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Ralph McKenzie* (mckenzie@math.vanderbilt.edu), Mathematics Department/1326
Stevenson Center, Vanderbilt University, Nashville, TN 37240. *Existence theorems for weakly
symmetric operations.*

We have proved, jointly with Miklos Maroti, that a locally finite variety \mathcal{V} satisfies at least one Maltsev condition formulated with idempotent operations that is not satisfied by the variety of sets iff \mathcal{V} possesses an n -ary near-unanimity term for some integer $n > 1$. By an n -ary near-unanimity term for \mathcal{V} we mean a term $t(x_1, \dots, x_n)$ for which the equations $t(x, \dots, x) = x$ and $t(y, x, \dots, x) = t(x, y, x, \dots, x) = \dots = t(x, \dots, x, y)$ are valid in \mathcal{V} . The talk will outline the proof of this result, and discuss its implications. (Received August 21, 2006)