

Figure 1: timing-pattern

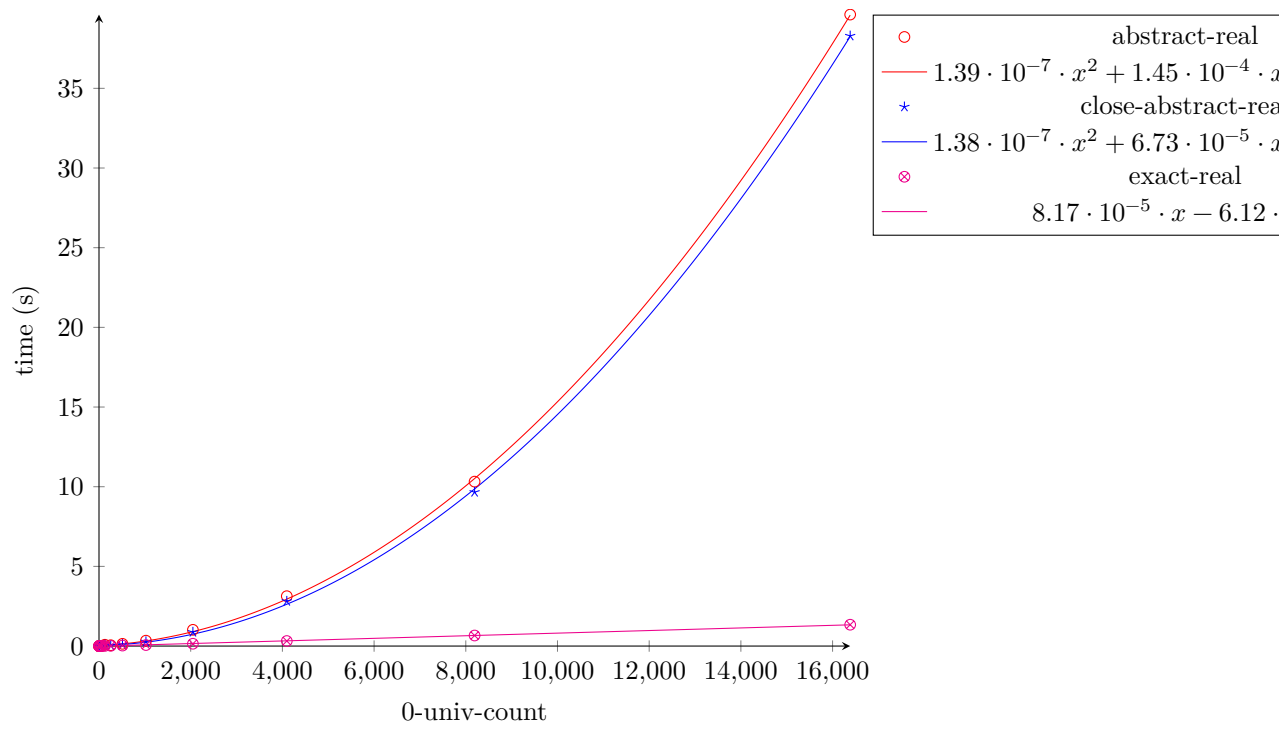


Figure 2: timing-n-polymorphic-universes param-1-n 0

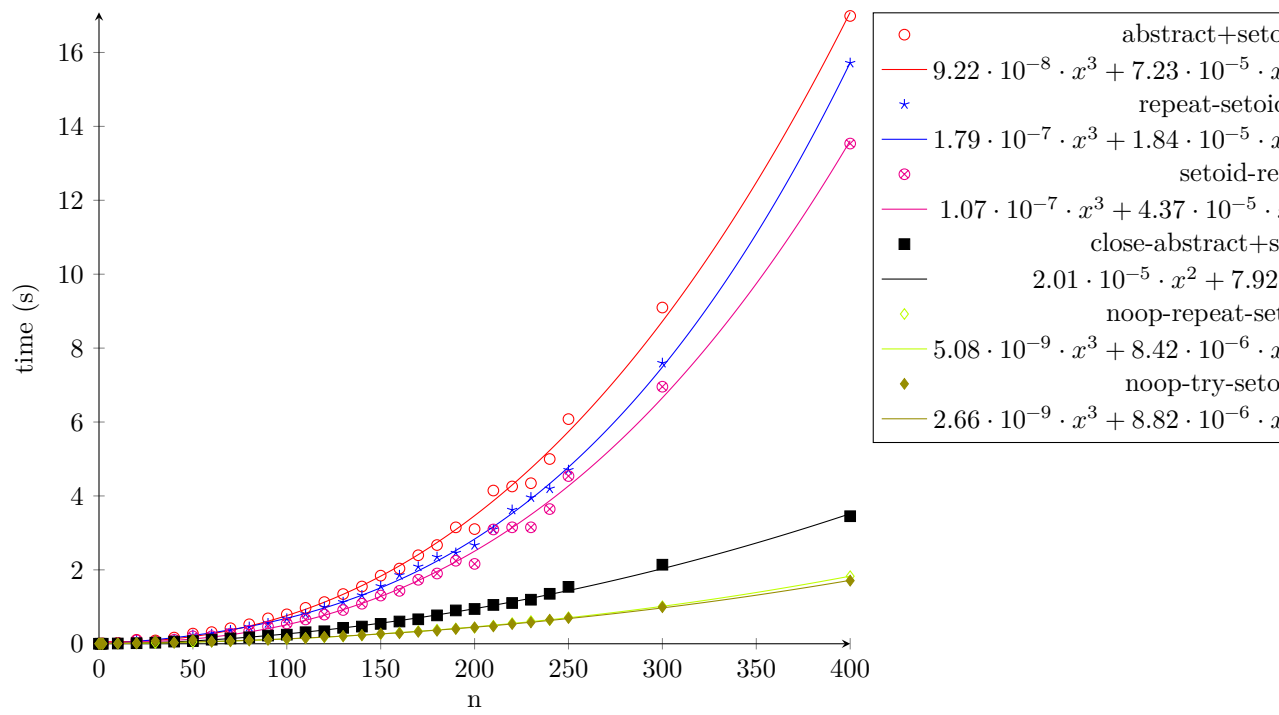


Figure 3: timing-repeat-setoid-rewrite-under-binders

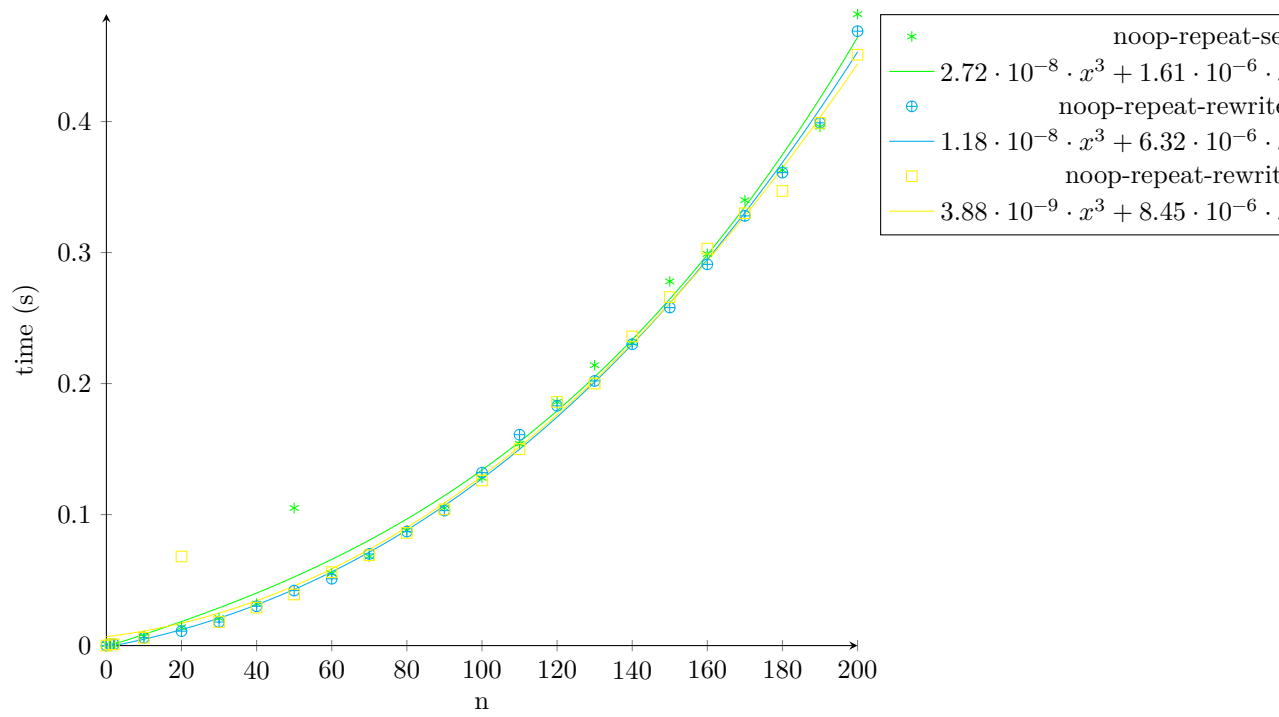


Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

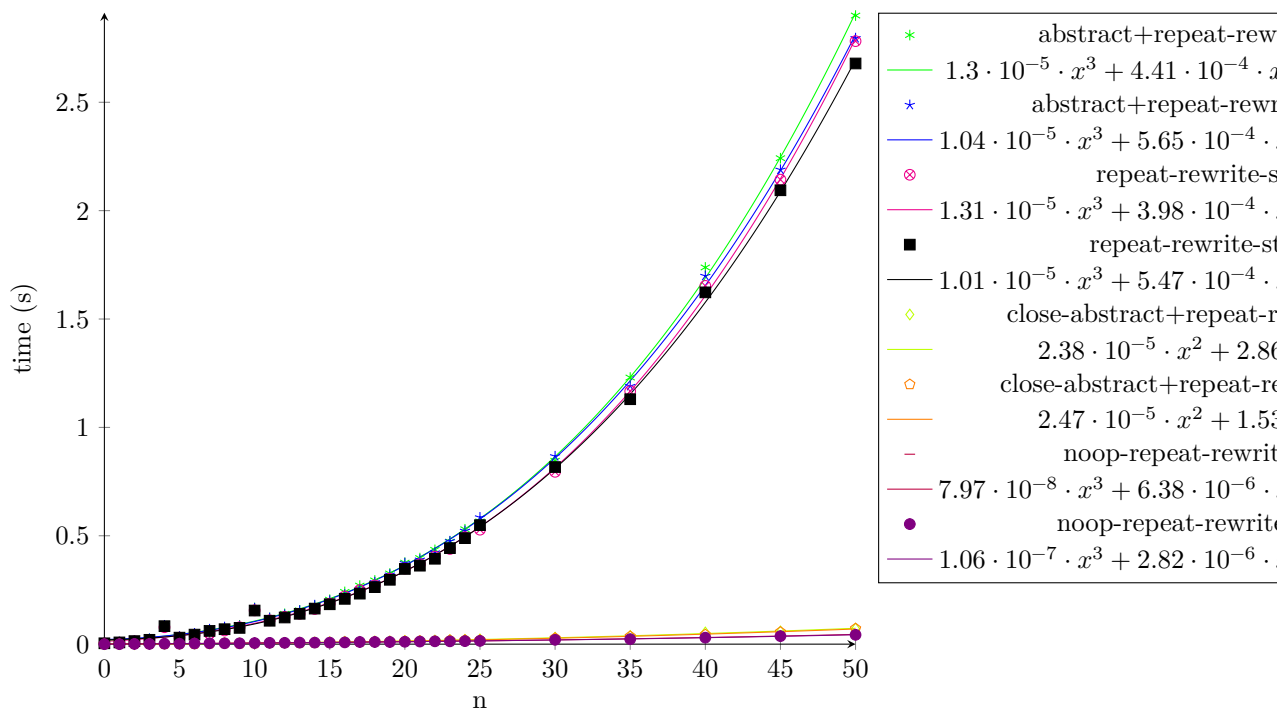


Figure 5: timing-rewrite-strat-under-binders

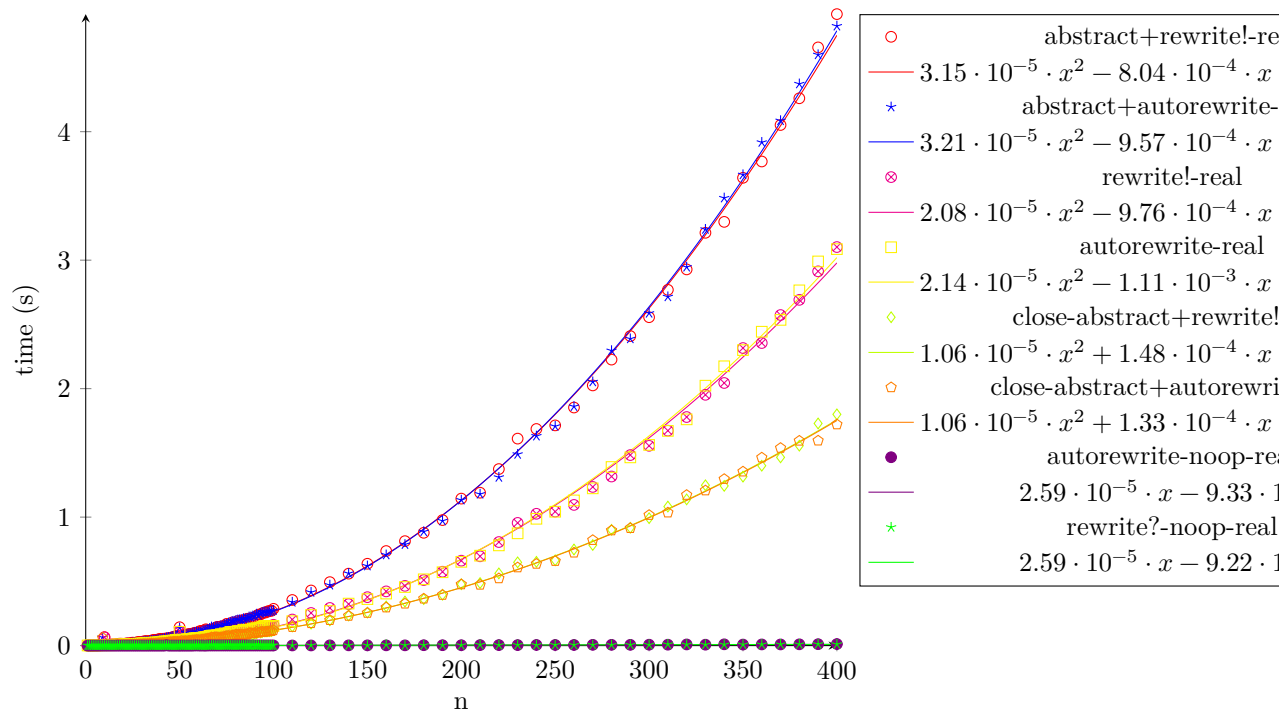


Figure 6: timing-rewrite-repeated-app-autorewrite

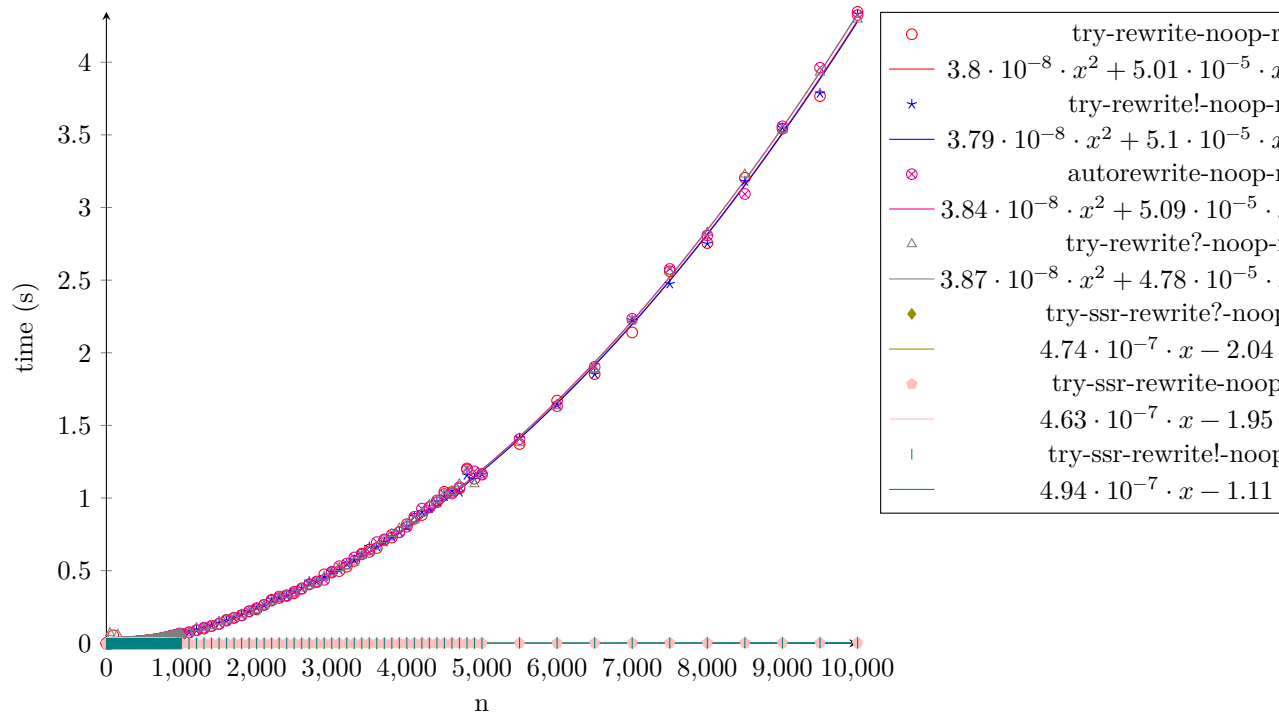


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

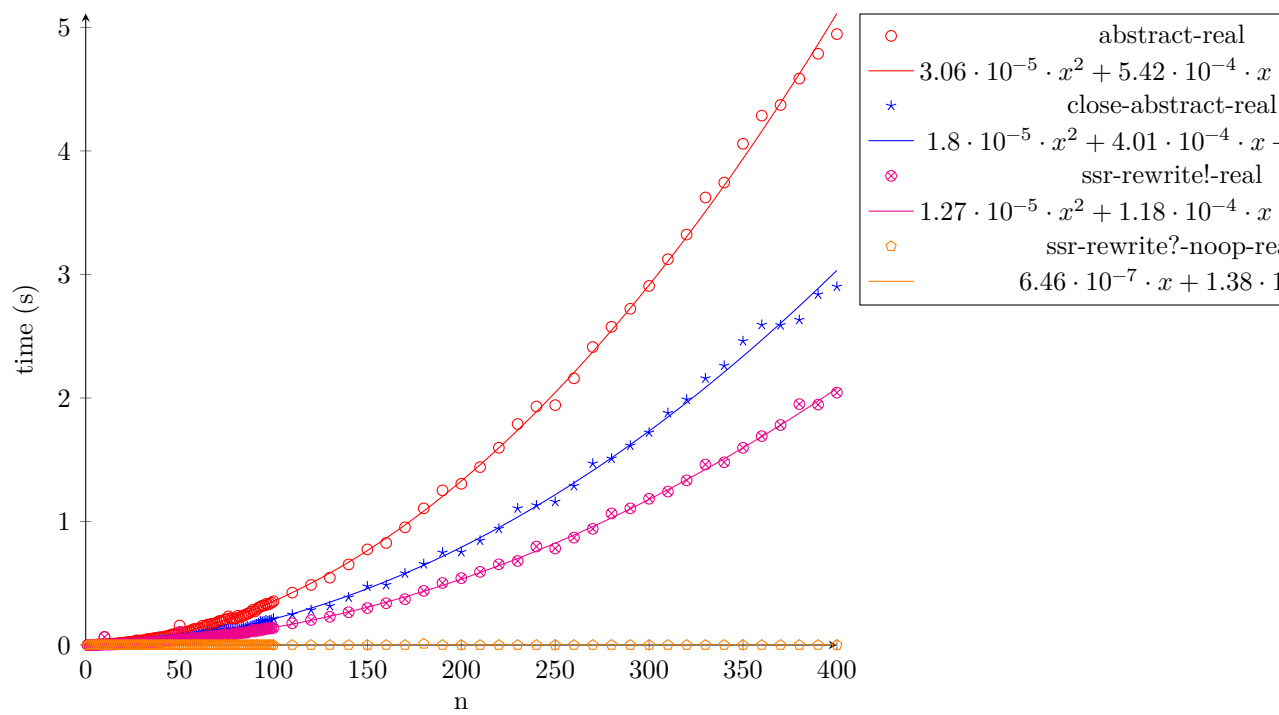


Figure 8: timing-rewrite-repeated-app-ssrrewrite

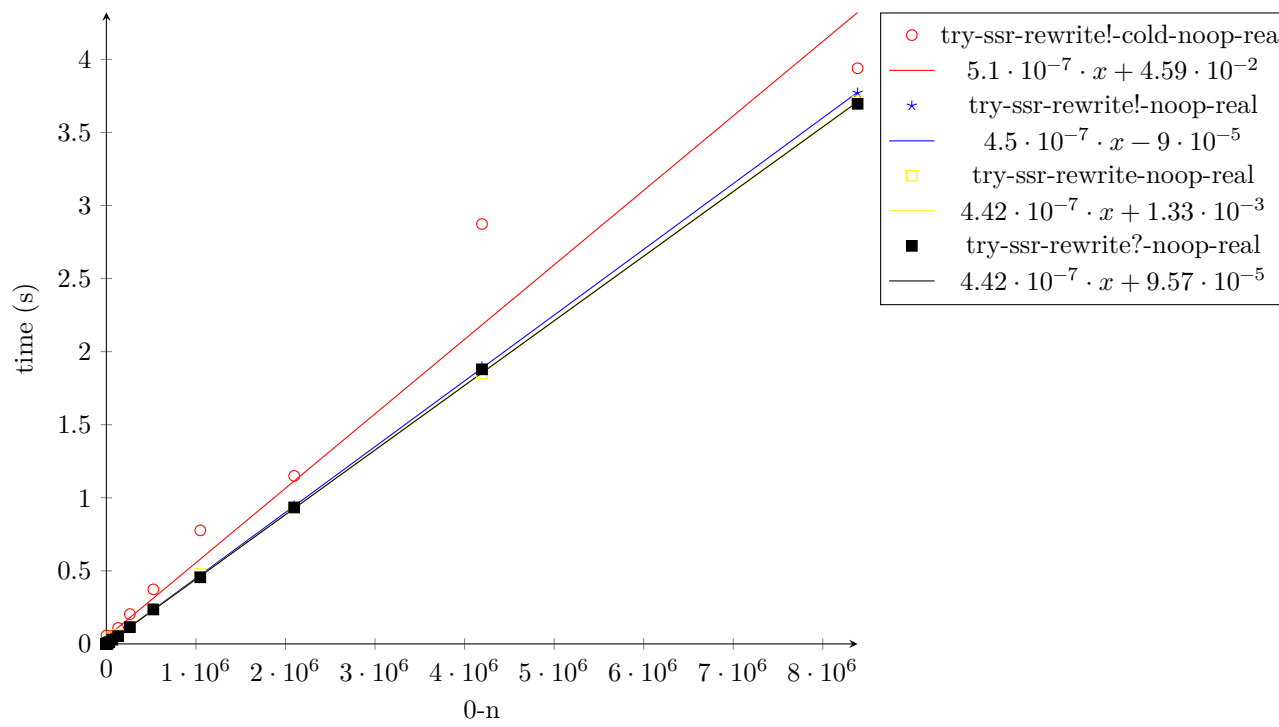


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

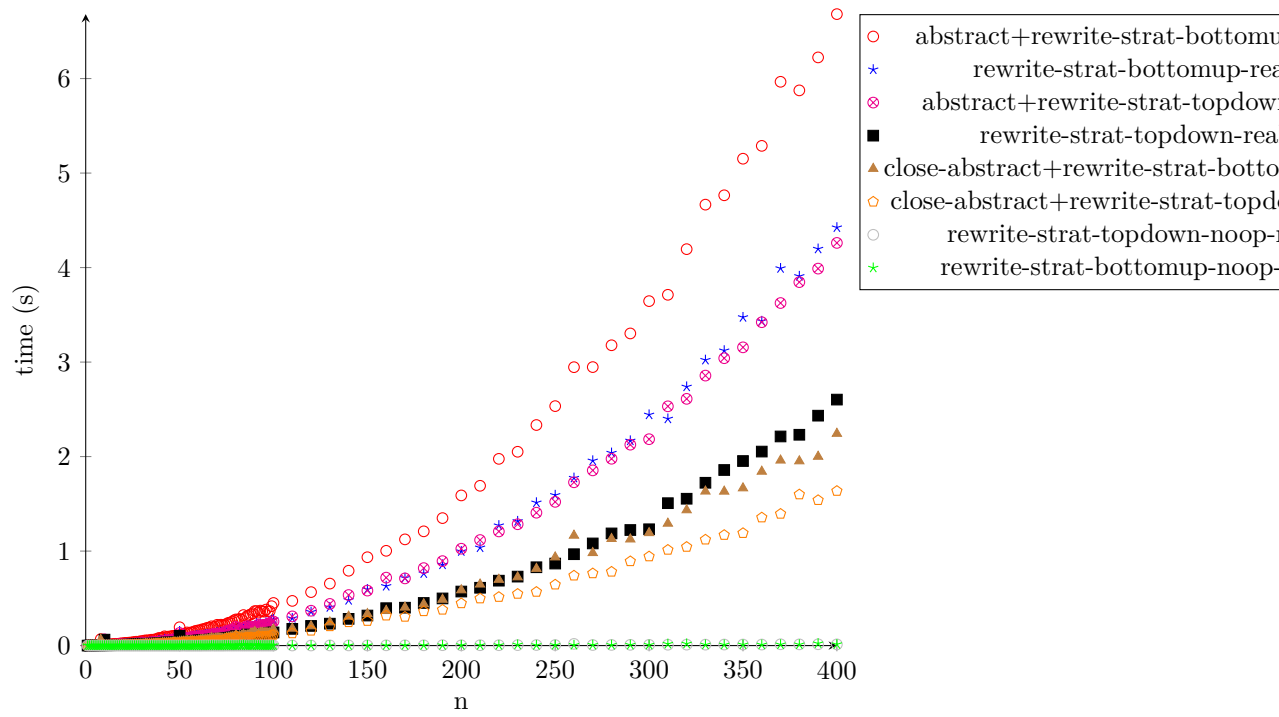


Figure 10: timing-rewrite-repeated-app-rewrite-strat

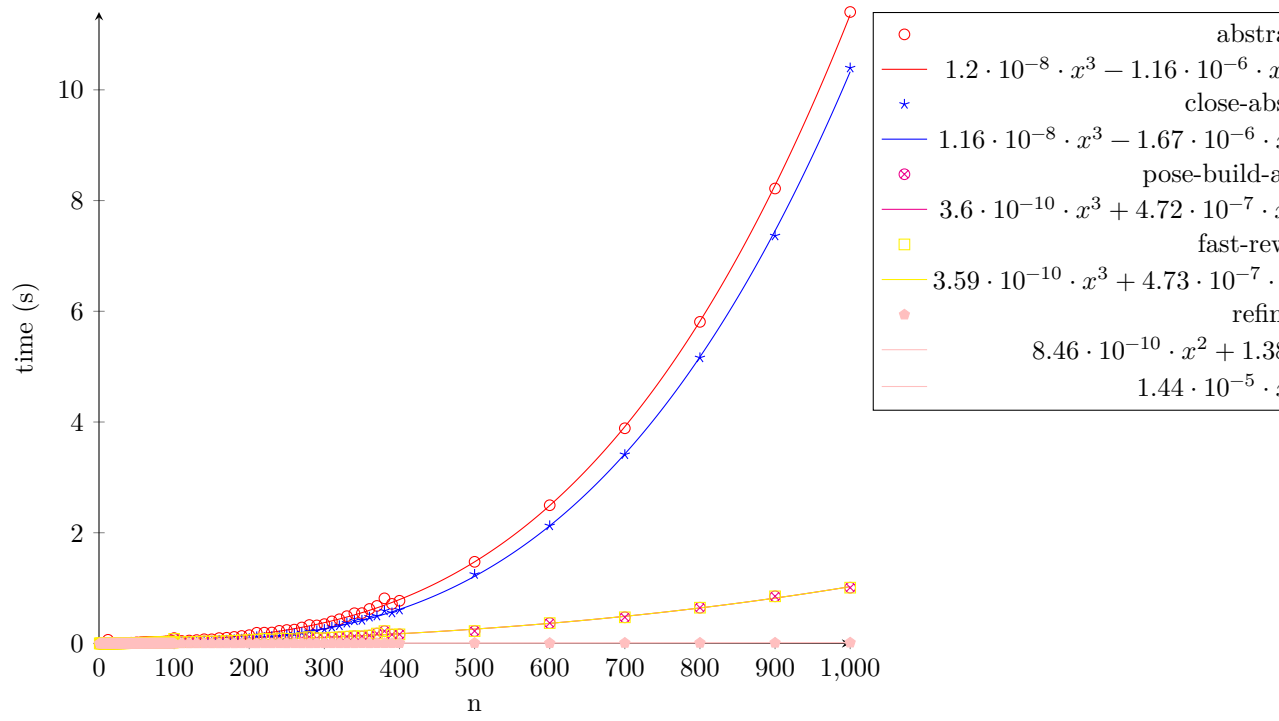


Figure 11: timing-rewrite-repeated-app-fast-rewrite

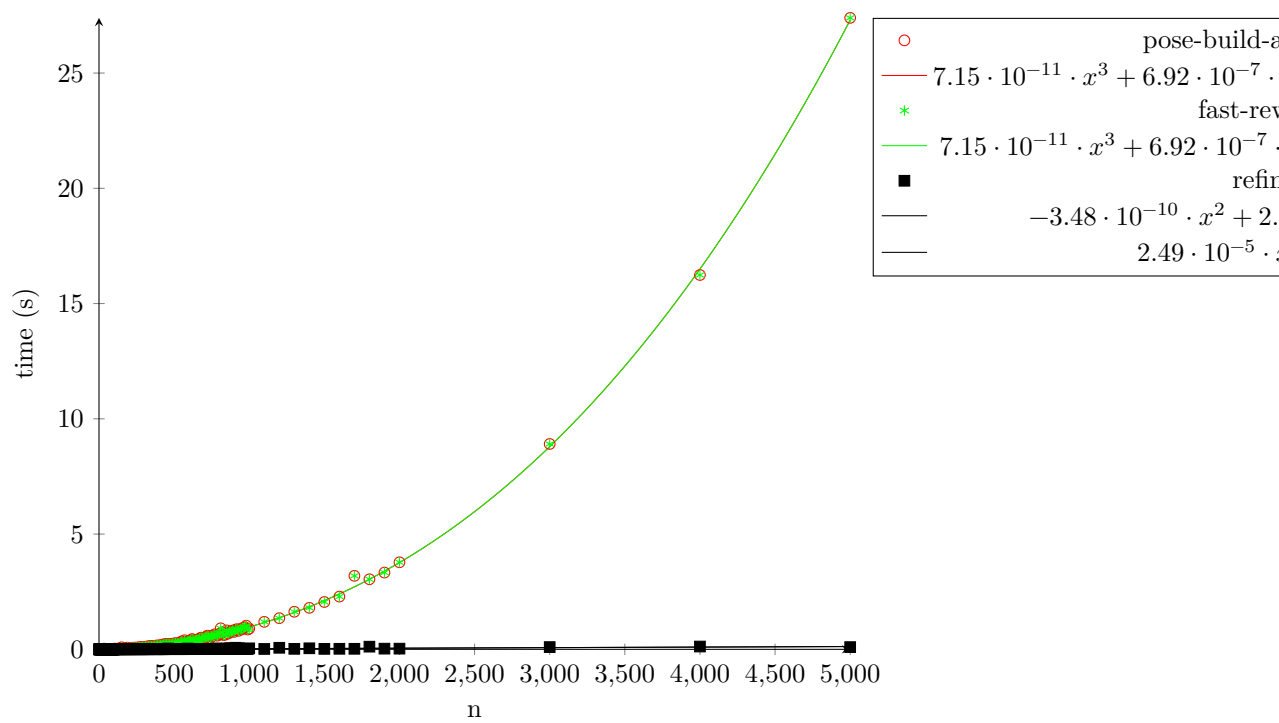
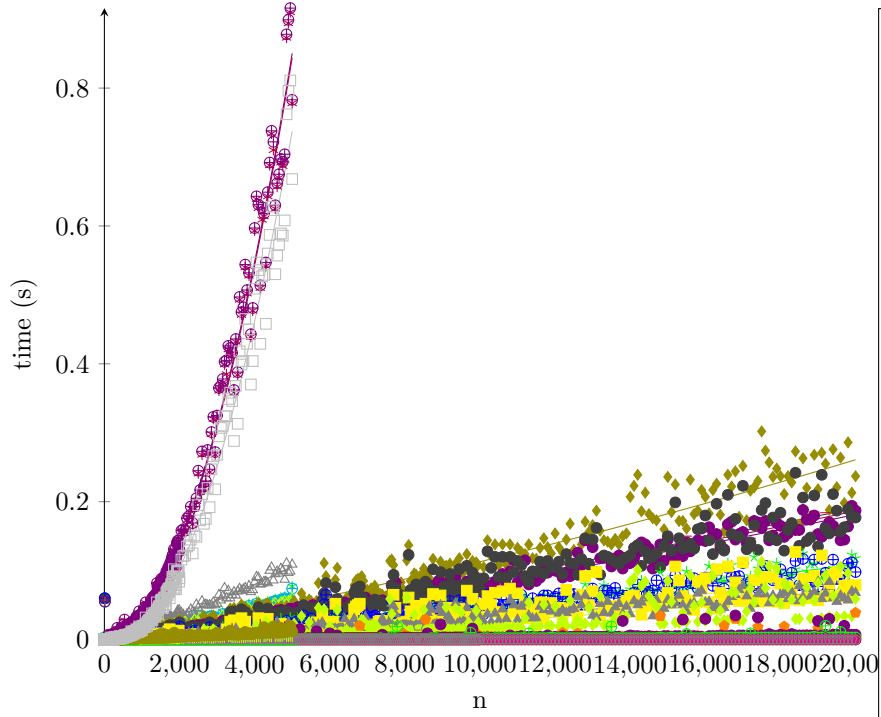


Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract



*	reif-for-beta-Param
—	$3.67 \cdot 10^{-10} \cdot x^2 + 1$
⊕	norm-reif-for-beta-Par
—	$3.89 \cdot 10^{-10} \cdot x^2 + 9$
□	eval-lazy-for-beta-Par
—	$1.12 \cdot 10^{-10} \cdot x^2 + 3$
△	actual-reif-for-beta-I
—	$1.16 \cdot 10^{-9} \cdot x^2 + 1$
◇	actual-reif-for-beta-Pa
—	$3.08 \cdot 10^{-10} \cdot x^2 + 9$
◆	reif-for-Parametr
—	$1.75 \cdot 10^{-10} \cdot x^2 + 9$
—	reif-for-Parametrici
—	$1.06 \cdot 10^{-10} \cdot x^2 + 7$
●	norm-reif-for-Parametr
—	$1.05 \cdot 10^{-10} \cdot x^2 + 6$
●	norm-reif-for-Param
—	$8.33 \cdot 10^{-11} \cdot x^2 + 7$
*	actual-reif-for-Parametr
—	$8.05 \cdot 10^{-11} \cdot x^2 + 3$
⊕	actual-reif-for-Param
—	$5.39 \cdot 10^{-11} \cdot x^2 + 4$
■	eval-lazy-for-Param
—	$3.29 \cdot 10^{-11} \cdot x^2 + 3$
▲	eval-lazy-for-Parametr
—	$2.58 \cdot 10^{-11} \cdot x^2 + 3$
◆	lazy-beta-iota-for-Para
—	$9.17 \cdot 10^{-11} \cdot x^2 + 1$
●	cbv-for-Parametr
—	$1.38 \cdot 10^{-11} \cdot x^2 + 2$
—	cbv-for-beta-Par
—	$1.64 \cdot 10^{-10} \cdot x^2 + 1$
●	cbv-for-Parametrici
—	$1.37 \cdot 10^{-11} \cdot x^2 + 2$
⊕	lazy-beta-iota-for-Param
—	$4.08 \cdot 10^{-12} \cdot x^2 + 1$
■	lazy-beta-iota-for-beta-I
—	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
◇	transitivity-(Denote-rv)-for-b
◆	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
●	transitivity-(Denote-rv)-for
*	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
△	transitivity-(Denote-rv)-for-P
◆	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
—	transitivity-(Denote-rv)-for
●	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
*	pre-for-beta-Param
□	$5.17 \cdot 10^{-11} \cdot x^2 + 2$
—	pre-for-beta-Para
▲	$5.17 \cdot 10^{-11} \cdot x^2 + 2$

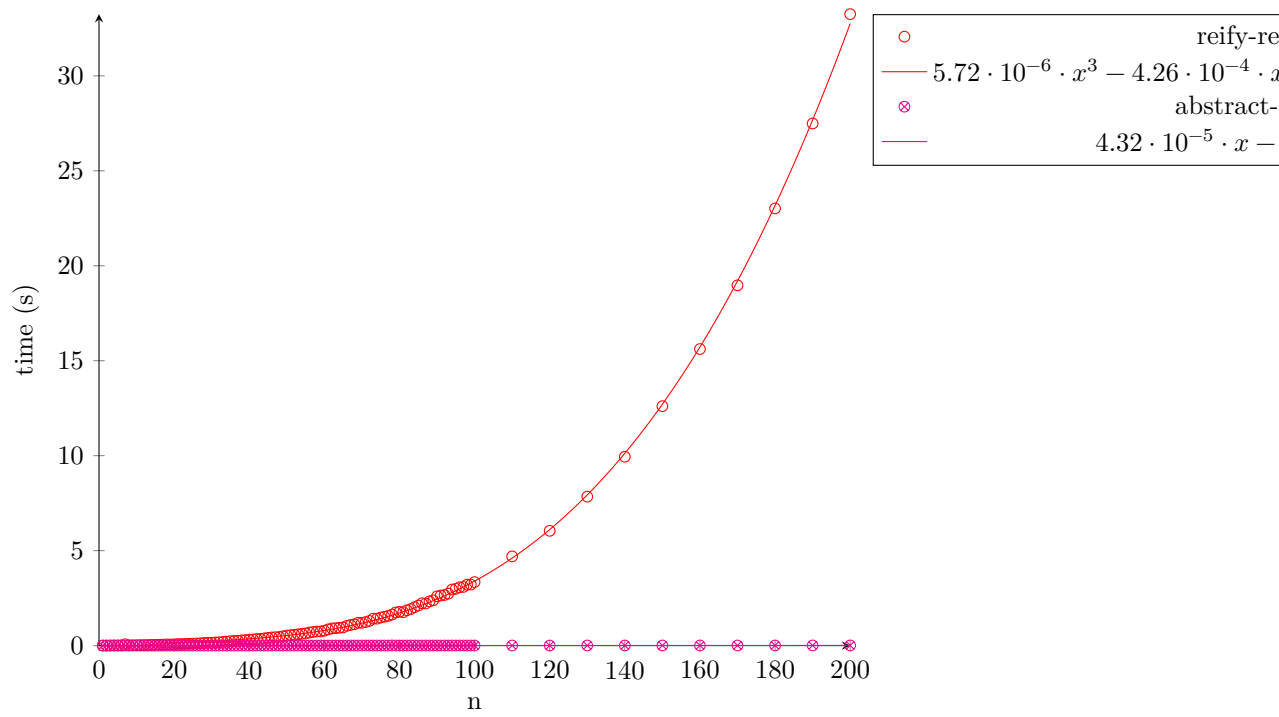


Figure 14: timing-typeclass-reification-let-in-HOAS

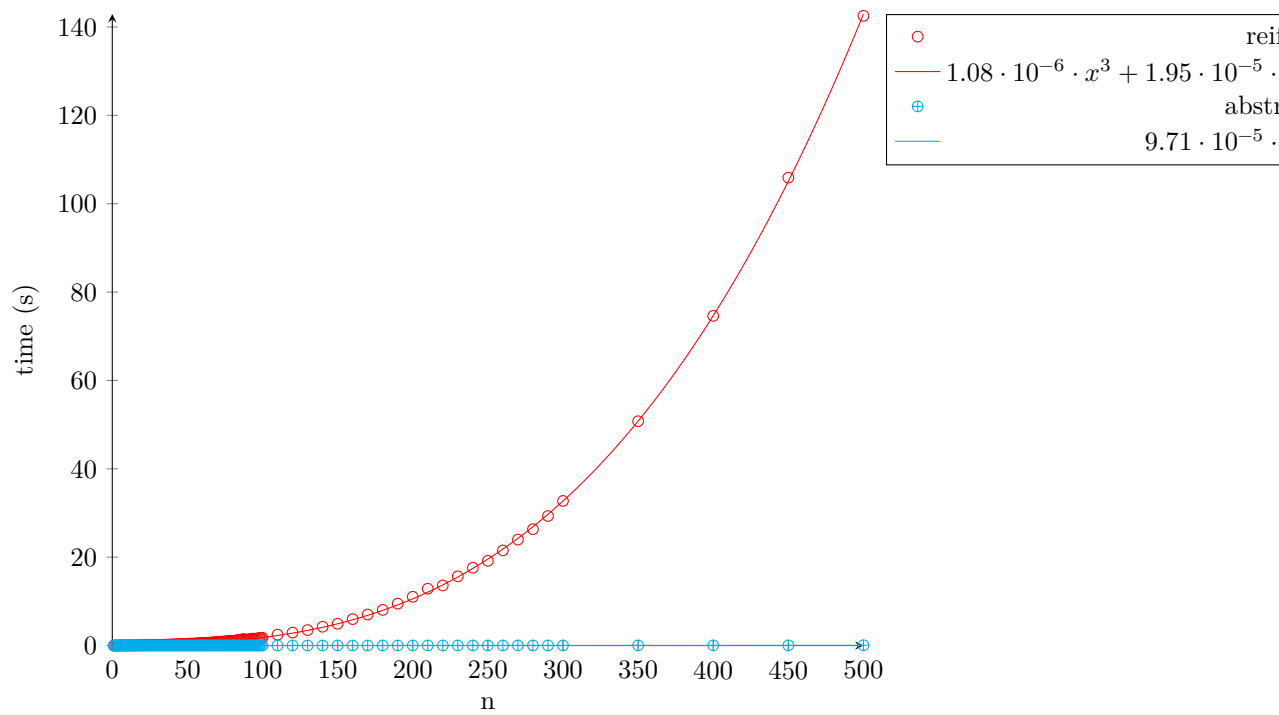


Figure 15: timing-typeclass-reification-let-in-PHOAS

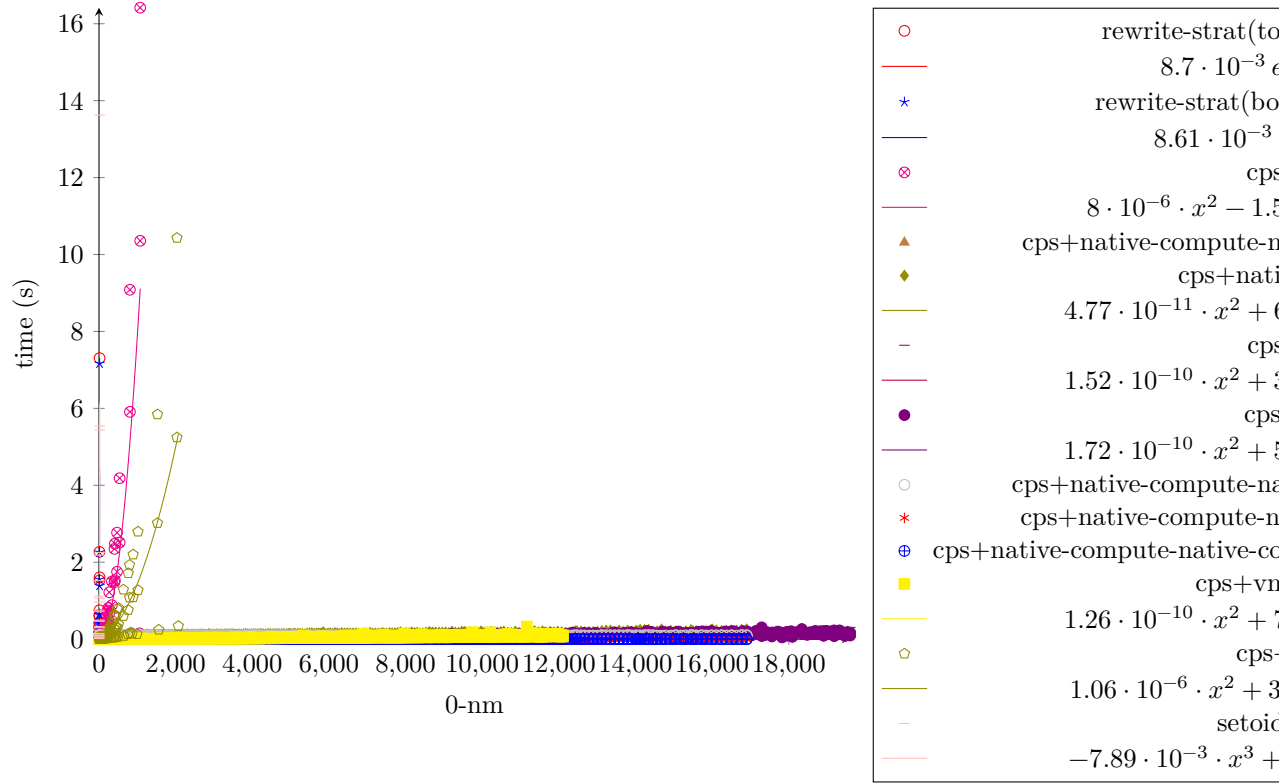


Figure 16: timing-rewrite-lift-lets-map param-1-n 1, param-2-m 1

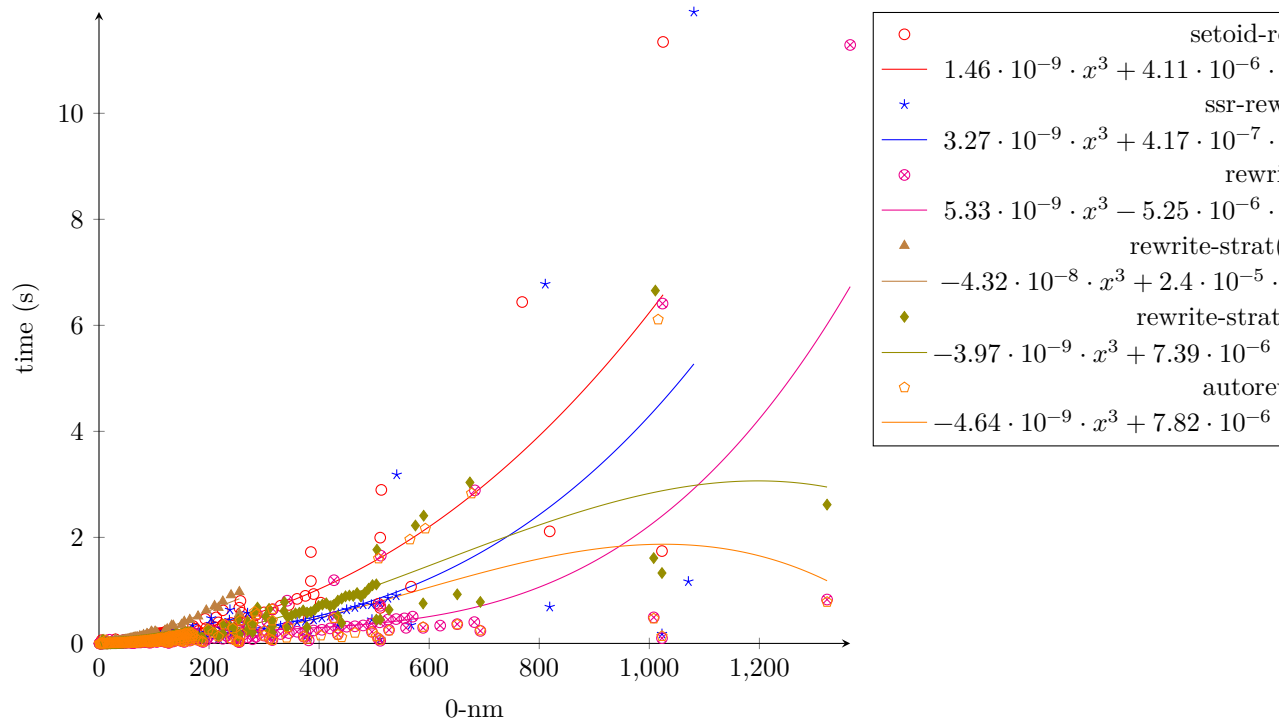


Figure 17: timing-rewrite-plus-0-tree param-1-n 0, param-2-m 1, param-3-input-size 5, param-4-output-size 3, param-5-num-rewrites 1

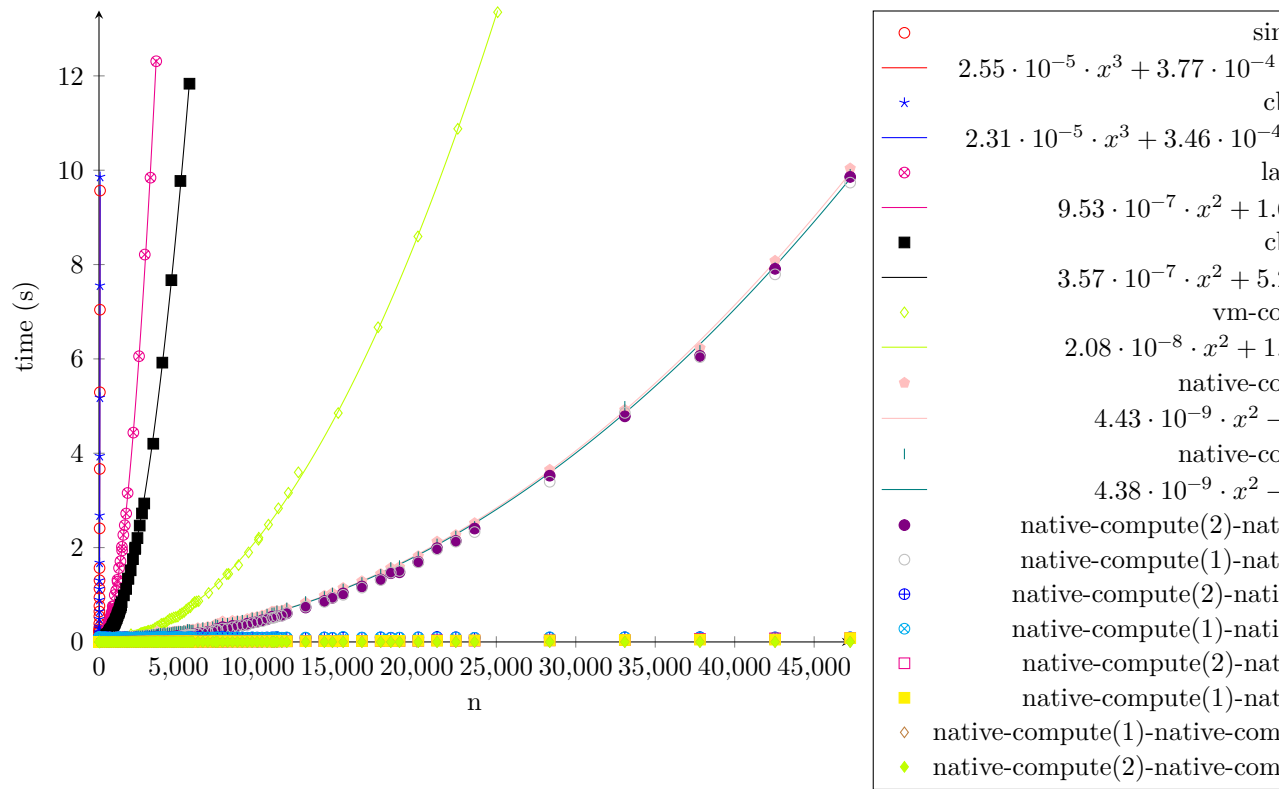


Figure 18: timing-sieve-of-eratosthenes

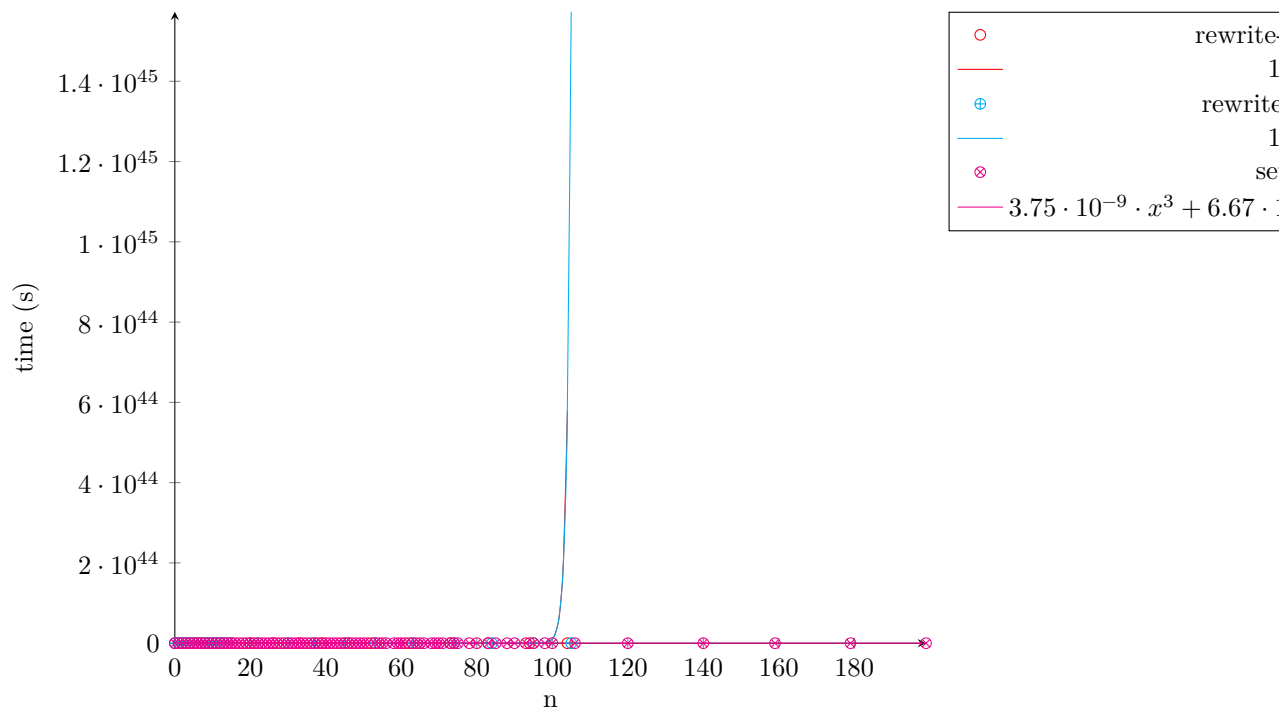


Figure 19: timing-rewrite-under-lets-plus-0

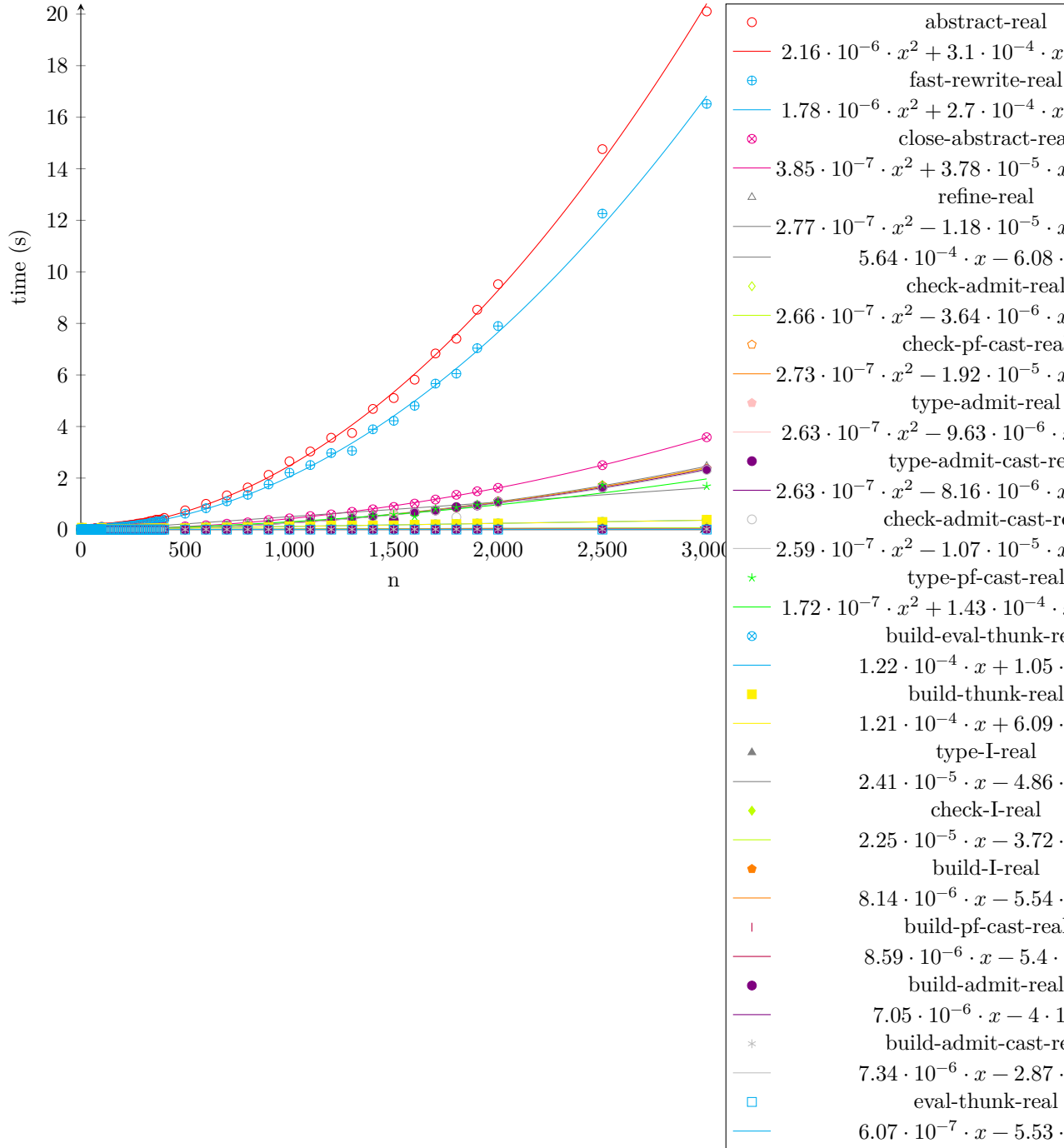


Figure 20: timing-rewrite-repeated-app-fast-rewrite-ltac2