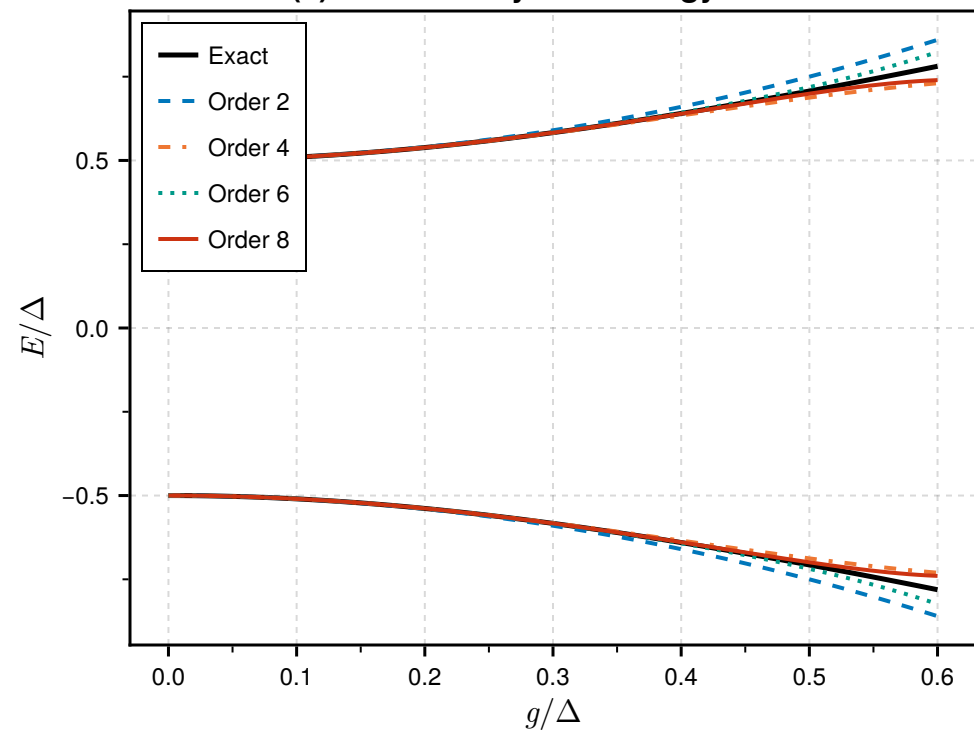
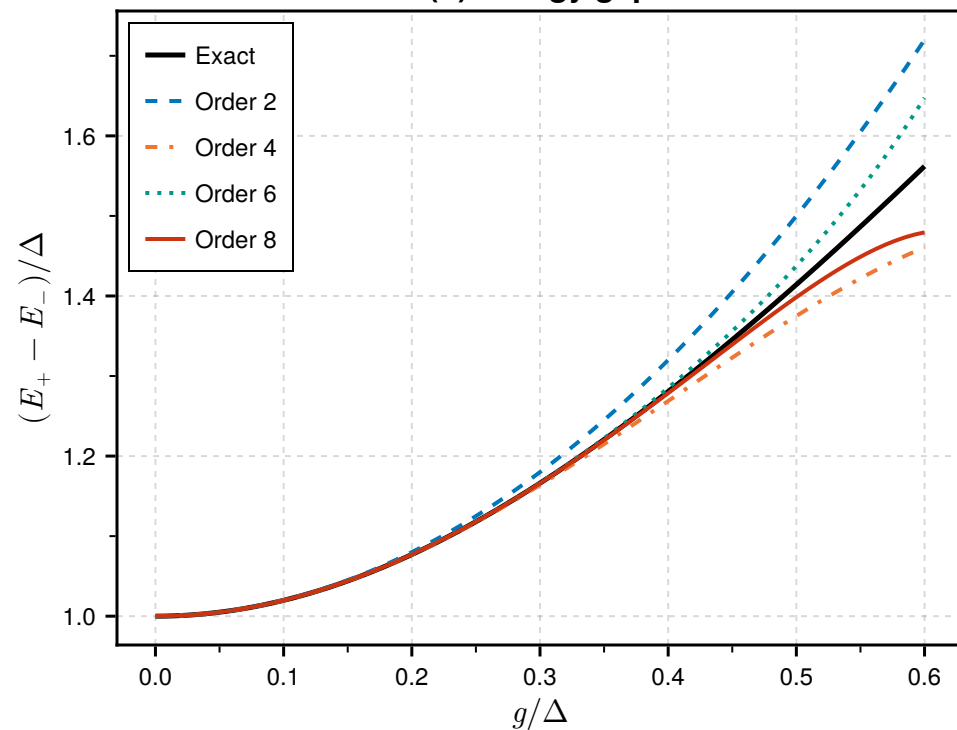
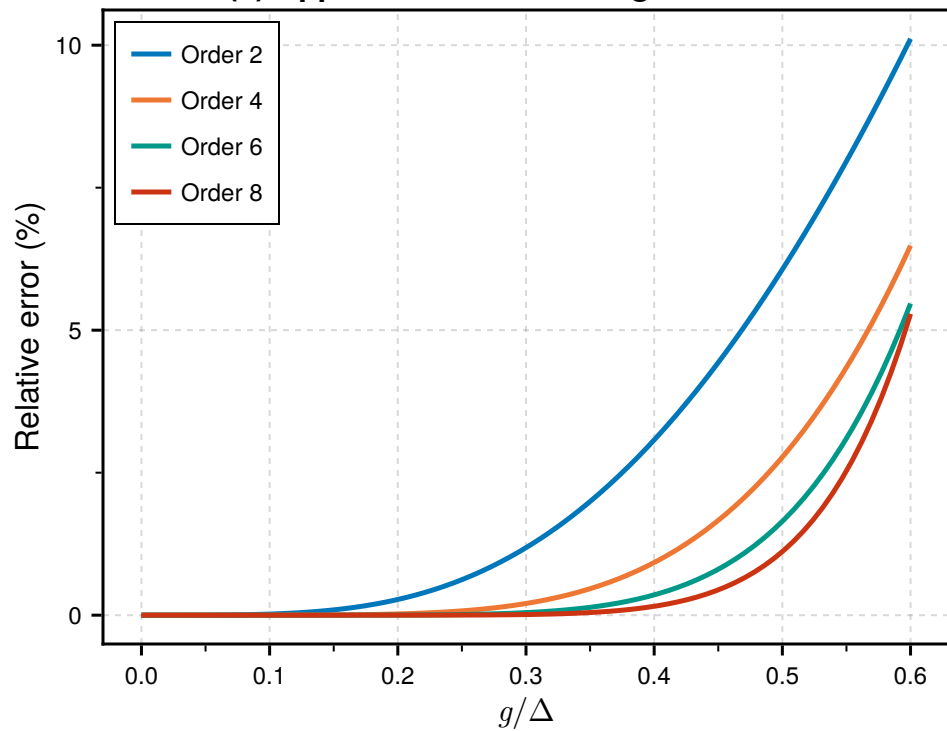


(a) Two-level system energy levels**(b) Energy gap****(c) Approximation error in ground state****(d) Jaynes-Cummings: dispersive shift and Kerr**