Periodic solutions of planar differential equations with delay

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Abstract: We present a result on the existence of periodic solutions slowly spiraling for a planar problem described by differential equations with discrete delay. The technique consists in building a convenient set, satisfying some properties and a completely continuous operator of return. We show then that this operator satisfies a fixed point theorem. The fixed point found corresponds to a nontrivial periodic solution. We applied this technique to study the existence of periodic solution of the economic model of Kaldor-Kalecki.

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