

The decay and tunneling dynamics of repulsive few-boson systems through a one-dimensional potential barrier is studied from first principles. To this end, we solve the time-dependent few-boson Schroedinger equation numerically-exact by utilizing the successful multiconfigurational time-dependent Hartree method. Deviations from the time-dependent Gross-Pitaevskii approach are identified. Counterintuitively, the mean-field approach can overestimate the tunneling times even for relatively weakly-interacting few-boson systems. Implications are discussed.