

Accepted Manuscript

Optimal decomposition for distributed optimization in nonlinear model predictive control through community detection

Wentao Tang, Andrew Allman, Davood Babaei Pourkargar, Prodromos Daoutidis

PII: S0098-1354(17)30441-6
DOI: [10.1016/j.compchemeng.2017.12.010](https://doi.org/10.1016/j.compchemeng.2017.12.010)
Reference: CACE 5977



To appear in: *Computers and Chemical Engineering*

Received date: 1 August 2017
Revised date: 28 November 2017
Accepted date: 22 December 2017

Please cite this article as: Wentao Tang, Andrew Allman, Davood Babaei Pourkargar, Prodromos Daoutidis, Optimal decomposition for distributed optimization in nonlinear model predictive control through community detection, *Computers and Chemical Engineering* (2017), doi: [10.1016/j.compchemeng.2017.12.010](https://doi.org/10.1016/j.compchemeng.2017.12.010)

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

- Network representations of optimization problems are introduced.
- Community detection is adopted for an optimal decomposition of optimization problems.
- The proposed decomposition method is applied to the optimal control problems in NMPC.

ACCEPTED MANUSCRIPT

Download English Version:

<https://daneshyari.com/en/article/6594913>

Download Persian Version:

<https://daneshyari.com/article/6594913>

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