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**Ralph McKenzie** and **Matthew Smedberg\***, 1227H Stevenson Center, Vanderbilt University, Nashville, TN 37240. *Finitely decidable varieties admitting type 1 are residually finite*. Preliminary report.

We show that if  $\mathcal{V}$  is any locally finite variety such that the first-order theory of the finite members of  $\mathcal{V}$  is decidable, then  $\mathcal{V}$  contains only finitely many subdirectly irreducible algebras, all of which are finite. This result is known already for varieties omitting type 1; our proof establishes a number of necessary structural properties for a variety admitting type 1 to be finitely decidable. (Received January 10, 2013)