Ising Haminltonian: $k = 3$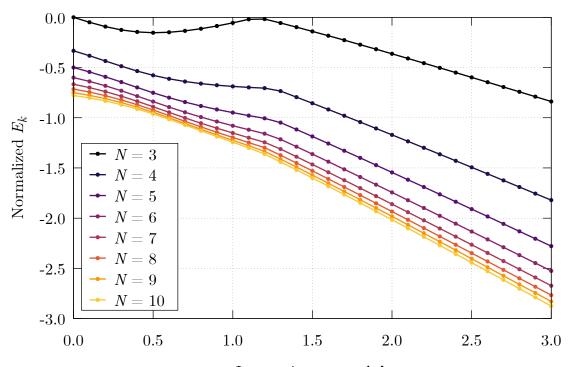 normalized eigenvalue