Research (What is it about?)	**Controlling the motion of a group of mobile agents**
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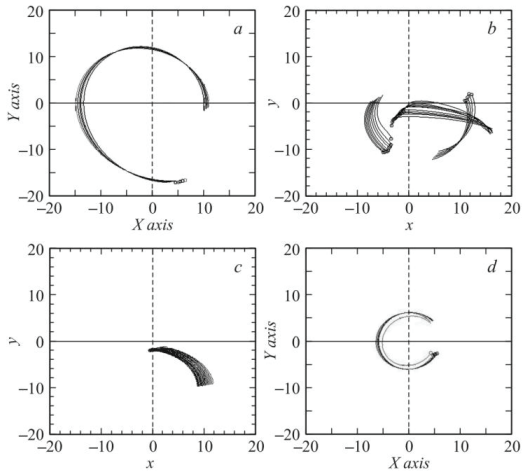
We find (The result)	A method of controlling an ensemble of mobile agents with a time-varying coupling structure that is based on the principles of phase synchronization is proposed. Results of modeling of the controlled motion in systems with serial, parallel, and strictly preset motion are presented.
Abstract	Now attention has been devoted to the problem of control over networks of autonomous mobile agents. This interest is related to the fact that this new approach has been closely linked with biology and social interactions describing a phenomenon of "flocking" behavior. Investigation of the mechanisms of self-organization and collective motion of large groups in the nature (e.g., flying flocks of birds) will simplify collective control over the operation of a number of robots or transport vehicles used by human beings. In most cases, the structure of such groups observed in living beings is random and variable with the time (e.g., neuronal ensembles, mobile communication networks). So the most interesting is the case of networks with time-varying topology of coupling. The method proposed refers to just this case. The method is based on the principle of phase synchronization in system of regular and chaotic oscillators with sufficiently short distance interaction. This will make it possible to control the group as a whole rather than every individual agent. By "mobile agent," we imply a material point moving on the (x, y) plane so that its trajectory coincides with the projection of a trajectory of some chaotic oscillator (assigned to this agent) onto the (x, y) plane. The use of chaotic oscillators determining the motion of agents allows us not to think of a synchronization domain on the (x, y) plane, since all agents will earlier or later accompany a sufficiently broad region of this plane. Results of modeling of the controlled motion in systems of *N* agents in groups with serial, parallel, and strictly preset motion are presented.

Representative articles 2016-2017, quartiles	1. *Levin V.A., Osipov G.V.* Controlling the Motion of a Group of Mobile Agents. Tech. Phys. Lett. **42**(3), 298-301 (2016).	Q4
	Q-index (Qi) of the result	**1**

In collaboration	–



(a) serial motion in a single group (N = 8), (b) parallel motion in groups (N = 25), (c) parallel motion in a single group (N = 25), and (d) driven motion along a limit cycle trajectory (N = 8)