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Title: Multidegrees of tame automorphisms with one prime number

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Let $3 \leq d_1 \leq d_2 \leq d_3$ be integers. We show the following results: (1) If d_2 is a prime number and $\frac{d_1}{\gcd(d_1,d_3)} \neq 2$, then (d_1, d_2, d_3) is a multidegree of a tame automorphism if and only if $d_1 = d_2$ or $d_3 \in d_1\mathbb{N} + d_2\mathbb{N}$; (2) If d_3 is a prime number and $\gcd(d_1, d_2) = 1$, then (d_1, d_2, d_3) is a multidegree of a tame automorphism if and only if $d_3 \in d_1\mathbb{N} + d_2\mathbb{N}$. We also show that the condition $\frac{d_1}{\gcd(d_1,d_3)} \neq 2$ in (1) cannot be removed.

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