1086-14-150   **Matthew Ward*** (`wardm4@math.washington.edu`), University of Washington, Department of Mathematics, Box 354350, Seattle, WA 98195-4350. *Derived Invariants of Calabi-Yau Threefolds in Positive Characteristic.*

Let X and Y be Calabi-Yau threefolds over a field of positive characteristic. We prove that if $D^b_{coh}(X) \simeq D^b_{coh}(Y)$, then the Artin-Mazur formal groups of X and Y have the same height. We use this to illustrate a derived category approach to the question of when a Calabi-Yau threefold lifts to characteristic 0. (Received July 29, 2012)