



FIGURE 1

Variation of the eigenvalues $E(\lambda)$ of the Hamiltonian $H(\lambda) = H_0 + \lambda \hat{W}$ with respect to λ . Each curve corresponds to an eigenstate of $H(\lambda)$. For $\lambda = 0$, we obtain the spectrum of H_0 . We have assumed here that the eigenvalues E_3^0 and E_4^0 are doubly degenerate; application of the perturbation $\lambda \hat{W}$ removes the degeneracy of E_3^0 , but not that of E_4^0 . An additional two-fold degeneracy appears for $\lambda = \lambda_1$.