

On the Wild Rank Conjecture of Han

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Abstract: The concept of rank of a wild algebra, introduced by Y. Han in [8], is discussed and, after a slight modification, investigated by means of Tarski's quantifier elimination theorem. This method allows, in particular, to prove that if there is a regular one-parameter family of d -dimensional algebras, uncountably many of them wild, then the whole family consists of wild algebras. A possible approach to the general question if *tame is open* is discussed.

Key words: wild algebra, variety of algebras, wild rank conjecture, quantifier elimination

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