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Lars Winther Christensen* (lars.w.christensen@ttu.edu) and **Jesse Burke** (jburke@math.uni-bielefeld.de). *Building modules over a local ring from its singular locus*. Preliminary report.

Let R be a commutative noetherian local ring. In a paper from 2003, Schoutens proves that every finitely generated R -module can be built from the prime ideals in the singular locus $\text{Sing}(R)$ by iteration of a few simple operations. It is known that the Krull dimension of a singular ring R provides an upper bound for the number of iterations required to build any R -module. In the talk I will explain exactly how many iterations are required. (Received August 29, 2011)