On the question: is tame open?
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Let T, W, SSC denote the subsets of the variety of d-dimensional algebras over a fixed algebraically closed field K, consisting of the tame (resp. wild, strongly simply connected) algebras. Using the characterization of tame strongly simply connected algebras due to Brüstle and Skowroński we prove that the sets $T \cap SSC$ and SSC are Zariski-open. Moreover, the sets are defined by polynomials with integral coefficients chosen independently on the field K.

The (still open) question if T is open is an objective of the article of Yang Han [*J. Algebra*, 284, 801-810 (2005)], where so called rank of a wild algebra is introduced and "Wild-Rank Conjecture" (implying that T is open) is formulated. Note that the methods of Han show that $T \cap SSC$ is open in SSC.

In what follows we use a slightly modified definition of rank, but the modification does not change the most important features of the concept. Consider a one-parameter regular family A_t, $t \in K$, of d-dimensional algebras. We prove that there is a function $\beta : \mathbb{N} \to \mathbb{N}$ such that if A_t is wild of rank less than or equal r for at least $\beta(r)$ values of t, then A_t is wild for any $t \in K$. The function β can be explicitly calculated and depends only on d.