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Michel Waldschmidt* (miw@math.jussieu.fr), Université P. et M. Curie (Paris 6), Institut de Mathématiques de Jussieu, Théorie des Nombres Case 247, 75252 Paris, France. *Families of Thue–Mahler equations with only trivial solutions.*

So far, a very small number of families of Diophantine Thue equations having only nontrivial solutions have been exhibited – explicit families of Thue–Mahler equations having this property were not known. We produce a large collection of examples, including the following one. Let K be a number field, S a finite set of places of K containing the infinite places, and E_S the set of S –units in K of degree ≥ 3 . For $\varepsilon \in E_S$, we denote by $F_\varepsilon(X, Y)$ the irreducible homogeneous form in $\mathbf{Z}[X, Y]$ of degree $[\mathbf{Q}(\varepsilon) : \mathbf{Q}]$ such that $F_\varepsilon(X, 1) \in \mathbf{Z}[X]$ is the irreducible polynomial of ε . Then the set of (x, y, ε) where x and y are S –units in K and ε is in E_S such that $F_\varepsilon(x, y) = 1$ is finite. The proof rests on Schmidt’s Subspace Theorem.

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