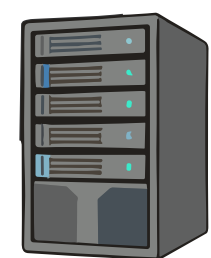
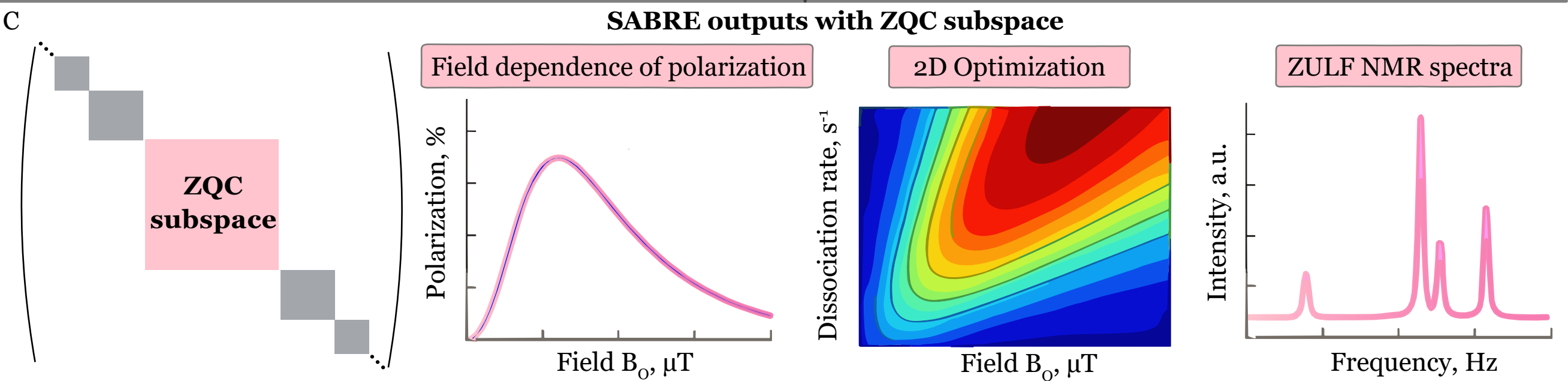
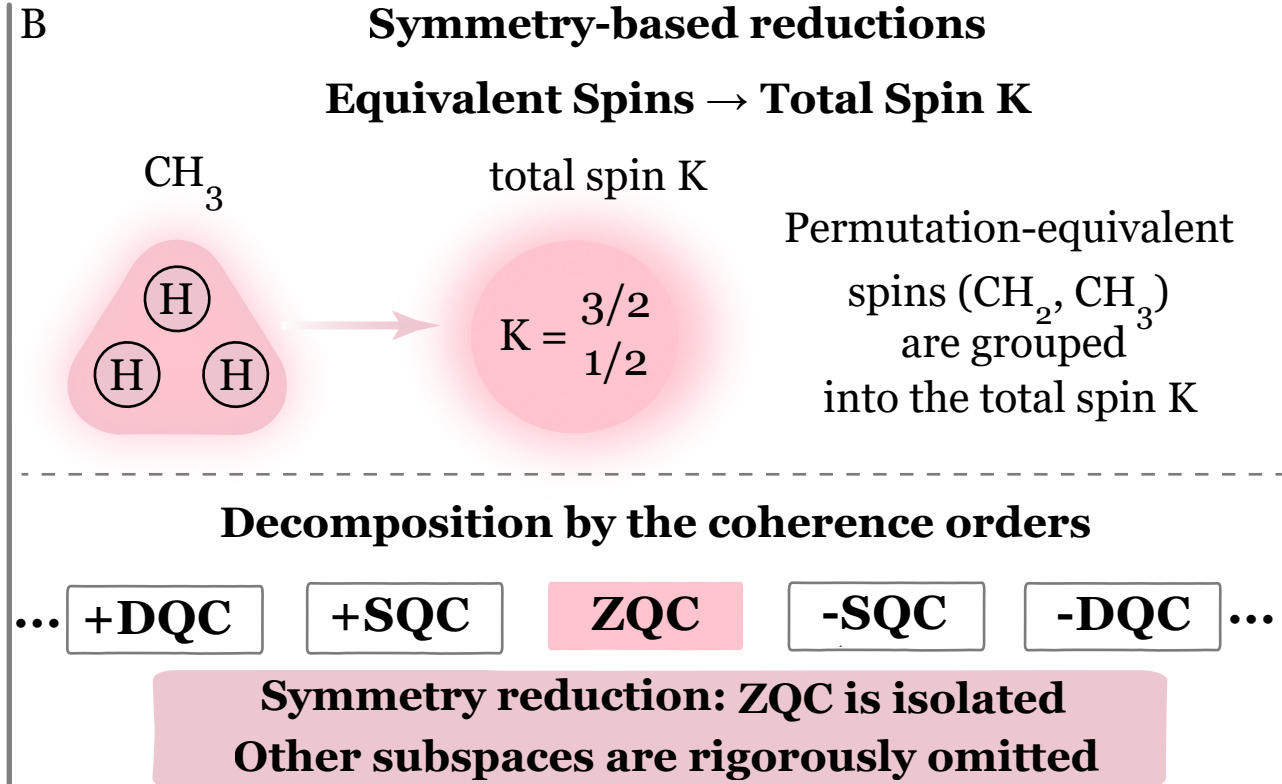


Full Liouville Space
 dimension = $4^N + 4^{N+2}$, N = number of substrate spins
 Coherent evolution + relaxation + chemical exchange



Full-space simulation: days per single magnetic field



ZQC subspace simulation: ~3 hours per single magnetic field (14 spins)