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Título: On the Coordinated Control of Networked Systems

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Resumo:

A problem of coordinated control for networked autonomous underwater vehicles is presented, formulated and discussed in order to illustrate a set-valued framework for the coordinated control problem.

After an informal user specification for the coordinated operation of multiple vehicles is introduced, a formal representation of the objects and relations of interest is presented, and the user requirements are mapped onto a formal specification.

Then, it is shown how this specification allows the formulation of an appropriate family of control problems which will be addressed in the dynamic optimization context.

Finally, some conclusions will be presented.