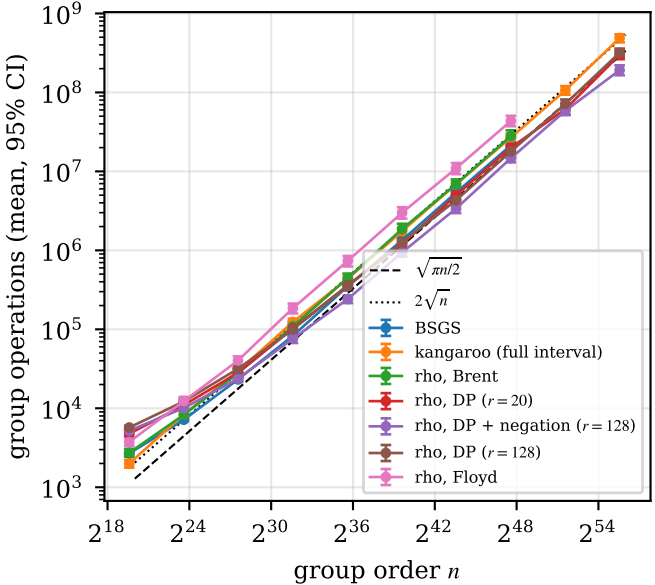
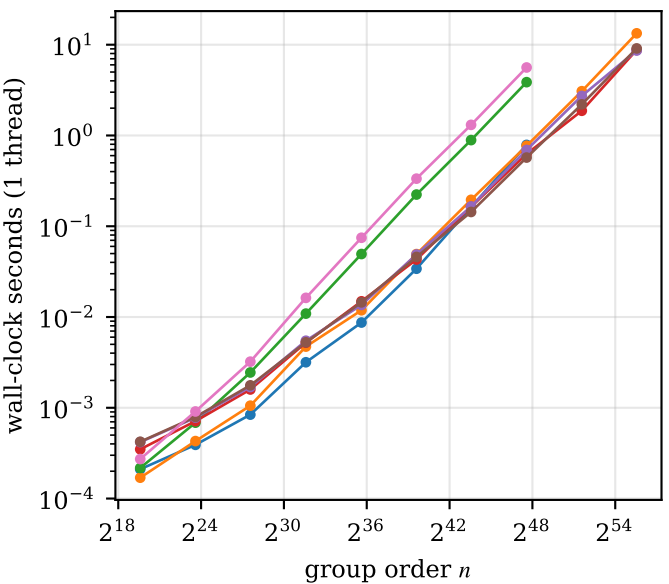

group operations (mean, 95% CI)
10^9
10^8
10^7
10^6
10^5
10^4
10^3
$\sqrt{\pi n/2}$
$2\sqrt{n}$
BSGS
kangaroo (full interval)
rho, Brent
rho, DP ($r = 20$)
rho, DP + negation ($r = 128$)
rho, DP ($r = 128$)
rho, Floyd
2^{18}
2^{24}
2^{30}
2^{36}
2^{42}
2^{48}
2^{54}
group order n


wall-clock seconds (1 thread)
10^1
10^0
10^{-1}
10^{-2}
10^{-3}
10^{-4}
2^{18}
2^{24}
2^{30}
2^{36}
2^{42}
2^{48}
2^{54}
group order n