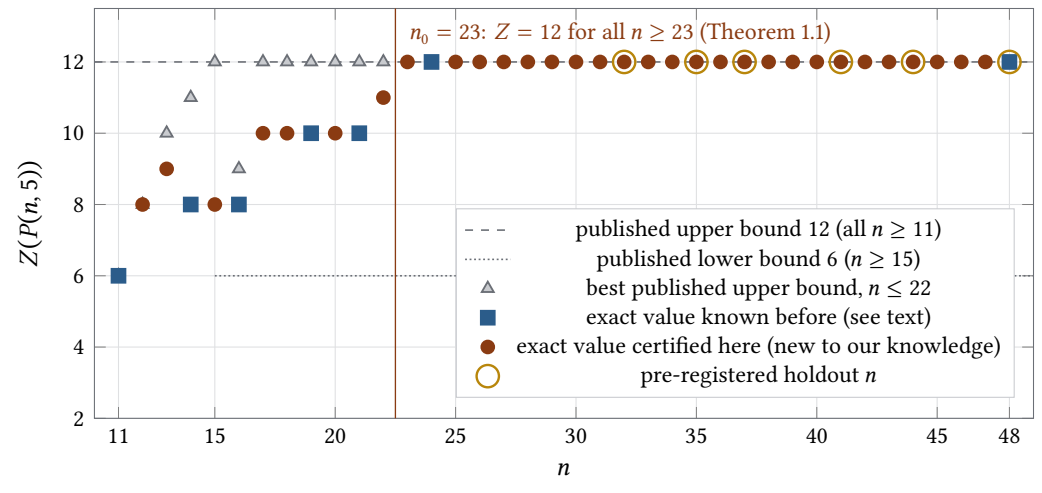

$n_0 = 23$: $Z = 12$ for all $n \geq 23$ (Theorem 1.1)
$Z(P(n, 5))$
n
12
10
8
6
4
2
11
15
20
25
30
35
40
45
48
published upper bound 12 (all $n \geq 11$)
published lower bound 6 ($n \geq 15$)
best published upper bound, $n \leq 22$
exact value known before (see text)
exact value certified here (new to our knowledge)
pre-registered holdout n