Comment on top-on-top mechanism in triaxial strongly deformed even mass nuclei KOSAI TANABE, RIKEN, Nishina Center, Saitama, 351-0198, Japan, KAZUKO SUGAWARA-TANABE, Otsuma Women’s University, Tama, Tokyo, 206-8540, Japan — We have derived the algebraic solution to the particle-rotor model with high \( j \) nucleon coupled to a triaxially deformed core, \( H = H_{\text{rot}} + H_{\text{sp}} \). The rotating core top with \( \vec{R} = \vec{I} - \vec{j} \) and the single-particle top with \( \vec{j} \), are strongly correlating each other. We call this mechanism as top-on-top mechanism, where the Coriolis term, \( \vec{I} \cdot \vec{j} \) in \( H_{\text{rot}} \), is explicitly taken into account, giving a big difference from the wobbling model. The algebraic solution to the top-on-top mechanism clarifies not only the energy level scheme, but also gives the approximate selection rules in the strength of transitions among bands. If the single-particle angular momentum \( j \) is assumed to be the sum of two angular momenta as \( j = j_1 + j_2 \) and the value of integer \( j \) keeps constant over some range of \( I \), then the algebraic solution is easily extended to the even-even nucleus with alignment of integer \( j \). Although several candidates of TSD bands are observed in Hf isotopes, no linking transitions between (0,0) and (1,0) are found. The rough estimation of the transition rates give a factor of \( (I-j)^3 \) both in \( B(E2) \) and \( B(M1) \) values for the transitions with \( \Delta I = 1 \) among the favored (0,0) and the unfavored (1,0) bands. The value of \( I - j \) is smaller for even-\( A \) case than odd-\( A \) case, which makes the observation of the other partner band difficult.