H order 6 Local Error Convergence Hamiltonian Solution 10^{-4} 10⁻⁵ 10^{-6} 10^{-7} $-H(x_{exact})|$ $x_{approx}||_2$ 10-8 10^{-9} 10-10 |H(X_{approx}) -10-11 $||x_{exact}|$ 10-12 10-13 10-15 10^{-14} 10^{-17} 10^{-16} 10-3 10⁻³ 10^{-1} 10^{-2} 10^{-1} 10-2 Δt Δt