Review of: "Periodic second-order systems and coupled forced Van der Pol oscillators"

Stepan A. Tersian[1]

1 University of Ruse Angel Kanchev

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REFEREE'S REPORT

on the paper MVCHS4.pdf

Periodic second-order systems and coupled

forced Van der Pol oscillators

by Feliz Minhos and Sara Perestrelo

The paper deals with the existence and localization for periodic solutions of a second-order non-linear coupled planar system (1). Topological degree theory is applied, and the main result is Theorem 4. It is applied to a system of two coupled Van der Pol oscillators with a forcing component.

A detailed introduction is given.

Some definitions and lemmas are formulated in Section 2. The main result, Theorem 4, is presented and proved in Section 3. Example 5 and two figures are presented. Coupled forced Van der Pol oscillators are considered in Section 4. An example and one figure are given.

I recommend the paper for publication in the journal Qeios. I recommend a minor revision. By me, Section 2 can be "Preliminaries" instead of "Definitions."