CCSD initial parameters n2 6-31g (10e, 16o) R=1.0 Å heavy-hex square error (Hartree) error (Hartree)  $10^{-2}$  $10^{-2}$ Energy Energy 2 12 14 16 18 20 10 12 14 16 18 20 8 10 8 Repetitions Repetitions 0.2 0.2 sso 0.1 loss 0.1 0.0 0.0 -12 16 18 20 12 16 18 20 8 10 14 14 Repetitions Repetitions 300000 sci\_vec\_shape 100000 sci\_vec\_shape 200000 --- UCCSD init LUCJ Compressed-t2 multi-stage LUCJ truncated LUCJ Compressed-t2 connectivity 100000 16 18 14 16 18 14 Repetitions Repetitions