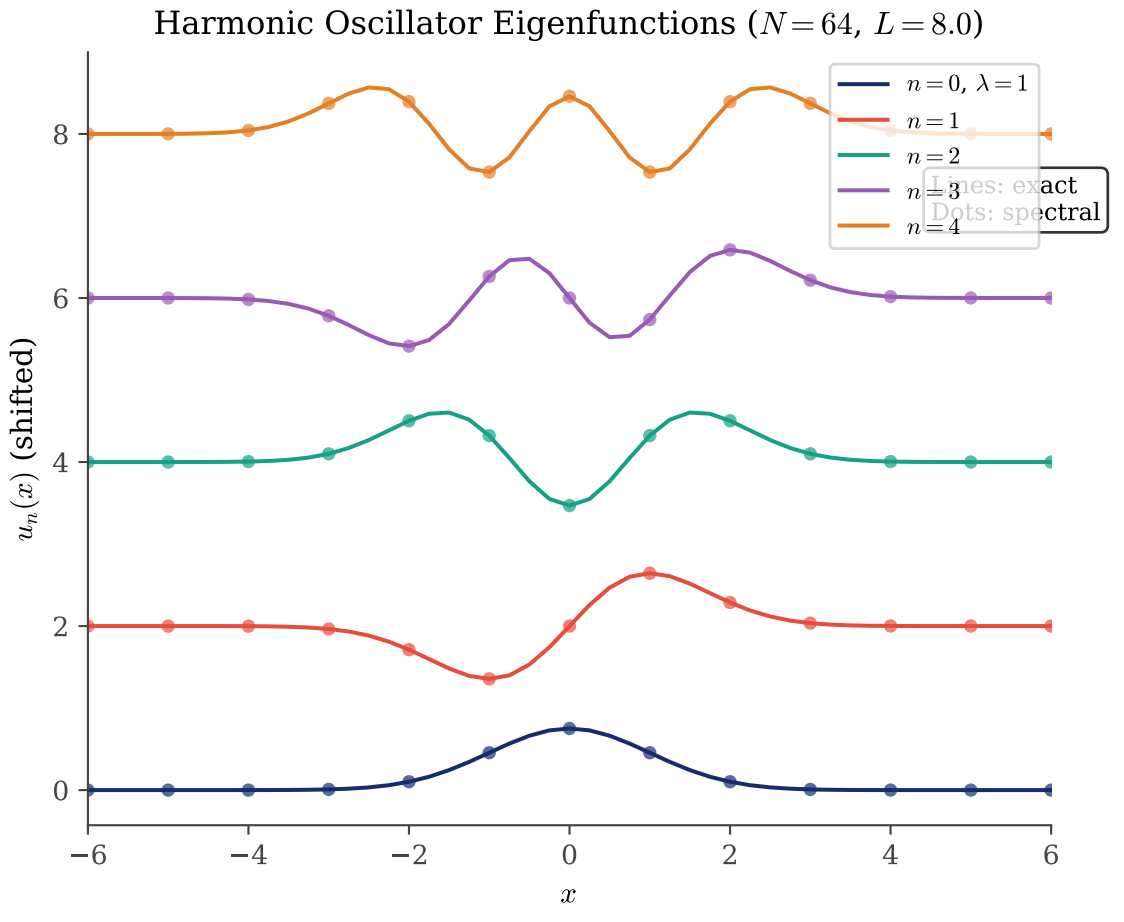
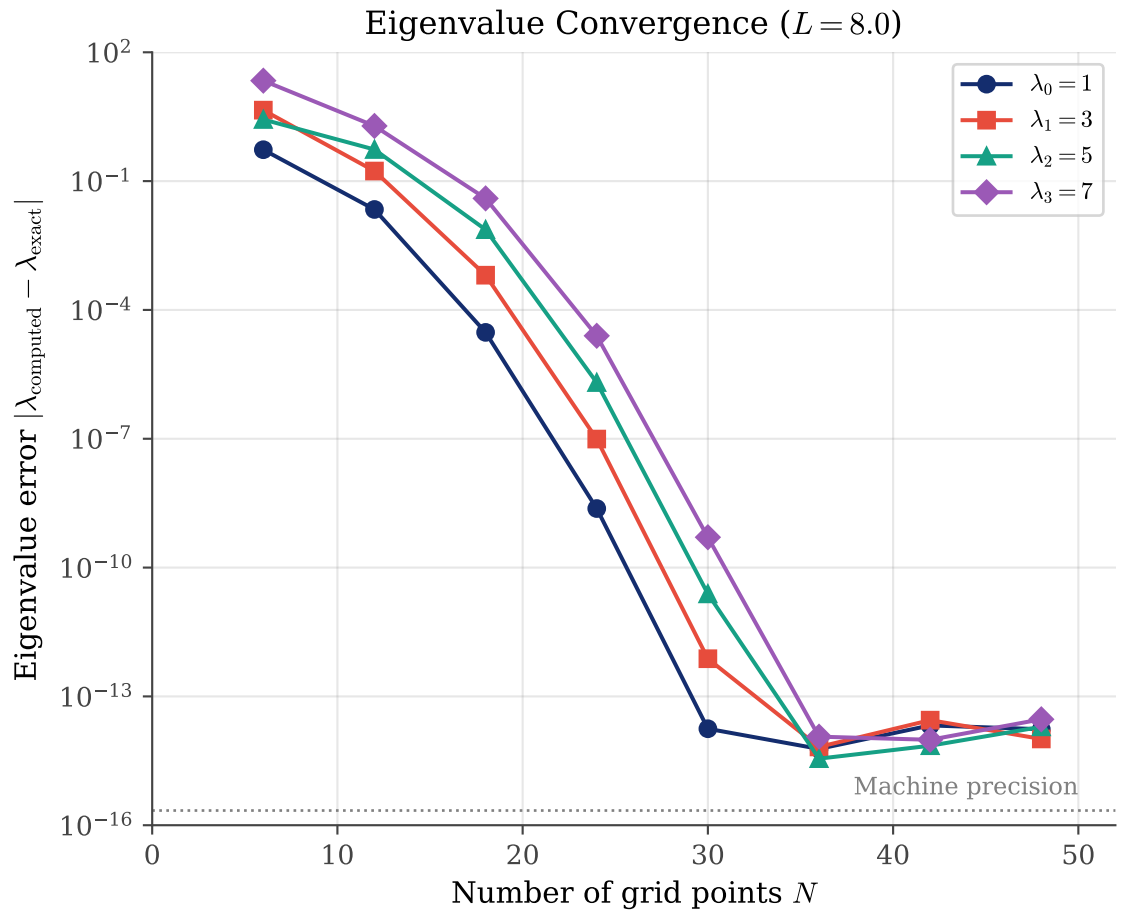

Harmonic Oscillator Eigenfunctions ($N = 64,\ L = 8.0$)
$n = 0,\ \lambda = 1$
$n = 1$
$n = 2$
$n = 3$
$n = 4$
Lines: exact
Dots: spectral
$u_n(x)$ (shifted)
x


Eigenvalue Convergence ($L = 8.0$)
$\lambda_0 = 1$
$\lambda_1 = 3$
$\lambda_2 = 5$
$\lambda_3 = 7$
Machine precision
Eigenvalue error $|\lambda_{\text{computed}} - \lambda_{\text{exact}}|$
Number of grid points N