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Insights into Nuclear Triaxiality from Interference Effects in E_2 Matrix Elements¹ J.M. ALLMOND, J.L. WOOD, W.D. KULP, Georgia Institute of Technology — Recently, we have introduced [1] a triaxial rotor model with independent inertia and E_2 tensors. The E_2 matrix elements [2] of the osmium isotopes (186, 188, 190, and 192) are studied in the framework of this model (59 of 84 E_2 matrix elements deviate by 30% or less). It is shown that interference effects in the inertia tensor (K-mixing) and the E_2 tensor can lead to significant reductions in the diagonal E_2 matrix elements. In some instances, the diagonal E_2 matrix elements may decrease with increasing spin. Additionally, a sum rule for diagonal E_2 matrix elements is shown and used to explore missing strength from K-admixtures.

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