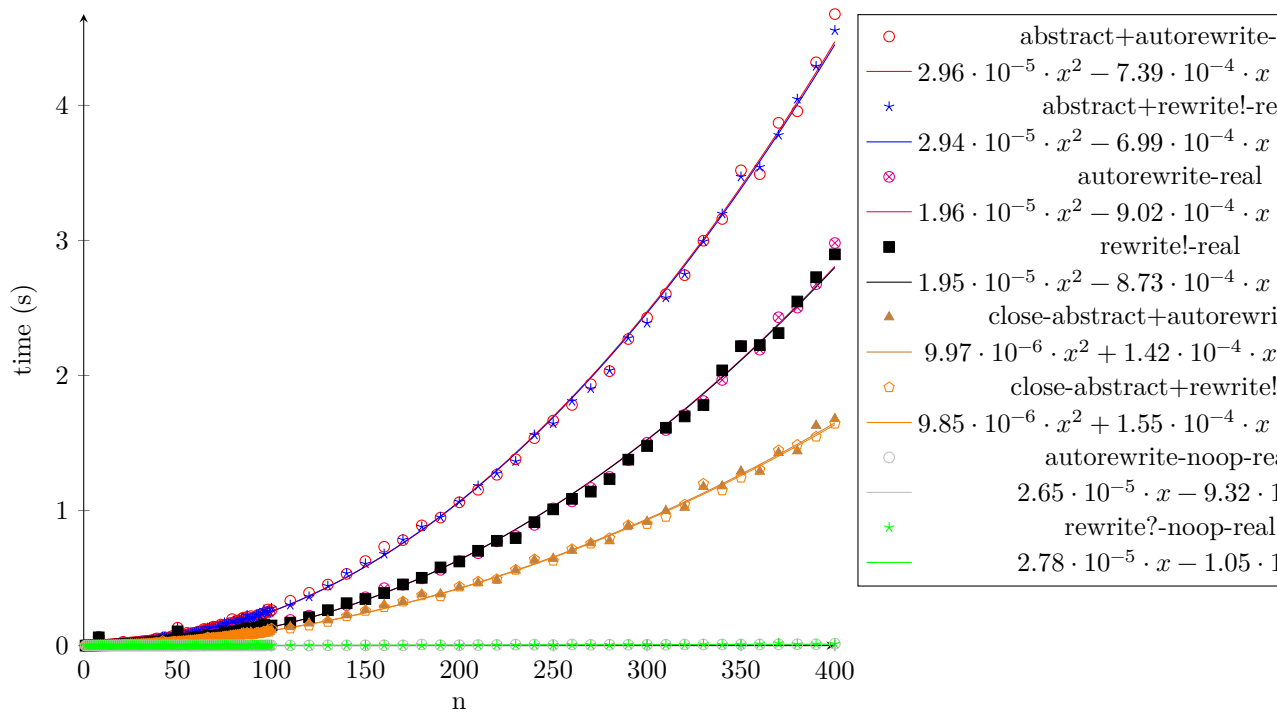


Figure 6: timing-rewrite-repeated-app-autorewrite

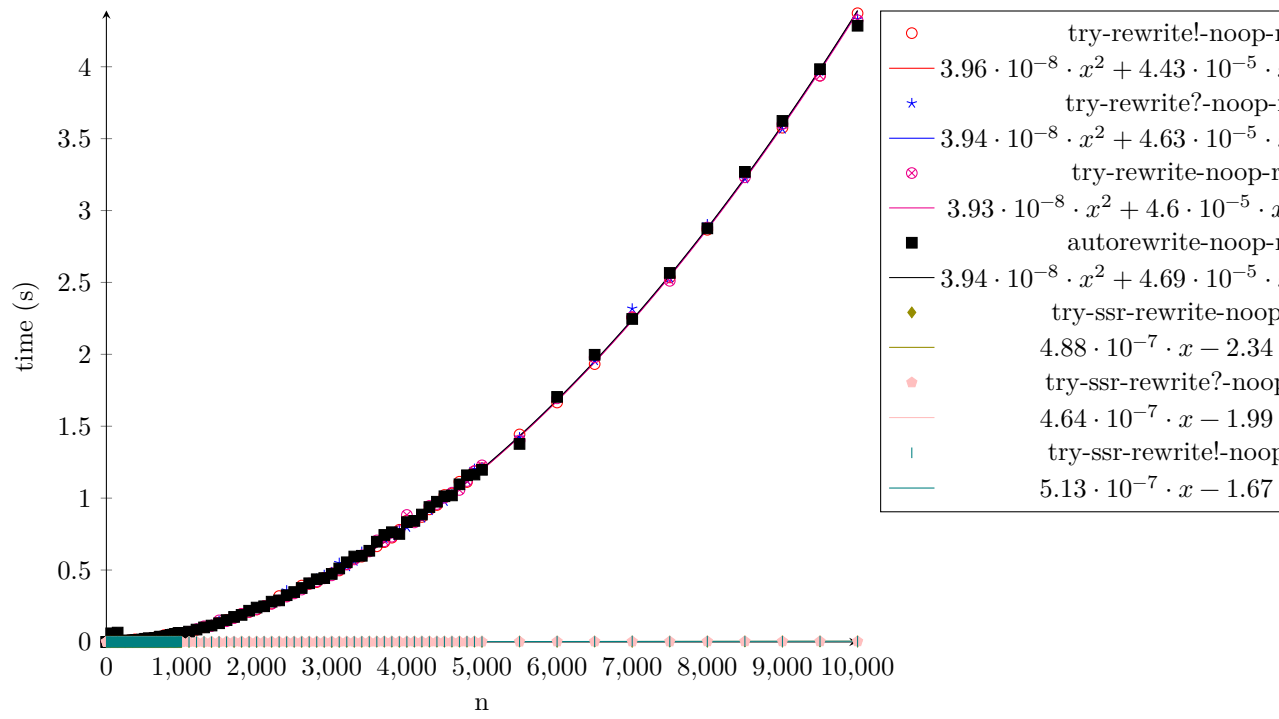


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

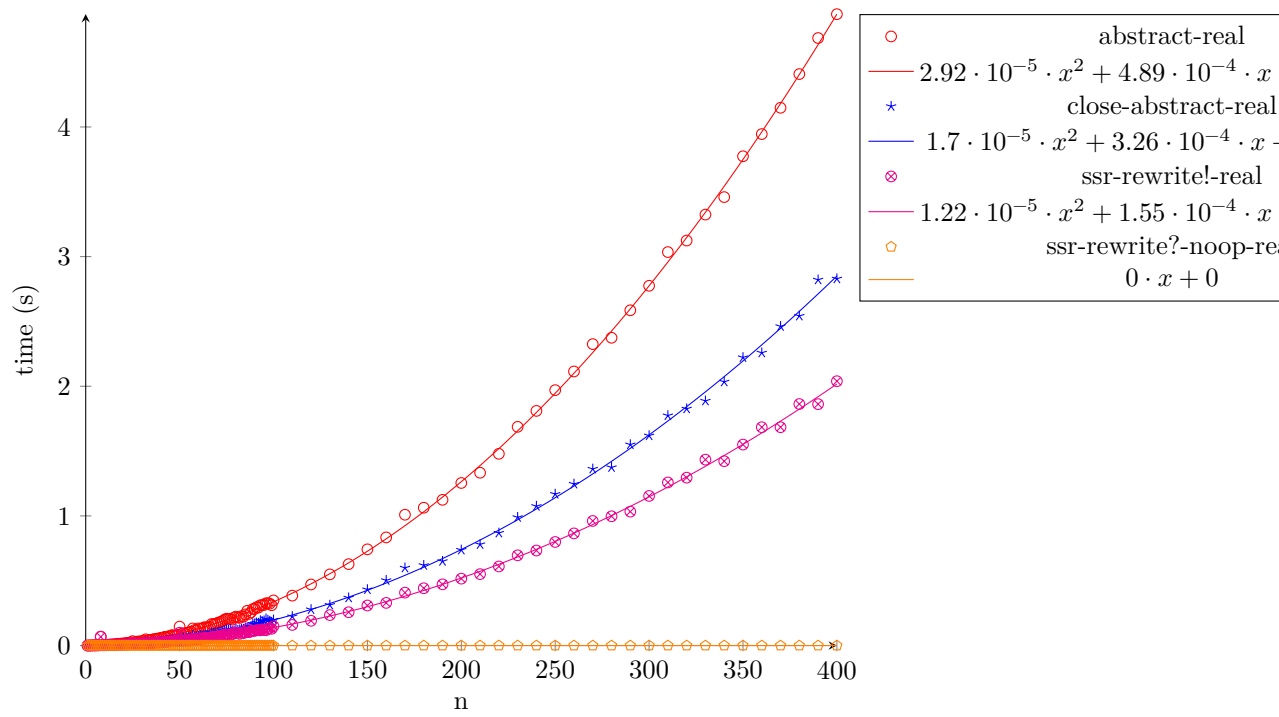


Figure 8: timing-rewrite-repeated-app-ssrrewrite

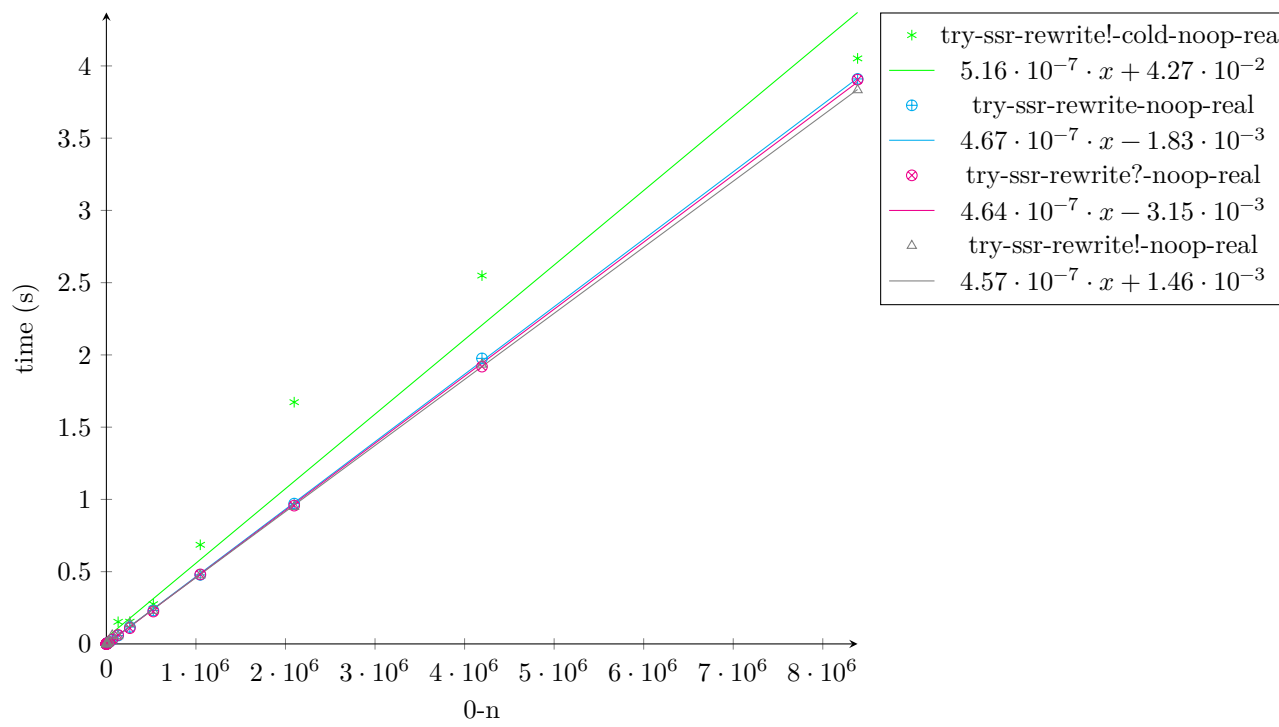


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

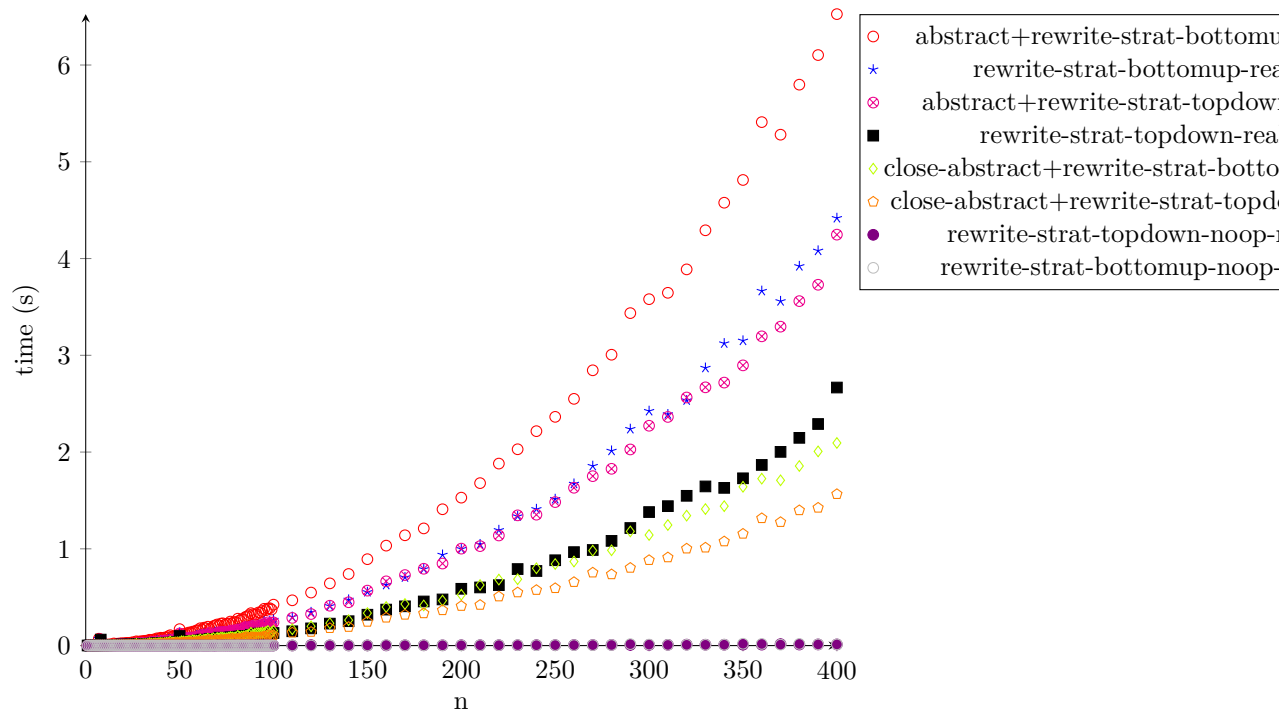


Figure 10: timing-rewrite-repeated-app-rewrite-strat

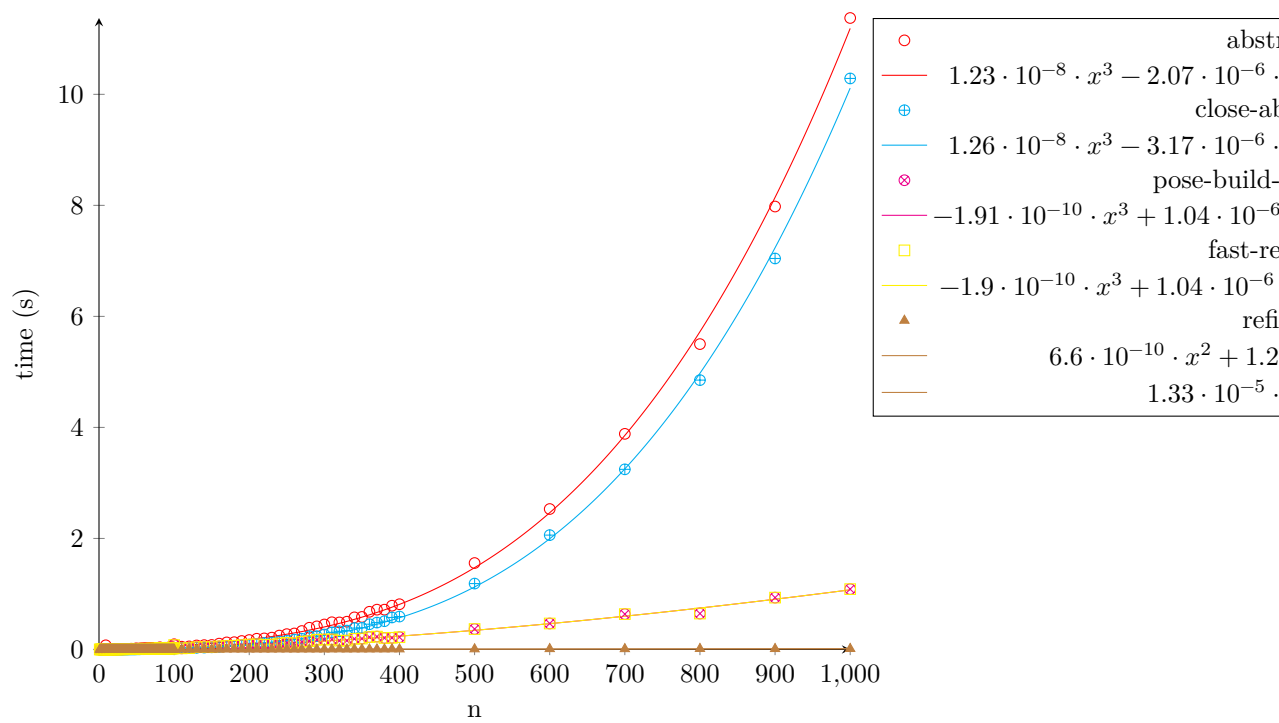


Figure 11: timing-rewrite-repeated-app-fast-rewrite

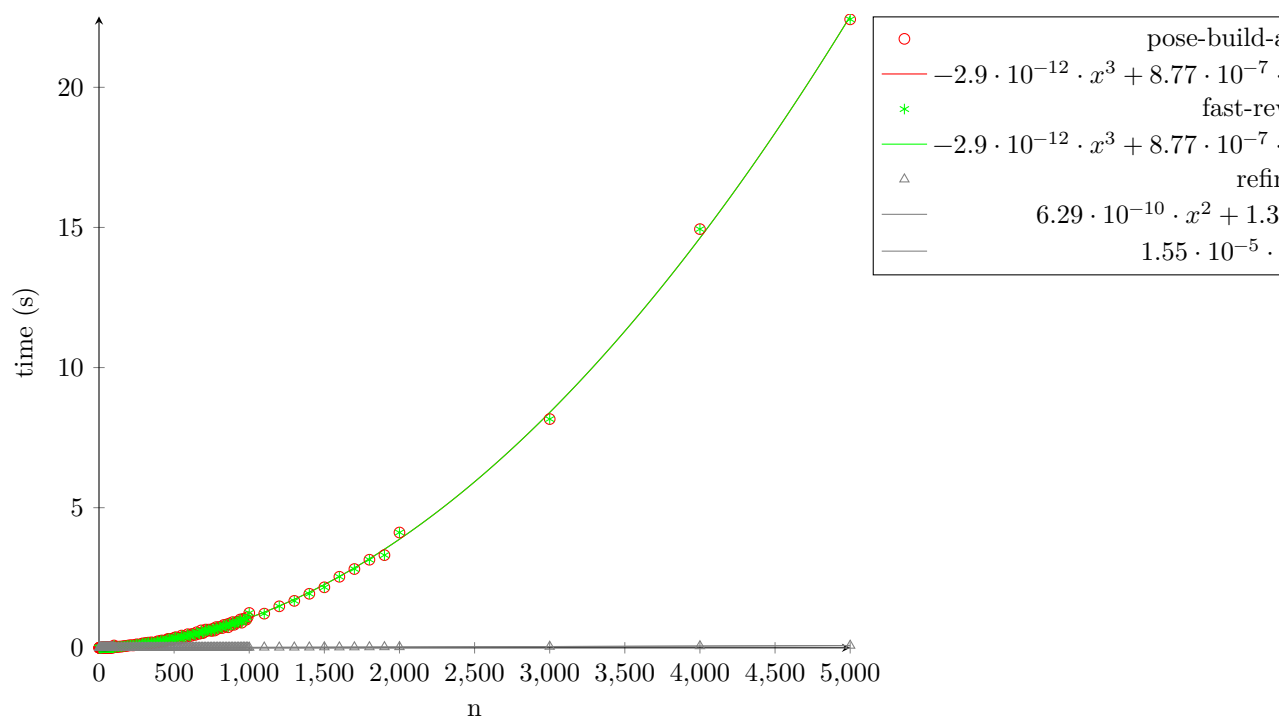
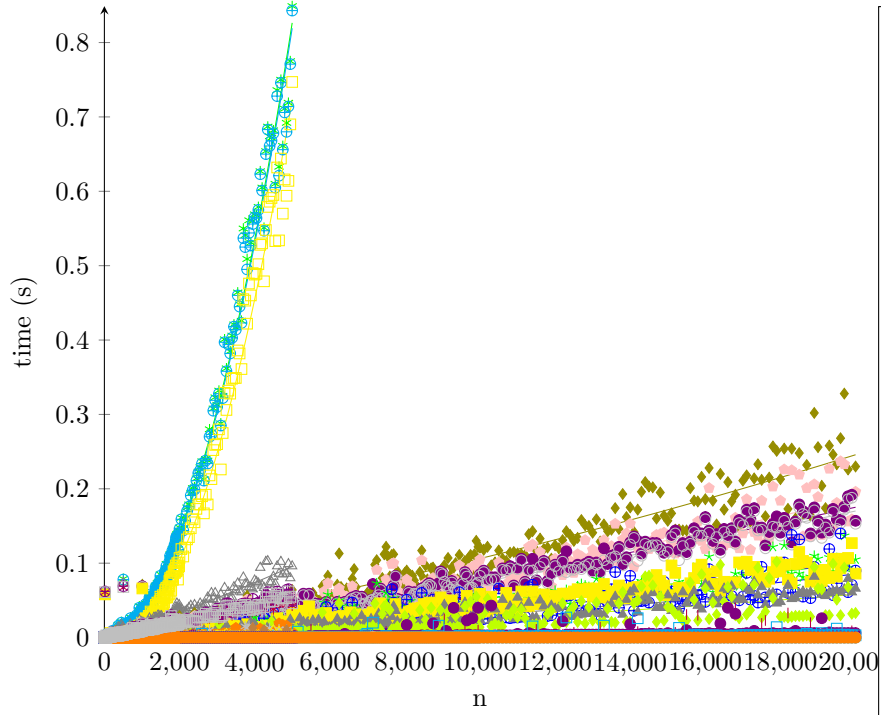


Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract



*	reif-for-beta-Param
—	$3.17 \cdot 10^{-8} \cdot x^2 + 6$
⊕	norm-reif-for-beta-P
—	$3.17 \cdot 10^{-8} \cdot x^2 + 5$
□	eval-lazy-for-beta-P
—	$3.1 \cdot 10^{-8} \cdot x^2 - 1$
△	actual-reif-for-beta-I
—	$6.73 \cdot 10^{-10} \cdot x^2 + 1$
◇	cbv-for-beta-Param
—	$1.08 \cdot 10^{-10} \cdot x^2 + 2$
◆	reif-for-Parametr
—	$1.68 \cdot 10^{-10} \cdot x^2 + 8$
●	norm-reif-for-Param
—	$1.23 \cdot 10^{-10} \cdot x^2 + 6$
●	reif-for-Parametrici
—	$9.94 \cdot 10^{-11} \cdot x^2 + 6$
○	norm-reif-for-Parametr
—	$1.03 \cdot 10^{-10} \cdot x^2 + 6$
*	actual-reif-for-Param
—	$5.2 \cdot 10^{-11} \cdot x^2 + 3$
⊕	eval-lazy-for-Param
—	$7.13 \cdot 10^{-11} \cdot x^2 + 2$
■	actual-reif-for-Parametr
—	$7.19 \cdot 10^{-11} \cdot x^2 + 3$
▲	eval-lazy-for-Parametr
—	$3.27 \cdot 10^{-11} \cdot x^2 + 2$
◆	lazy-beta-iota-for-Para
—	$4.37 \cdot 10^{-11} \cdot x^2 + 2$
●	cbv-for-beta-Para
—	$1.59 \cdot 10^{-10} \cdot x^2 + 1$
—	cbv-for-Parametrici
—	$1.31 \cdot 10^{-11} \cdot x^2 + 2$
●	cbv-for-Parametr
—	$-4.7 \cdot 10^{-12} \cdot x^2 + 5$
*	lazy-beta-iota-for-beta
—	$1.19 \cdot 10^{-10} \cdot x^2 + 7$
□	lazy-beta-iota-for-Param
—	$9.05 \cdot 10^{-13} \cdot x^2 + 2$
△	eval-lazy-for-beta-Par
—	$9.04 \cdot 10^{-11} \cdot x^2 + 3$
◆	lazy-beta-iota-for-beta-I
—	$1.58 \cdot 10^{-10} \cdot x^2 - 5$
—	transitivity-(Denote-rv)-for-b
●	$1.58 \cdot 10^{-10} \cdot x^2 - 5$
*	transitivity-(Denote-rv)-for
□	$1.58 \cdot 10^{-10} \cdot x^2 - 5$
○	transitivity-(Denote-rv)-for-P
—	$1.58 \cdot 10^{-10} \cdot x^2 - 5$
—	transitivity-(Denote-rv)-for
○	$1.58 \cdot 10^{-10} \cdot x^2 - 5$

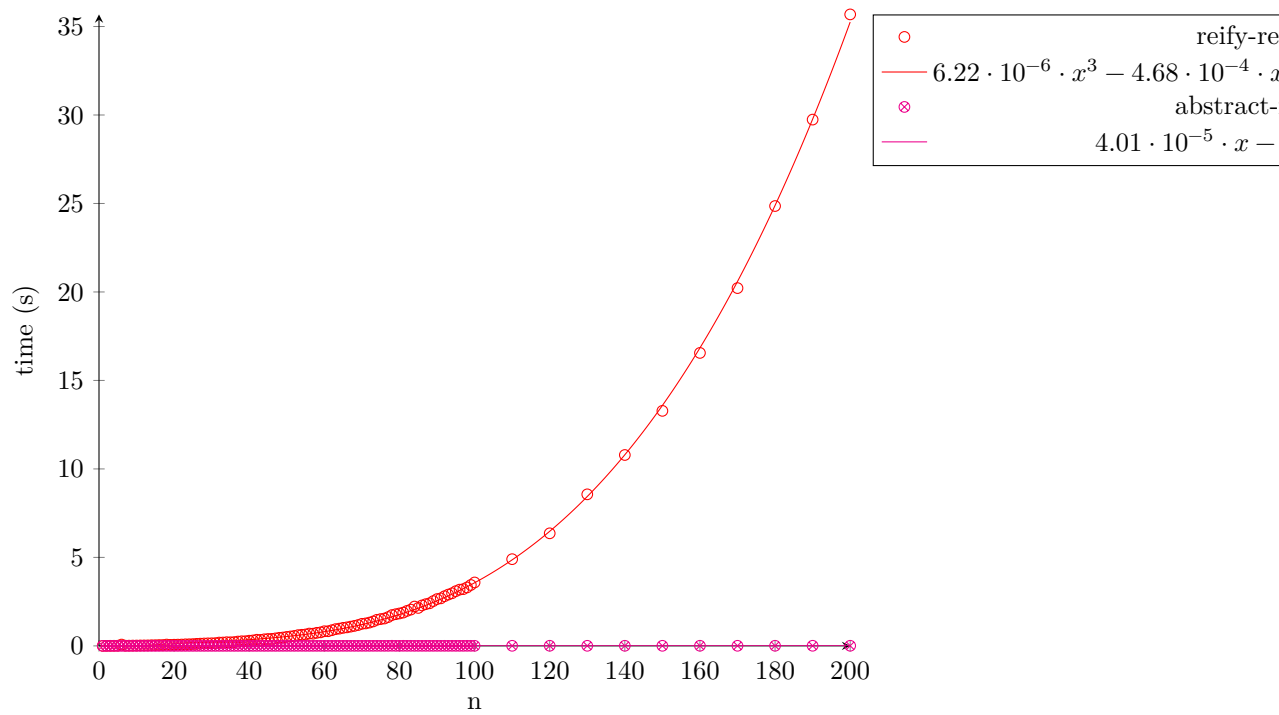


Figure 14: timing-typeclass-reification-let-in-HOAS

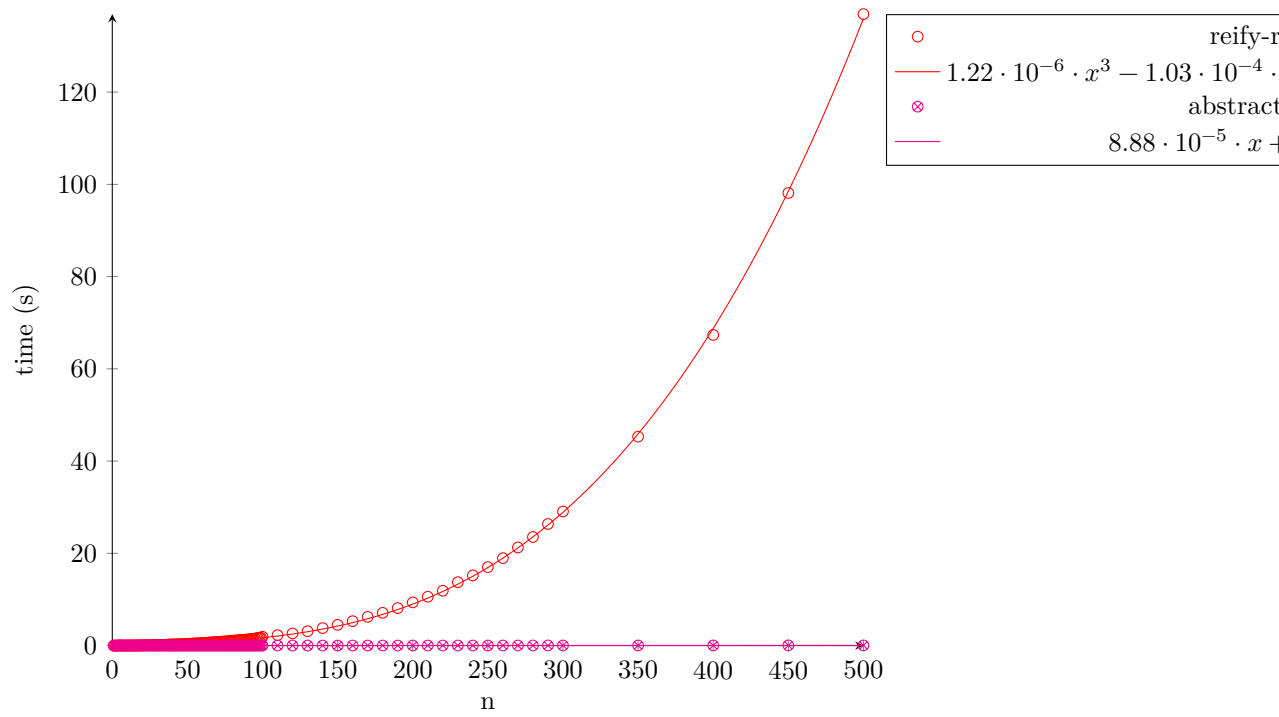


Figure 15: timing-typeclass-reification-let-in-PHOAS

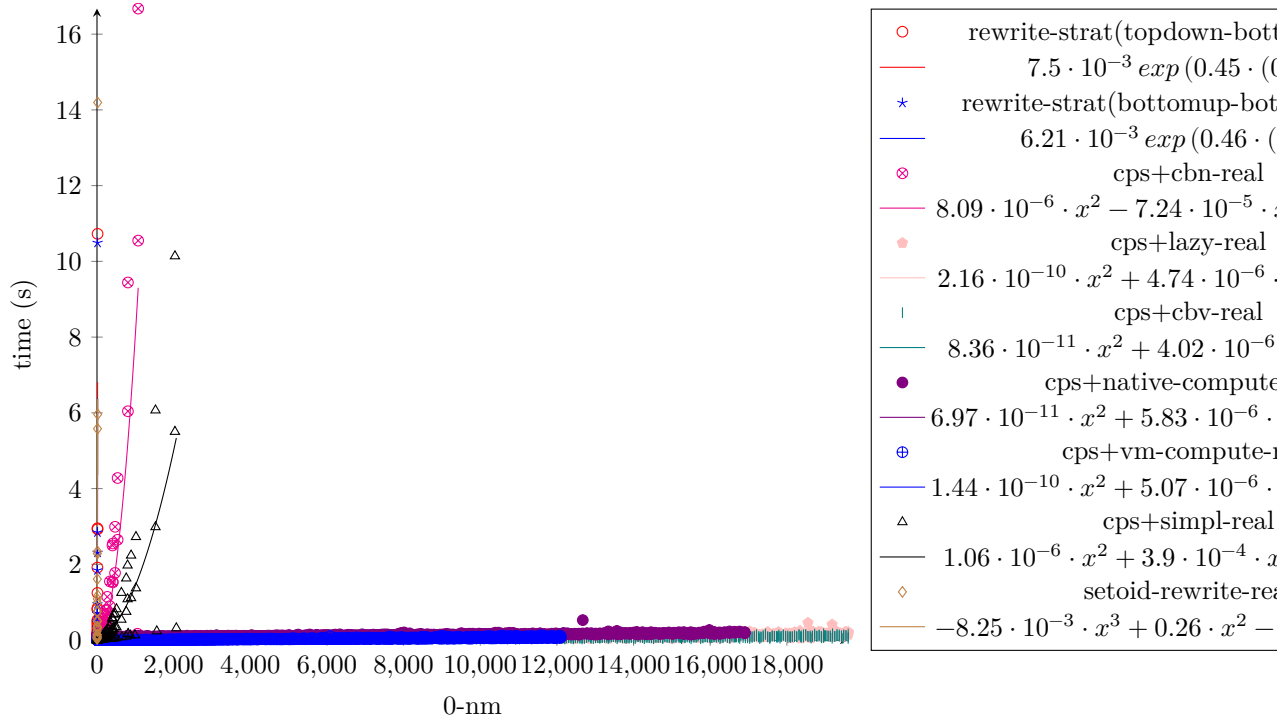


Figure 16: timing-rewrite-lift-lets-map param-1-n 1, param-2-m 1

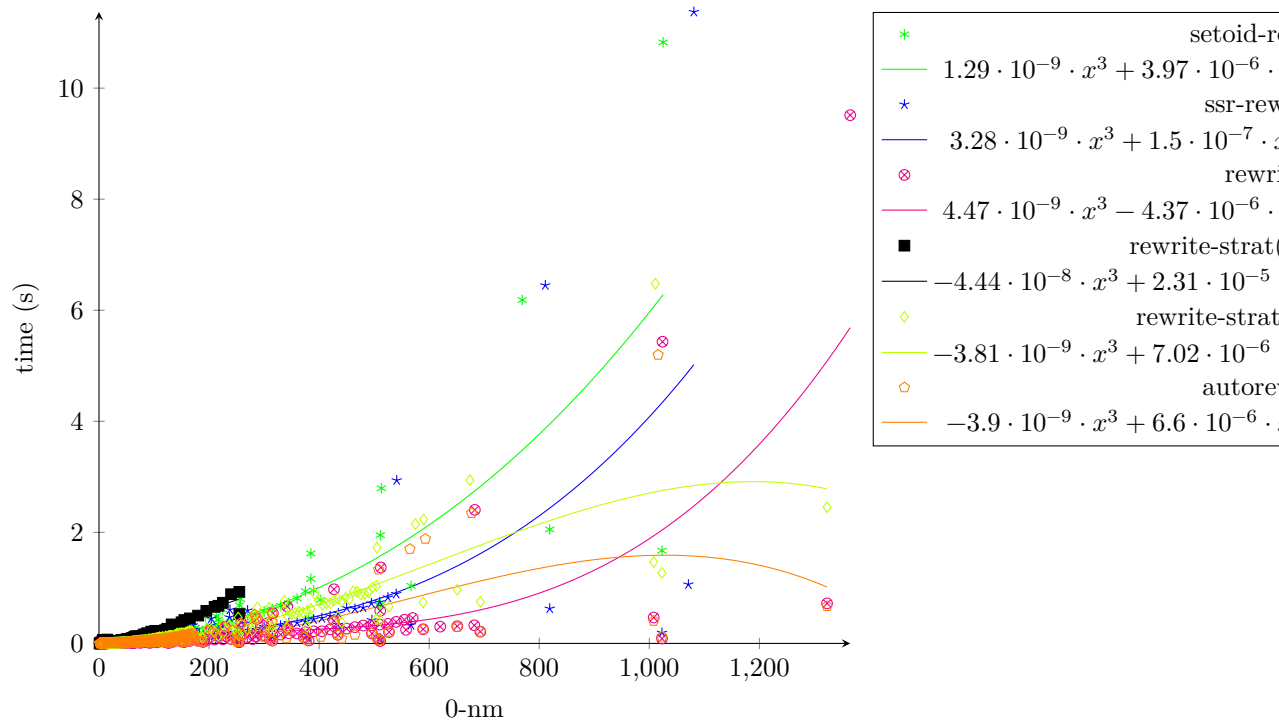


Figure 17: timing-rewrite-plus-0-tree param-1-n 0, param-2-m 1, param-3-input-size 5, param-4-output-size 3, param-5-num-rewrites 1

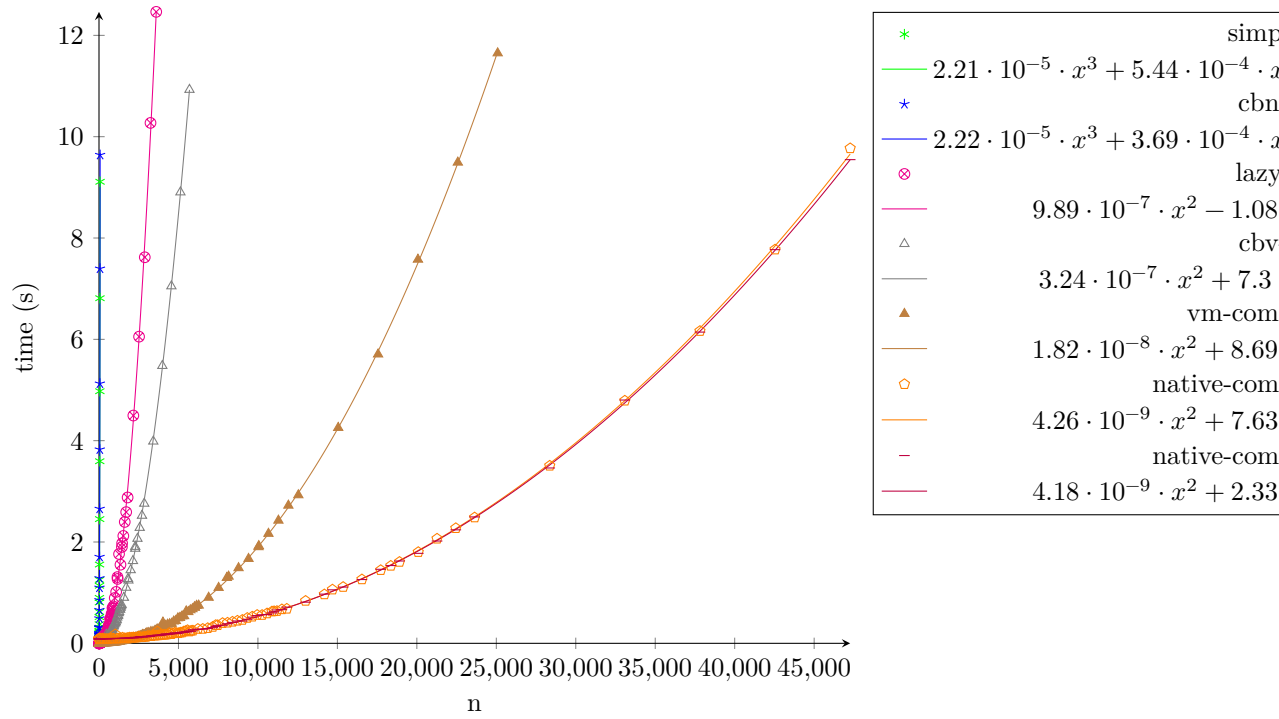


Figure 18: timing-sieve-of-eratosthenes

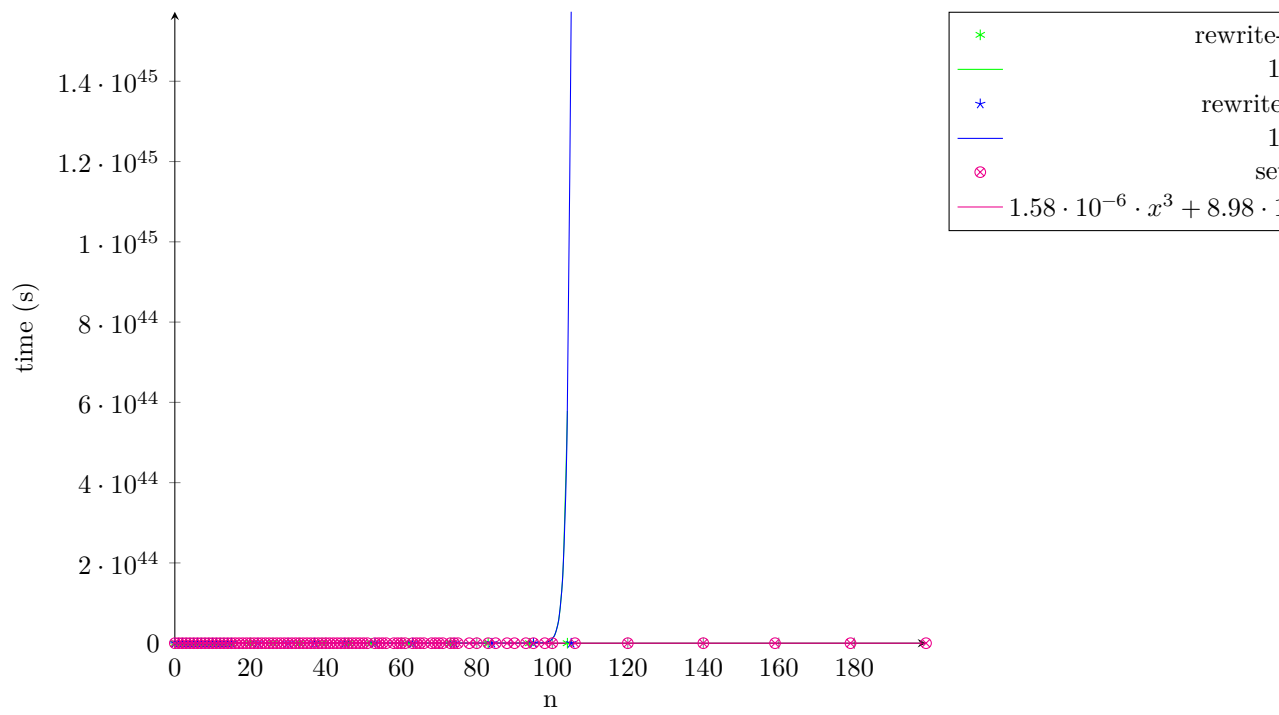


Figure 19: timing-rewrite-under-lets-plus-0