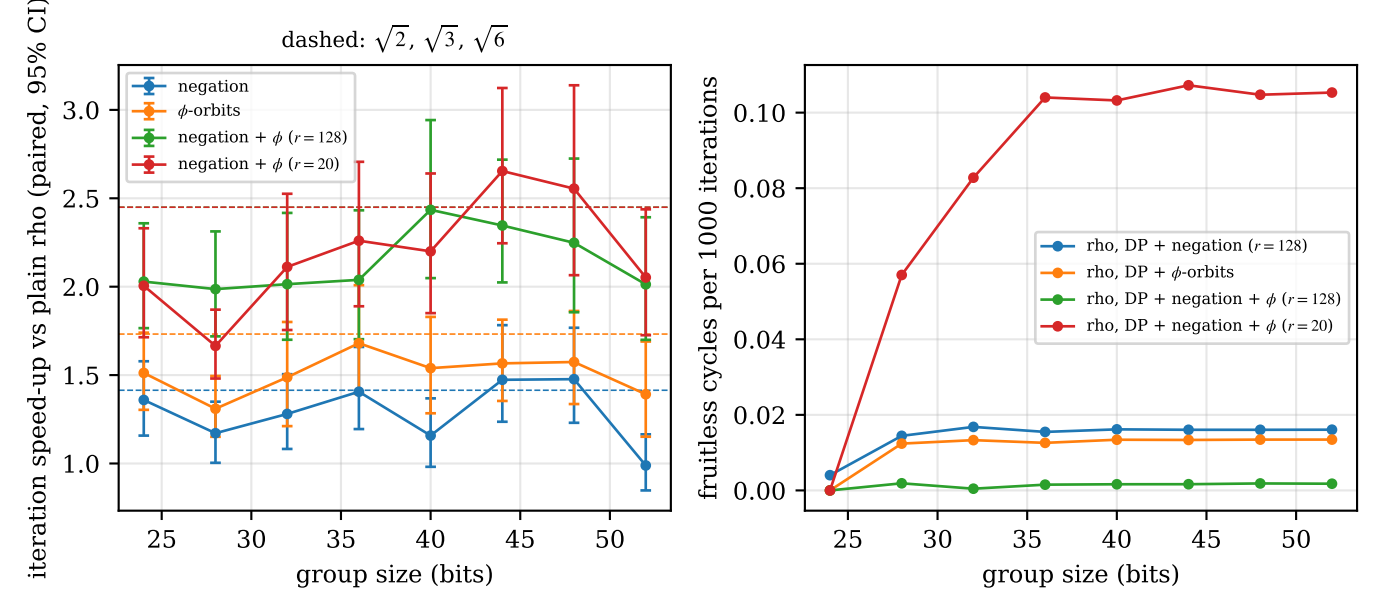

dashed: $\sqrt{2}$, $\sqrt{3}$, $\sqrt{6}$
negation
$\phi$-orbits
negation + $\phi$ ($r = 128$)
negation + $\phi$ ($r = 20$)
iteration speed-up vs plain rho (paired, 95% CI)
group size (bits)
rho, DP + negation ($r = 128$)
rho, DP + $\phi$-orbits
rho, DP + negation + $\phi$ ($r = 128$)
rho, DP + negation + $\phi$ ($r = 20$)
fruitless cycles per 1000 iterations
group size (bits)