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On effects of K-mixing in wobbling motion JULIAN FLETCHER, MAKITO OI, Department of Physics, University of Surrey — Bohr and Mottelson showed that a quantum rotor with triaxiality shows wobbling motion at high spin under the classical condition, $I \simeq I_1$. Quantum mechanically, we need to reconsider this condition as $I \simeq \langle \hat{I}_1 \rangle$ because the Hamiltonian does not commute with I_1 . In other words, when we call eigenvalues of the angular momentum operator I_1 Kquantum numbers, K is not a good quantum number in this model. We discuss several effects of K-mixing in the wobbling model, and present an view about how the wobbling motion should be understood quantum mechanically.

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