Title: Most known Calabi-Yau threefolds are elliptic or genus one fibered

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Abstract: We systematically analyze the fibration structure of toric hypersurface Calabi-Yau threefolds with large and small Hodge numbers in the Kreuzer and Skarke database. We show that there are only four known Calabi-Yau threefolds with $h^{1,1} \geq 140$ or $h^{2,1} \geq 140$ that do not have manifest elliptic or genus one fibers arising from a fibration structure of the associated 4D polytope. We find that for small $h^{1,1}$ the fraction of polytopes in the KS database that do not have a genus one or elliptic fibration drops exponentially. We find explicit constructions through Tate tunings of Weierstrass models over toric bases that match all the Hodge numbers of Calabi-Yau threefolds with $h^{1,1} \geq 240$ or $h^{2,1} \geq 240$; this includes a relatively small number of somewhat exotic constructions, including elliptic fibrations over non-toric bases, models with new Tate tunings that can give rise to exotic matter in the 6D F-theory picture, tunings of gauge groups over non-toric curves, tunings with very large Hodge number shifts and associated nonabelian gauge groups, and tuned Mordell-Weil sections associated with U(1) factors in the corresponding 6D theory.