

Oscillators coupled through an environment

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We study the dynamics generated when many oscillators are indirectly coupled to each other by interacting with another system (the "environment"), a type of structure that arises, for example, in models of cells communicating by chemical means. Some mathematical results on (in)stability of synchronized and anti-synchronized oscillations in such systems will be presented, and some dynamical phenomena which appear in simulations and require further investigation will be discussed.