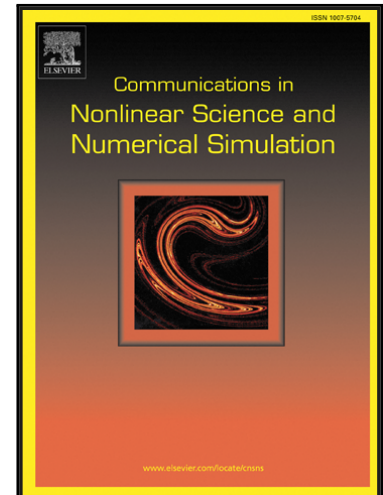


Accepted Manuscript

Existence and global exponential stability of periodic solutions for coupled control systems on networks with feedback and time delays

Shang Gao, Qi Wang, Boying Wu

PII: S1007-5704(18)30095-9
DOI: [10.1016/j.cnsns.2018.03.012](https://doi.org/10.1016/j.cnsns.2018.03.012)
Reference: CNSNS 4484



To appear in: *Communications in Nonlinear Science and Numerical Simulation*

Received date: 7 February 2016
Revised date: 22 February 2018
Accepted date: 13 March 2018

Please cite this article as: Shang Gao, Qi Wang, Boying Wu, Existence and global exponential stability of periodic solutions for coupled control systems on networks with feedback and time delays, *Communications in Nonlinear Science and Numerical Simulation* (2018), doi: [10.1016/j.cnsns.2018.03.012](https://doi.org/10.1016/j.cnsns.2018.03.012)

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Highlights

- We construct a model of coupled control systems on networks with feedback and time delays.
- We present sufficient conditions for existence and global exponential stability of periodic solutions.
- We mainly employ coincidence degree theory, Lyapunov method, and graph theory.
- The existence and global exponential stability criteria are shown in terms of the topology property of the network.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/7154540>

Download Persian Version:

<https://daneshyari.com/article/7154540>

[Daneshyari.com](https://daneshyari.com)