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Data-driven dissipativity analysis with quadratic difference form supply-rate functions and its applications

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10.33612/diss.672422585

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Document Version Publisher's PDF, also known as Version of record

Publication date: 2023

Link to publication in University of Groningen/UMCG research database

Citation for published version (APA):

Esteves Rosa, T. (2023). Datà-driven dissipativity analysis with quadratic difference form supply-rate functions and its applications. [Thesis fully internal (DIV), University of Groningen]. University of Groningen. https://doi.org/10.33612/diss.672422585

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Data-driven dissipativity analysis with quadratic difference form supply-rate functions and its applications

Tábitha Esteves Rosa



The research described in this dissertation has been carried out at the Faculty of Science and Engineering, University of Groningen, The Netherlands, within the Enginnering and Technology institute Groningen (ENTEG).



The research reported in this dissertation is part of the research program of the Dutch Institute of Systems and Control (DISC). The author has successfully completed the educational program of DISC.

Printed by Ipskamp Printing Enschede

Cover art by Paulo Henrique Vilela Machado Cover Design by Tábitha Esteves Rosa



Data-driven dissipativity analysis with quadratic difference form supply-rate functions and its applications

PhD thesis

to obtain the degree of PhD at the
University of Groningen
on the authority of the
Rector Magnificus Prof. C. Wijmenga
and in accordance with
the decision by the College of Deans.

This thesis will be defended in public on

Friday 9 June 2023 at 11:00 hours

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List of Acronyms

AAS Atomic absorption spectroscopy

CVD Chemical vapour deposition

DoF Degree-of-freedom

HCL Hollow cathode lamp

LMI Linear matrix inequality

LTI Linear time-invariant

PID Proportional-integral-derivative

QDF Quadratic differential form

TH Threshold

UHV Ultra-high vacuum