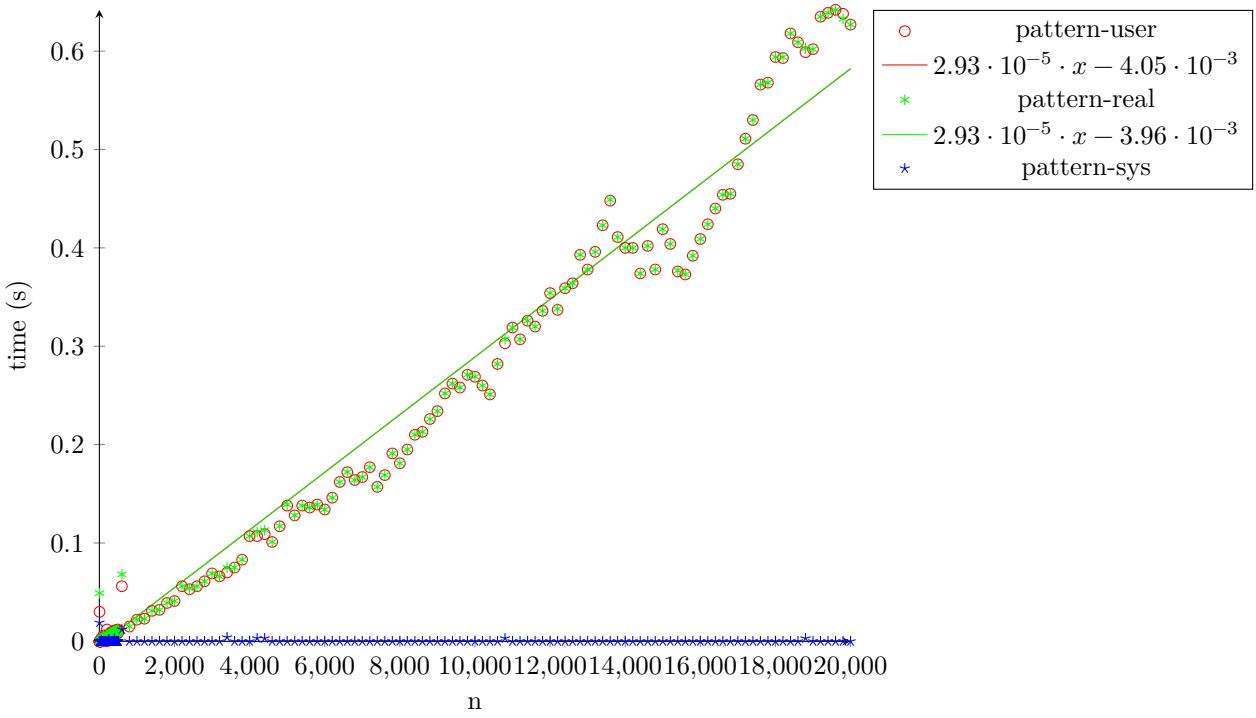


Figure 1: timing-pattern

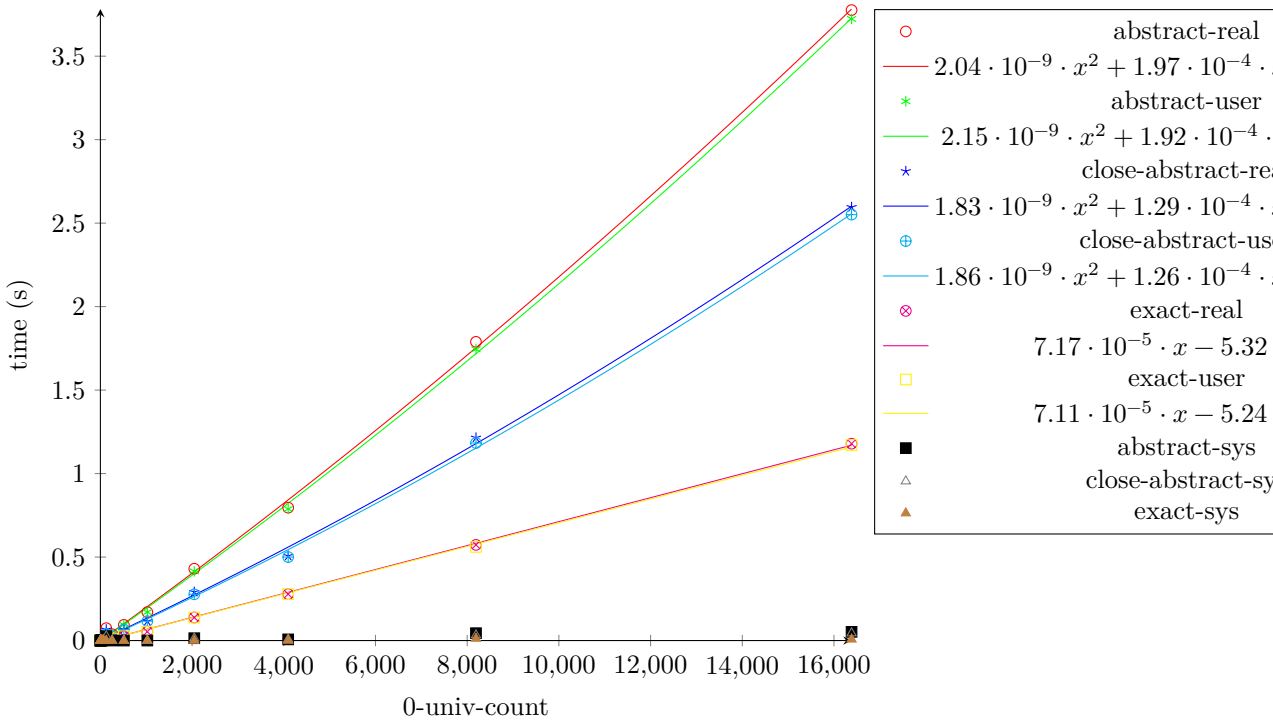


Figure 2: timing-n-polymorphic-universes param-1-n 0

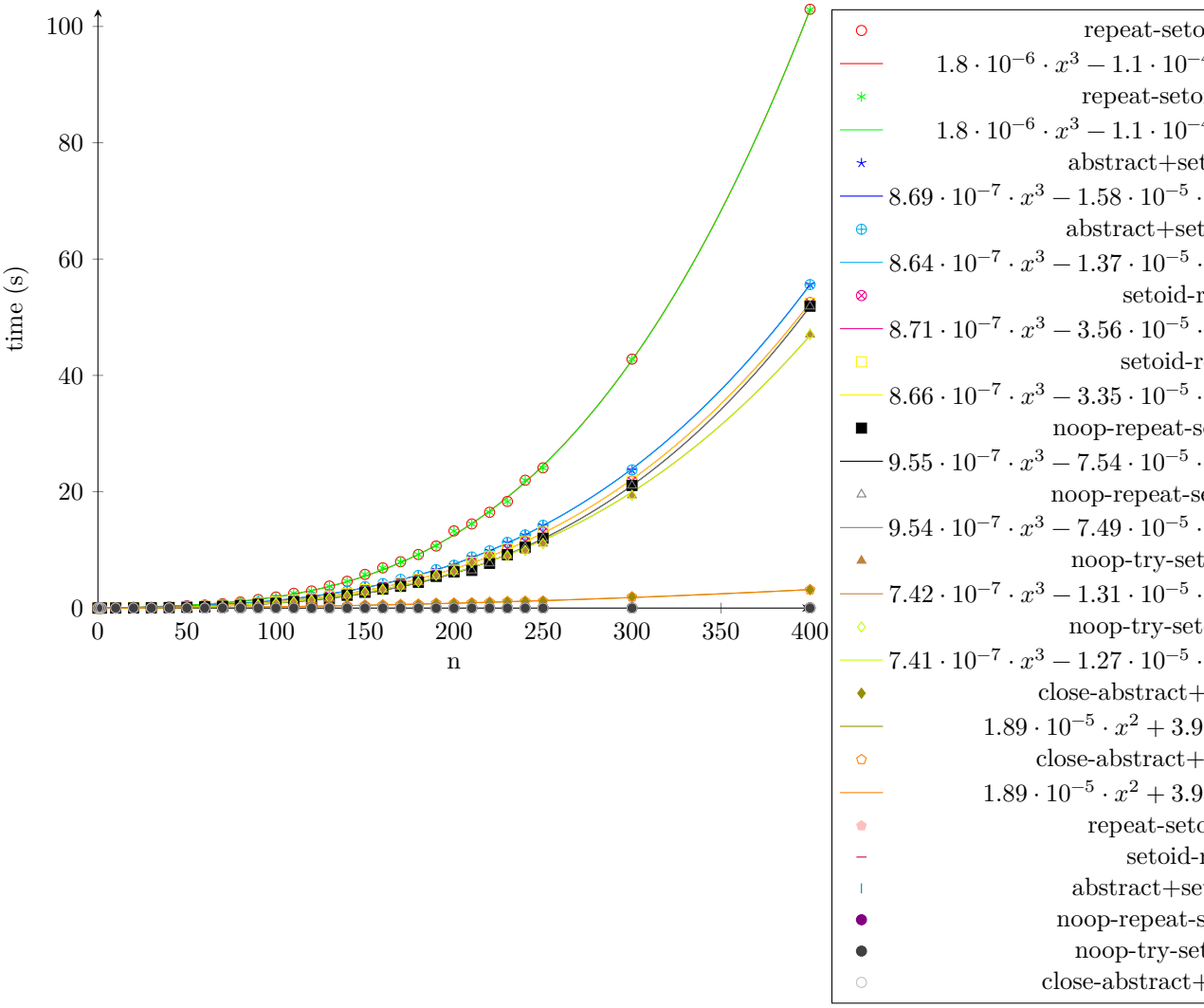


Figure 3: timing-repeat-setoid-rewrite-under-binders

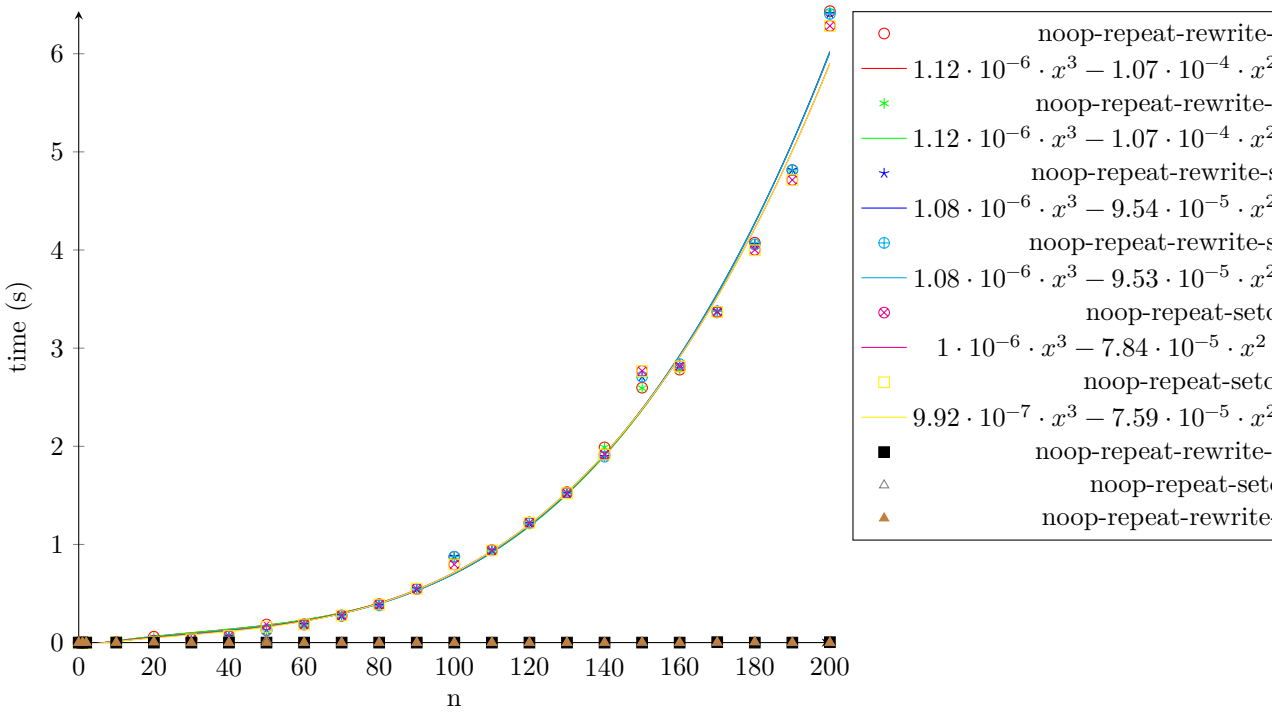


Figure 4: timing-repeat-setoid-rewrite-under-binders-noop

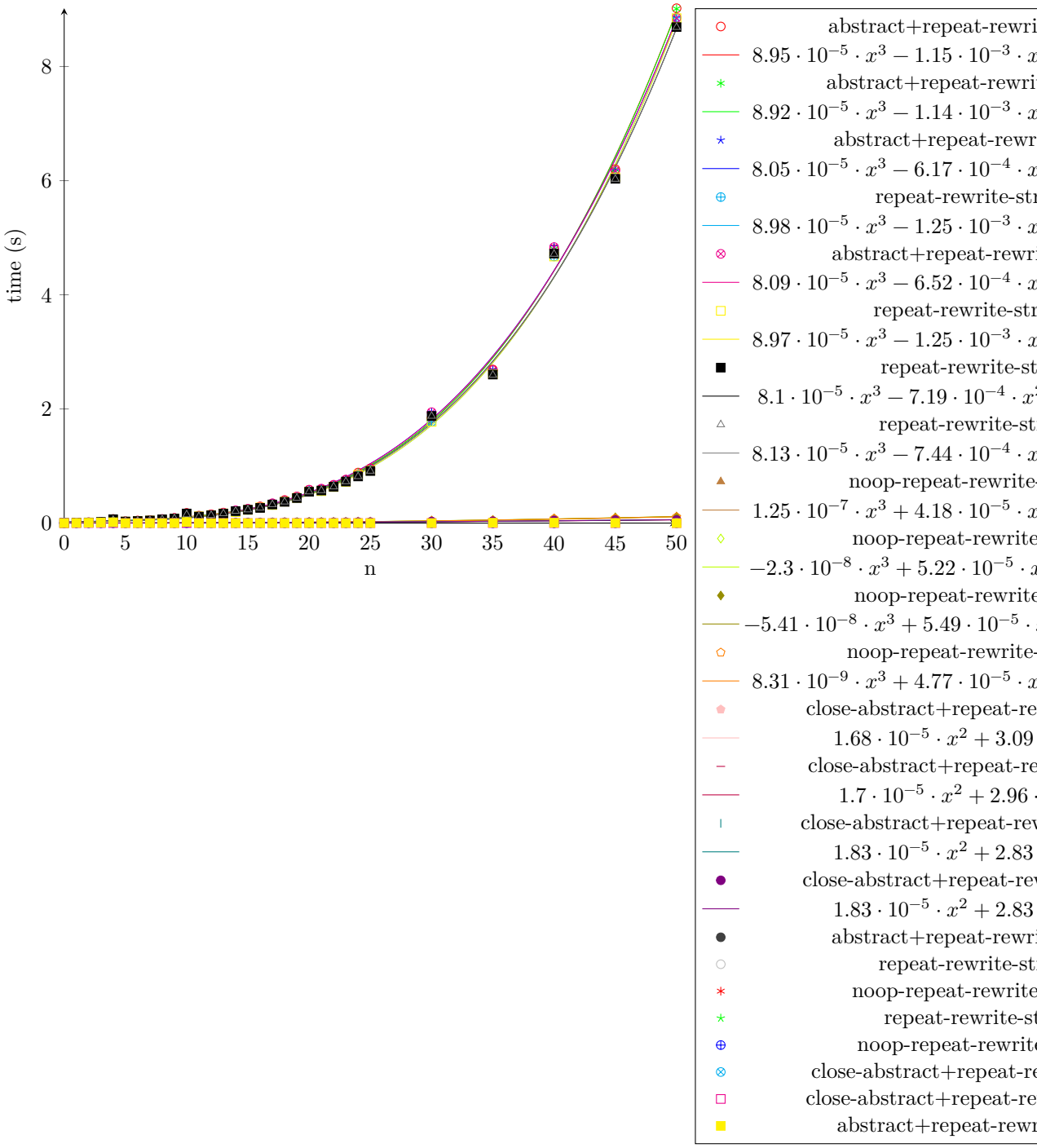


Figure 5: timing-rewrite-strat-under-binders

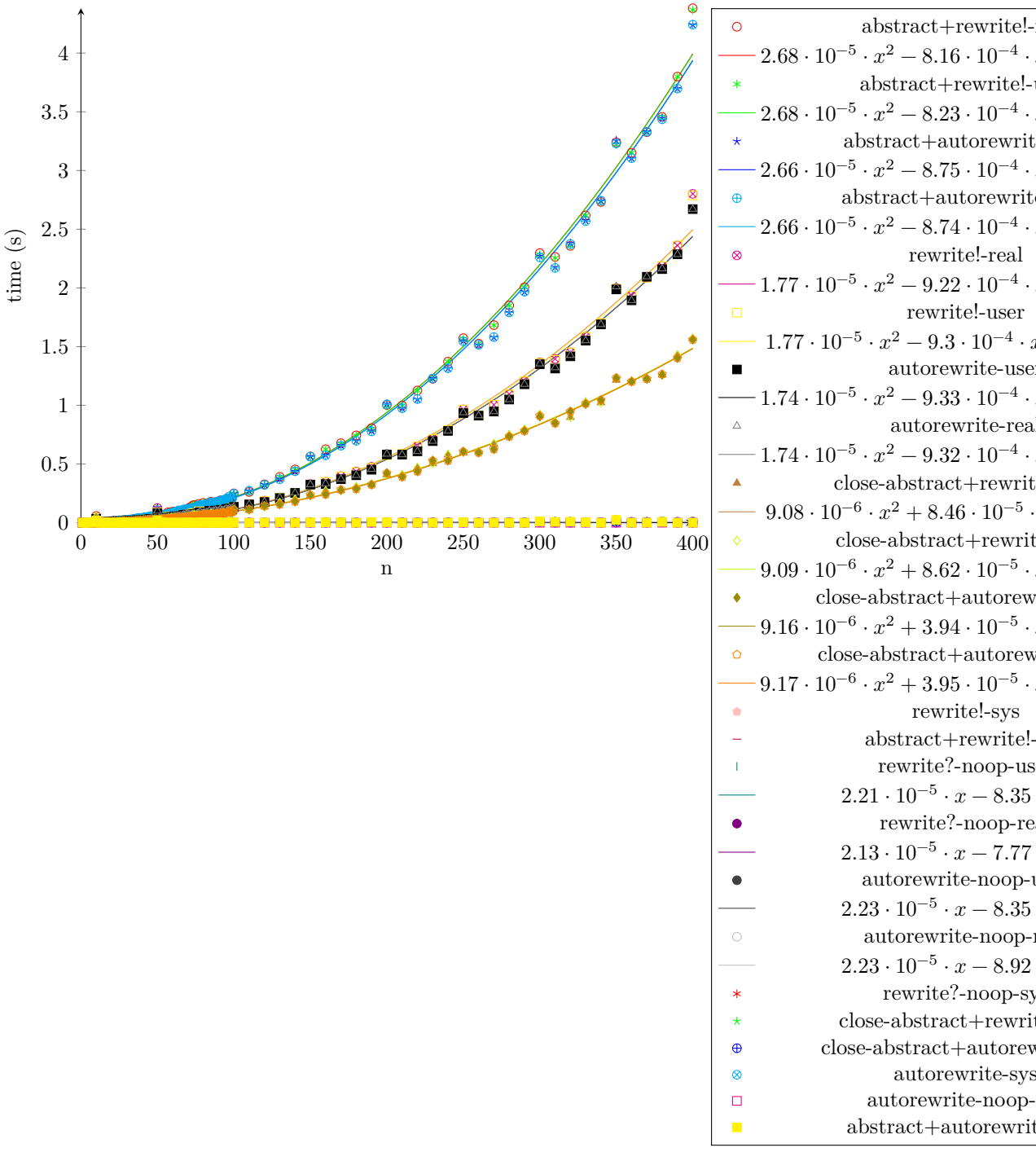


Figure 6: timing-rewrite-repeated-app-autorewrite

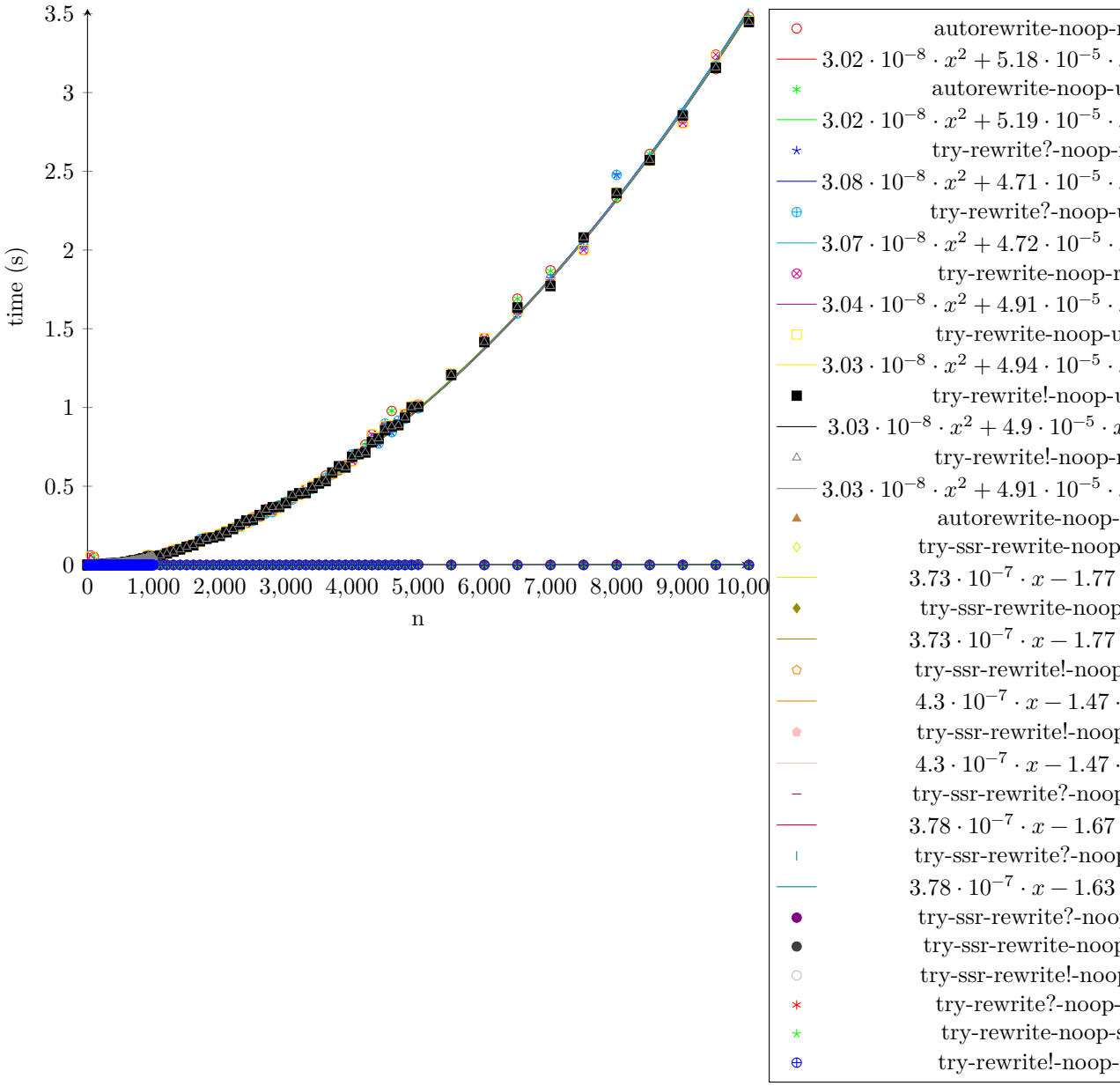


Figure 7: timing-rewrite-repeated-app-autorewrite-noop

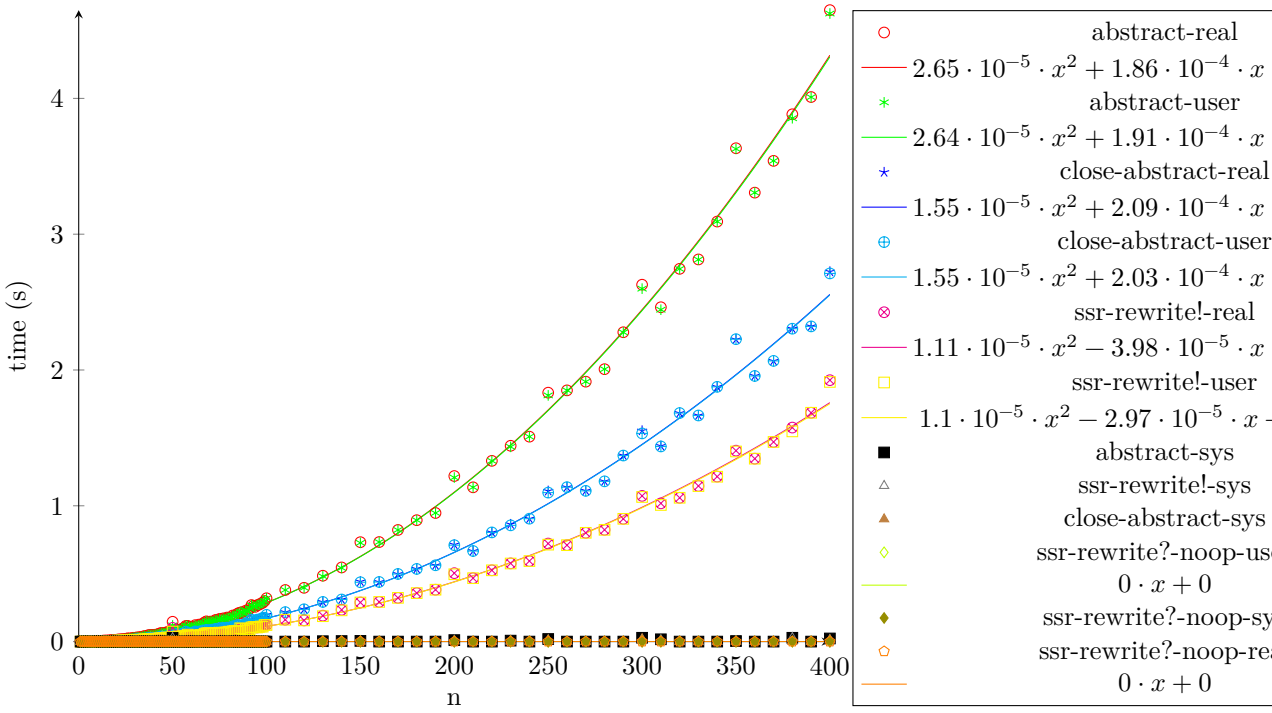


Figure 8: timing-rewrite-repeated-app-ssrrewrite

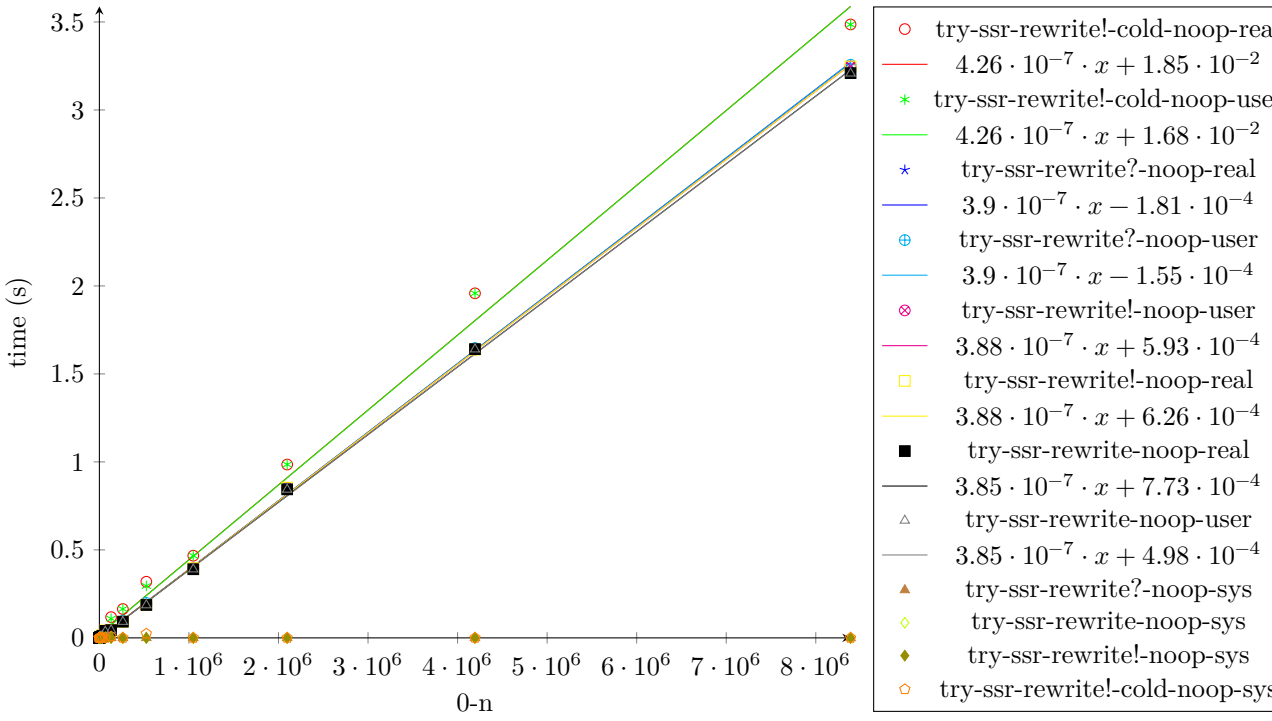


Figure 9: timing-rewrite-repeated-app-ssrrewrite-noop param-1-lgn 1

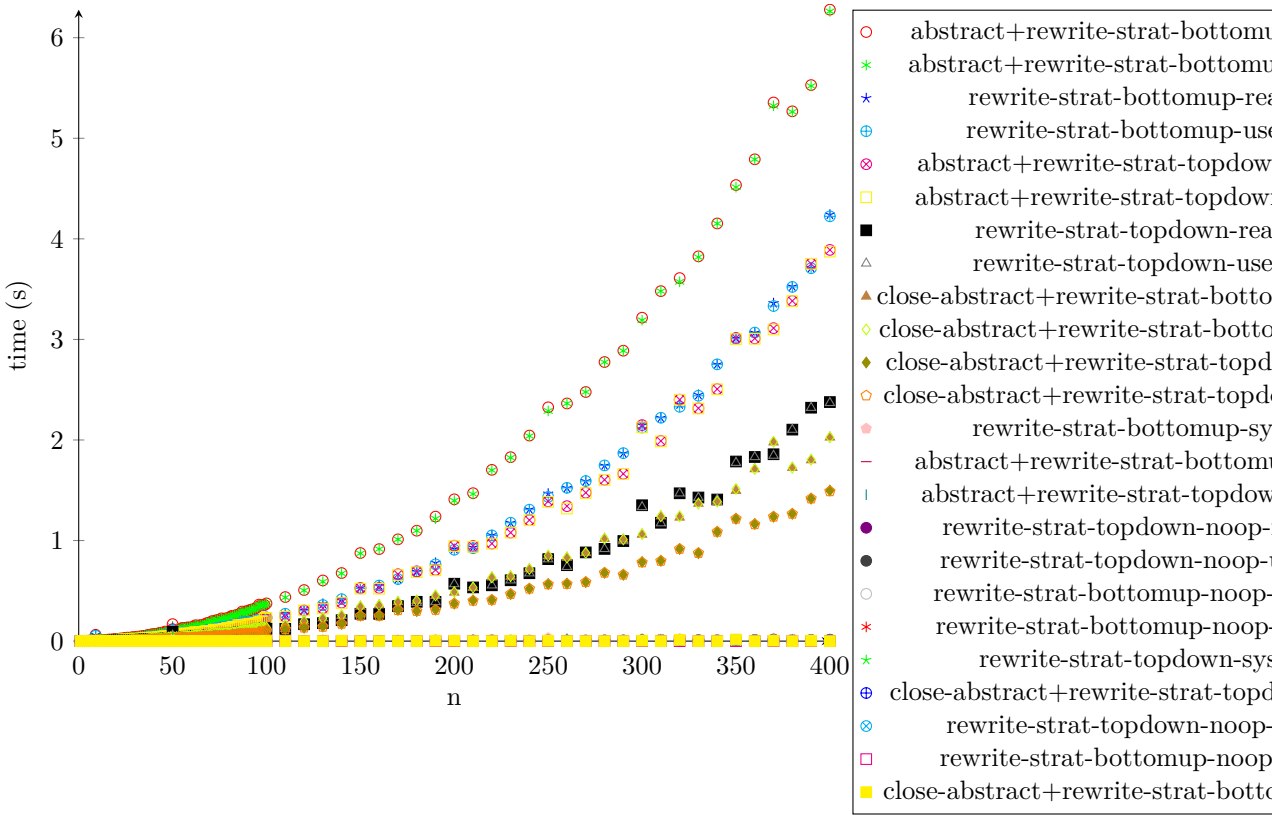


Figure 10: timing-rewrite-repeated-app-rewrite-strat

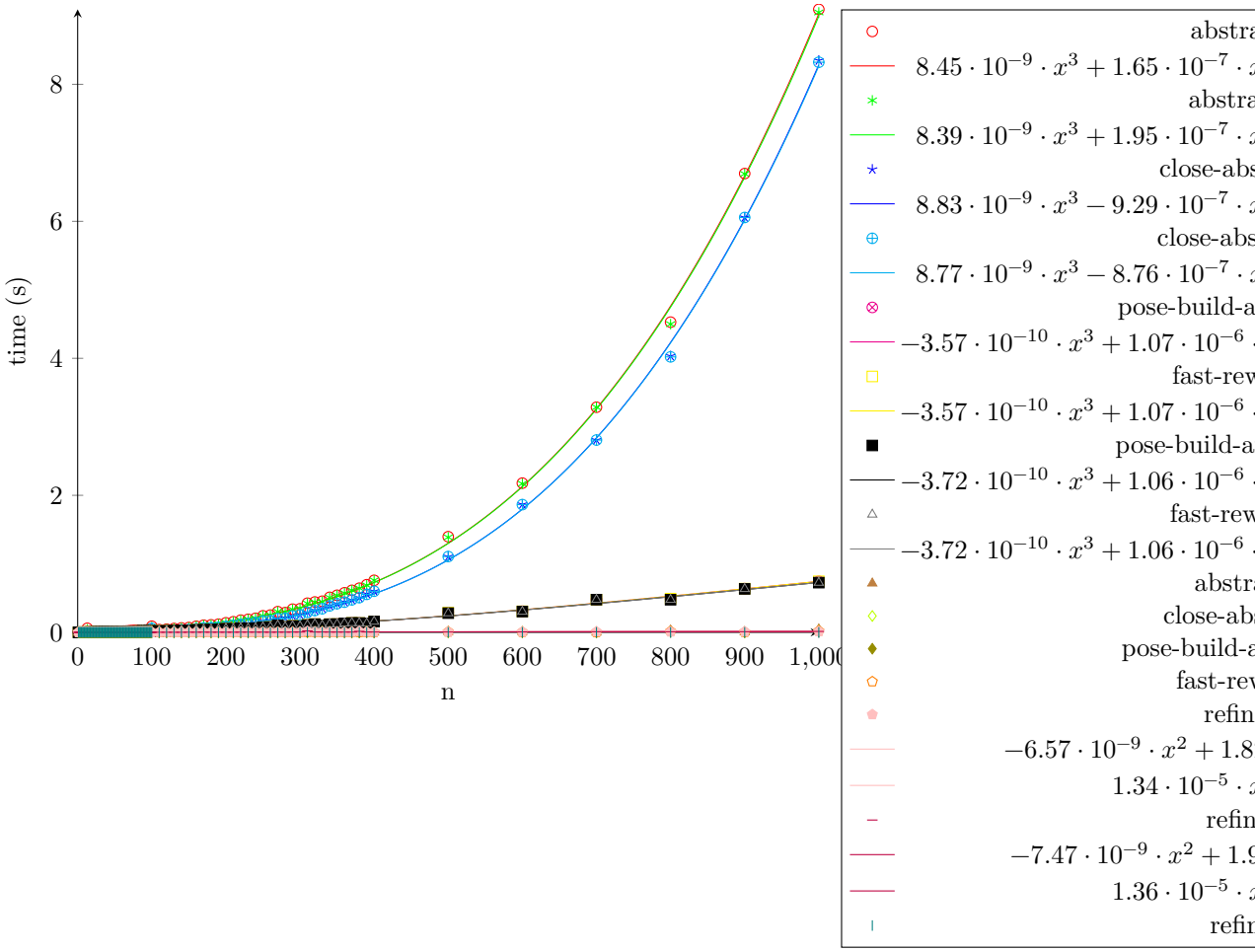


Figure 11: timing-rewrite-repeated-app-fast-rewrite

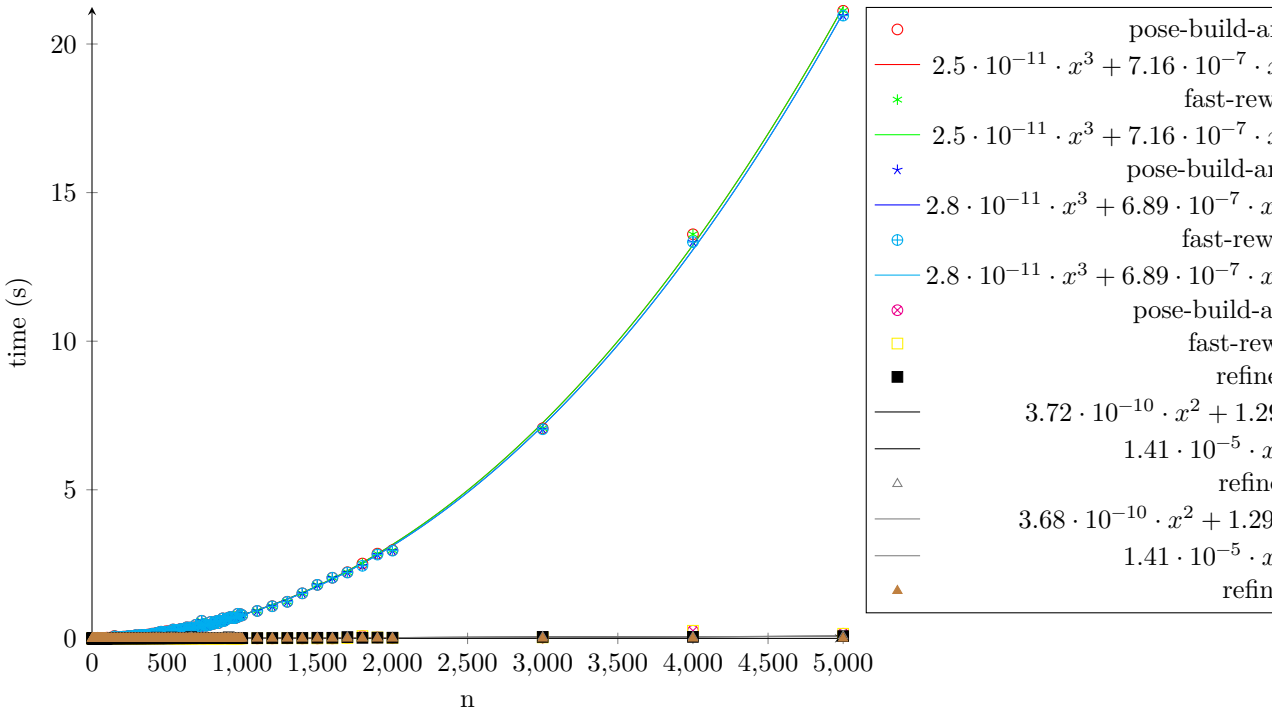


Figure 12: timing-rewrite-repeated-app-fast-rewrite-no-abstract

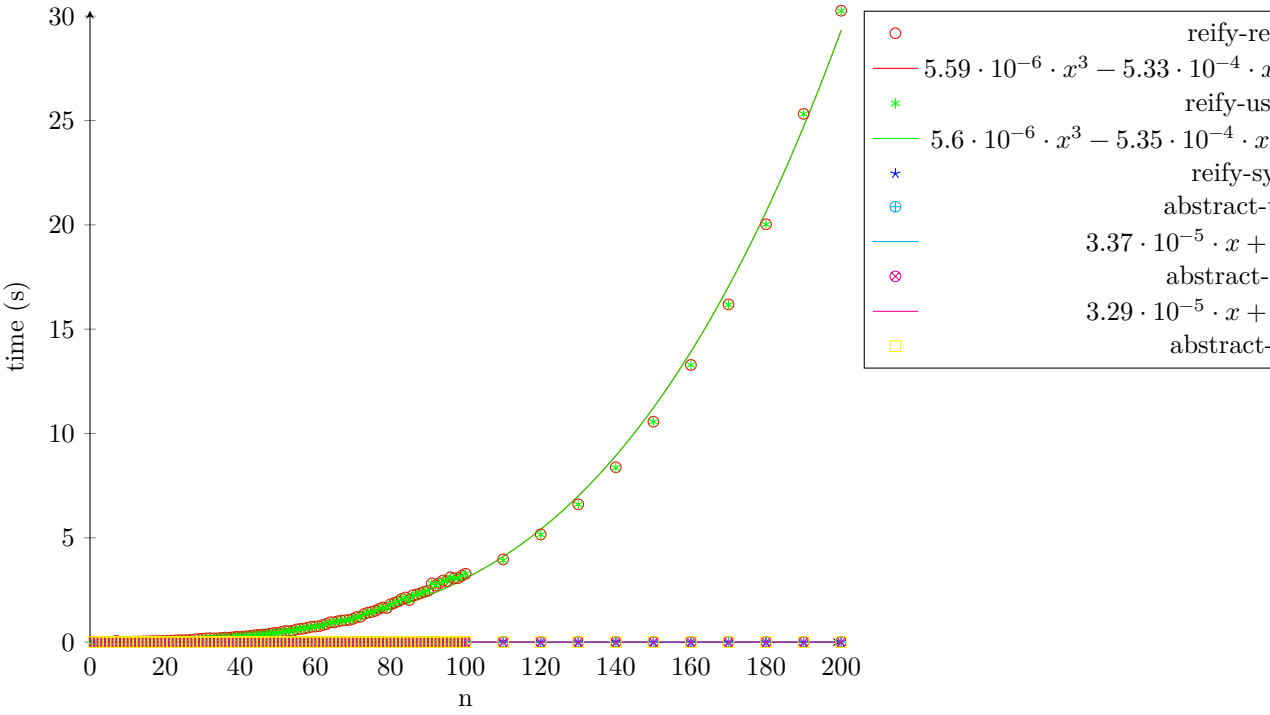


Figure 13: timing-typeclass-reification-let-in-HOAS

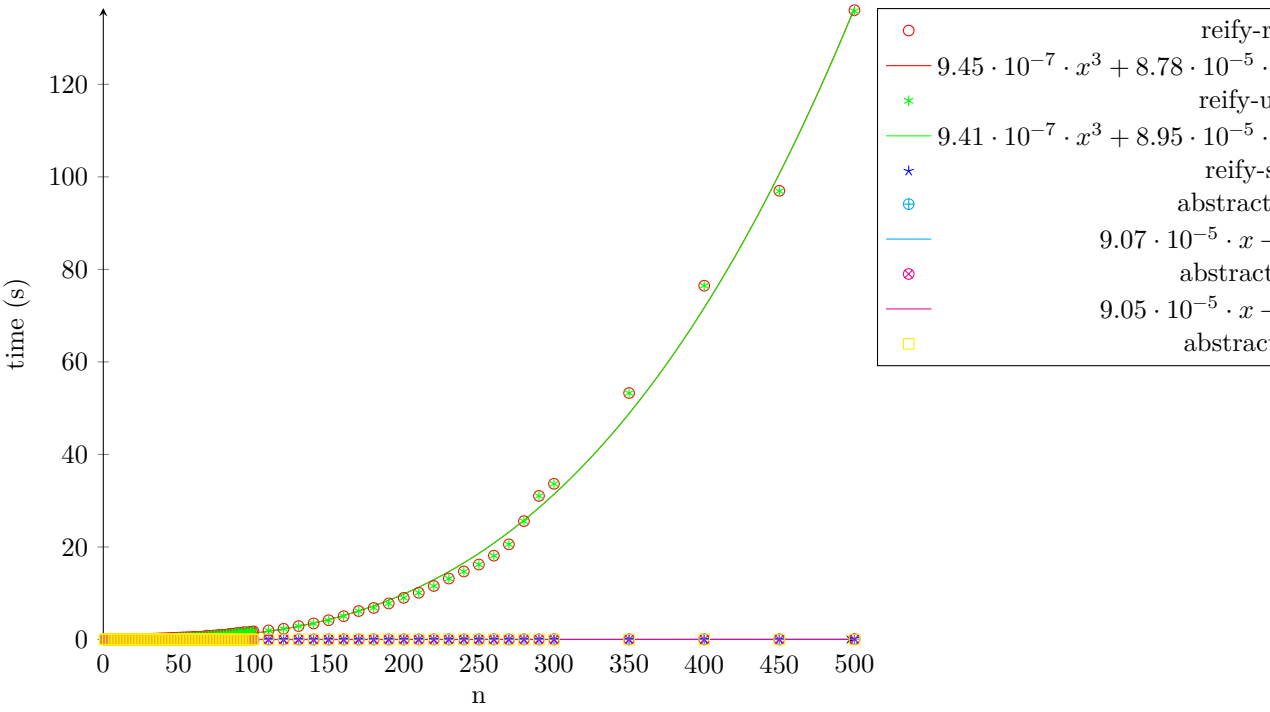
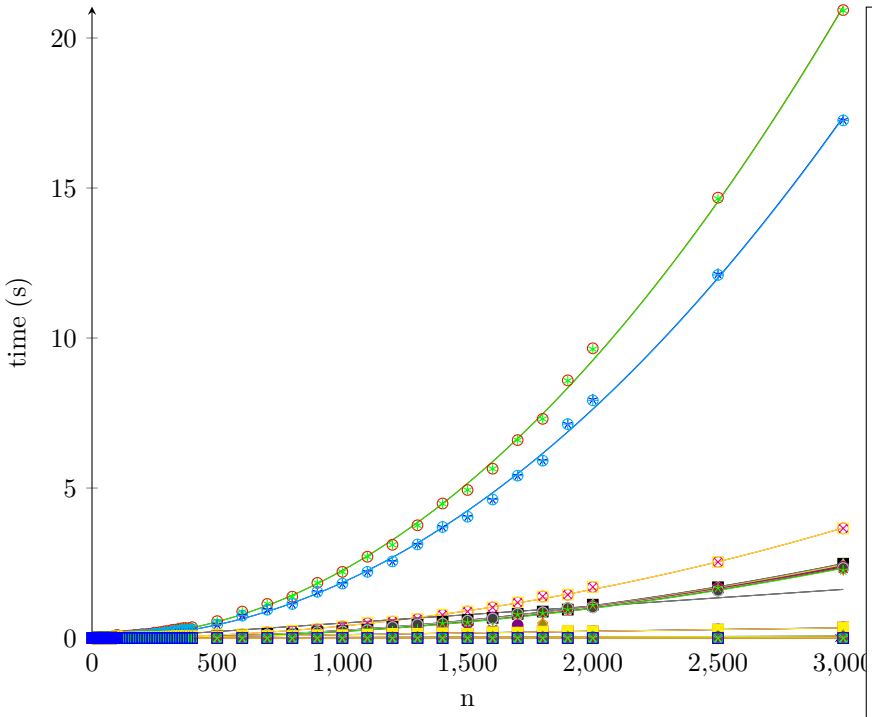


Figure 14: timing-typeclass-reification-let-in-PHOAS



abstract-real
$2.39 \cdot 10^{-6} \cdot x^2 - 1.66 \cdot 10^{-4} \cdot x$
abstract-user
$2.39 \cdot 10^{-6} \cdot x^2 - 1.68 \cdot 10^{-4} \cdot$
fast-rewrite-real
$1.98 \cdot 10^{-6} \cdot x^2 - 1.55 \cdot 10^{-4} \cdot x$
fast-rewrite-user
$1.98 \cdot 10^{-6} \cdot x^2 - 1.54 \cdot 10^{-4} \cdot x$
close-abstract-use
$4.13 \cdot 10^{-7} \cdot x^2 - 1.51 \cdot 10^{-5} \cdot x$
close-abstract-rea
$4.12 \cdot 10^{-7} \cdot x^2 - 1.34 \cdot 10^{-5} \cdot x$
refine-real
$2.87 \cdot 10^{-7} \cdot x^2 - 3.44 \cdot 10^{-5} \cdot x$
$5.62 \cdot 10^{-4} \cdot x - 6.23 \cdot$
refine-user
$2.87 \cdot 10^{-7} \cdot x^2 - 3.45 \cdot 10^{-5} \cdot$
$5.61 \cdot 10^{-4} \cdot x - 6.23 \cdot$
check-admit-real
$2.89 \cdot 10^{-7} \cdot x^2 - 5.37 \cdot 10^{-5} \cdot x$
check-admit-user
$2.89 \cdot 10^{-7} \cdot x^2 - 5.43 \cdot 10^{-5} \cdot x$
check-pf-cast-rea
$2.83 \cdot 10^{-7} \cdot x^2 - 5.58 \cdot 10^{-5} \cdot x$
check-pf-cast-use
$2.83 \cdot 10^{-7} \cdot x^2 - 5.64 \cdot 10^{-5} \cdot x$
check-admit-cast-re
$2.8 \cdot 10^{-7} \cdot x^2 - 3.89 \cdot 10^{-5} \cdot x$
check-admit-cast-u
$2.8 \cdot 10^{-7} \cdot x^2 - 3.87 \cdot 10^{-5} \cdot x$
type-admit-cast-re
$2.8 \cdot 10^{-7} \cdot x^2 - 5.1 \cdot 10^{-5} \cdot x$
type-admit-cast-us
$2.8 \cdot 10^{-7} \cdot x^2 - 5.04 \cdot 10^{-5} \cdot x$
type-pf-cast-user
$2.63 \cdot 10^{-7} \cdot x^2 - 9.69 \cdot 10^{-6} \cdot x$
type-pf-cast-real
$2.63 \cdot 10^{-7} \cdot x^2 - 9.63 \cdot 10^{-6} \cdot x$
type-admit-real
$2.83 \cdot 10^{-7} \cdot x^2 - 6.98 \cdot 10^{-5} \cdot x$
type-admit-user
$2.8 \cdot 10^{-7} \cdot x^2 - 6.64 \cdot 10^{-5} \cdot x$
build-eval-thunk-us
$1.14 \cdot 10^{-4} \cdot x - 1.31 \cdot$
build-eval-thunk-re
$1.15 \cdot 10^{-4} \cdot x - 1.13 \cdot$
build-thunk-user
$1.13 \cdot 10^{-4} \cdot x - 1.41 \cdot$
build-thunk-real
$1.14 \cdot 10^{-4} \cdot x - 1.22 \cdot$
check-I-user