ON PERIODIC COUPLED SYSTEMS

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Some existence and localization results for the existence of periodic solutions to several types of coupled nonlinear systems are presented, without requiring periodicity on the nonlinearities.

The relation between the definition of lower and upper solutions, not necessarily ordered, and the local monotone properties of the nonlinearities, is discussed.

In each case, real scenarios show the results' applicability to some phenomena such as population dynamics models and Wilson-Cowan impulsive system of two strongly coupled neurons.

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