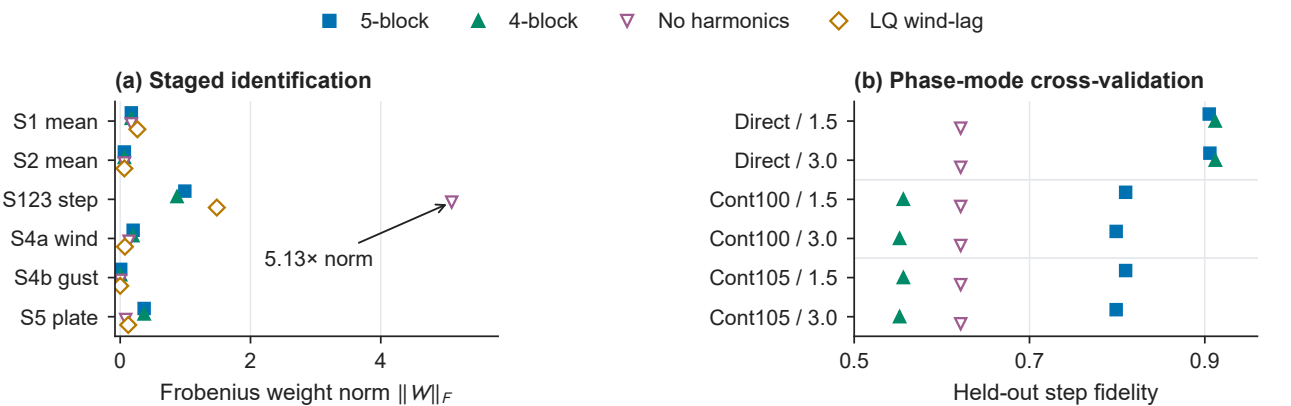

5-block
4-block
No harmonics
LQ wind-lag
(a) Staged identification
S1 mean
S2 mean
S123 step
S4a wind
S4b gust
S5 plate
5.13× norm
0
2
4
Frobenius weight norm $\|W\|_F$
(b) Phase-mode cross-validation
Direct / 1.5
Direct / 3.0
Cont100 / 1.5
Cont100 / 3.0
Cont105 / 1.5
Cont105 / 3.0
0.5
0.7
0.9
Held-out step fidelity