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Intelligent Autonomous Decision-Making and Cooperative Control Technology of High-Speed Vehicle Swarms

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Deadline for manuscript submissions:
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Message from the Guest Editors

Dear Colleagues,

Swarm intelligence technology is a new technology combining unmanned system technology, network information technology and artificial intelligence technology, and this has become a research hotspot.

Due to the difference in flight dynamics characteristics, the strong uncertainty caused by the large airspace of the flight environment and the fast time-varying cluster topology caused by high dynamics, it is difficult for traditional UAV swarm technology to be directly applied to the cluster system of high-speed vehicles. Therefore, there is an urgent need to study new theories and methods for the cooperative operation of high-speed vehicle swarm systems.

1. Swarm distributed situation awareness and cognitive technology;
2. Swarm autonomous decision-making method based on decision rule base;
3. Swarm collaborative planning technology in a complex environment;
4. Swarm strike cooperative task planning technology under multiple constraints and strong coupling conditions;
5. Verification system of key technologies of swarm intelligent planning and autonomous control.
6. Other relevant theories, methods, technologies, systems and platforms.

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Message from the Editor-in-Chief

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