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 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 8 10 14 14 20 Repetitions Repetitions 300000 200000 200000 100000 LUCJ Compressed-t2 multi-stage sci_vec_shape 200000 500000 **UCCSD** init LUC| Compressed-t2 connectivity - LUCJ truncated 16 18 16 18 14 14 Repetitions Repetitions