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Manuel L. Reyes* (reyes@bowdoin.edu), Department of Mathematics, Bowdoin College, 8600 College Station, Brunswick, ME 04011-8486, and **Daniel Rogalski**. *Twisted Calabi-Yau and Artin-Schelter regularity properties for locally finite algebras.*

It is known that a connected graded algebra is Artin-Schelter (AS) regular if and only if it is twisted Calabi-Yau (CY). While AS regular algebras are necessarily connected, a twisted CY algebra need not be. Thus we ask: for algebras that are graded but not necessarily connected, is the twisted CY property equivalent to a suitable analogue of the AS regular property? We give a positive answer, using a generalized AS regular property inspired by the work of Martinez-Villa, Minamoto, and Mori. We will also discuss properties of graded twisted CY algebras of dimension at most 2. (Received February 20, 2017)