Highlights

The Beggining of Control Revolution: Ofset-free Koopman MPC

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- Research highlight 1
- Research highlight 2

The Beggining of Control Revolution: Ofset-free Koopman MPC

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Abstract

Keywords:

1. Introduction

2. Preliminaries and Notation

3. Results

Table 1: Comparison of structure of A

Structure	Time TE/MPC	Optimal? [%]	OBJ	ST h_1	ST h_2
Full	0.2392 / 2.3884	26.7	100.0	43	48
Block Diagonal	0.2191 / 1.6204	100.0	94.1	25	31

Table 2: Comparison of several methods

Structure	OBJ u	OBJ y	OBJ	ST h_1	ST h_2
NMPC	4.4568	20.3818	100.0	8	8
Parsim-K	6.0253	24.5910	123.3	27	27
Full C	3.8177	23.8167	111.3	66	78
Block Diagonal C	3.8492	22.4462	105.9	47	42
Full C_k	11.5966	18.9656	123.0	31	23
Block Diagonal C_k	11.5214	19.0154	122.9	30	23

Table 3: Comparison of several Tunings

Tuning	OBJ u	OBJ y	OBJ	ST h_1	ST h_2
$C_k(z0)$	3.9120	29.3575	133.9	24	23
$C_k(z_s)$	11.3832	19.4816	124.3	31	23
C	3.8177	23.8167	111.3	66	78