

A solution to fractal Hilbert's 16th problem for slow-fast Lienard equations

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We introduce a fractal version of Hilbert's 16th problem for slow-fast Lienard equations of type (n, m) and give a complete fractal analysis of canard cycles with parts at infinity. We have 3 different cases: $m < 2n + 1$, $m = 2n + 1$ and $m > 2n + 1$. This will be related to the number of limit cycles.