

بسم الله الرحمن الرحيم



-Cardon - Cardon - Ca





شبكة المعلومات الجامعية التوثيق الالكتروني والميكروفيلم





جامعة عين شمس

التوثيق الإلكتروني والميكروفيلم قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها علي هذه الأقراص المدمجة قد أعدت دون أية تغيرات



يجب أن

تحفظ هذه الأقراص المدمجة بعيدا عن الغبار







بعض الوثائق

الأصلية تالفة



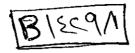




بالرسالة صفحات

لم ترد بالأصل







Department of Mathematics Faculty of Science Tanta University

STABILITY ANALYSIS IN CONTINUOUS DIFFERENTIAL GAMES

A Thesis

Submitted to

Department of Mathematics, Faculty of Science,

Janta University

In Partial Fulfilment of the Requirement for The Award of The Master Degree in Science

In

Pure Mathematics (Operations Research)

By

Ibarahim Abd El-Mageed Abd El-Hameed Noaman



SUPERVISORS

1- Prof. Dr. MOHAMED SAYED ALI OSMAN

Professor of Pure Mathematics, Head of the Department of Basic Science and the agent of Higher Technological Institute 10th of Ramadan.

2- Prof. Dr. Mabrouk El-Ghoul

Assistant Professor of Mathematics, Faculty of Science, Tanta University.

3- Dr. Nabil Abd El-Ghafar El-Kholy

Lecturer of Mathematics, Faculty of Science, Tanta University.

Head of Department of Mathematics

E.EL-Moly

Prof. Dr. E. El-Kholy



CURRICULUM VITAE

Name : Ibarahim Abd El-Mageed Abd El-Hameed Noaman

Date of Birth : 21/2/1971

Location : Kaser Bagdad-Kafer El-Ziyat Gharbeya

Nationality : Egyptian

Qualification: B. Sc. degree in Mathematics (1993), Faculty of

Science, Tanta University.

Head of Department of Mathematics

E.EL-Kholy

Prof. Dr. E. El-Kholy



POSTGRADUATE STUDIES

The present thesis is submitted to Mathematics Department, Faculty of Science, Tanta University in Partial Fulfilment of requirements of the degree of Master of Science in Pure Mathematics.

Beside the research work materialized in this thesis, the candidate has attended five postgraduate courses within two years including the following topics:

- 1- Abstract Algebra
- 2- Numerical Analysis
- 3- Partial Differential Equations.
- 4- Functional analysis.
- 5- German language.

The applicant **Ibarahim Abd El-Megeed Abd El-Hameed Noaman** successfully passed the final examinations (1996-1997) of these courses.

Head of Mathematics Department

E. EL-Kholy

(Prof. Dr. E. El-Kholy)



ACKNOWLEDGMENT

First of all my great thanks are Almighty due to GOD.

My sincere thanks are dedicated to my supervisor **Prof. Dr.**Mohamed S. Aly Osman, Professor of Pure Mathematics, Head of Department of Basic Science, Higher Technological Institute 10 th of Ramadan, for suggesting the subjects investigated, research facilities, interesting discussions, valuable assistance and continuous guidance.

I would like to express my deepest gratitude to **Prof. Dr. E. El-Kholy**, Head of Mathematics Department, Faculty of Science, Tanta University, for her kind help.

I wish to express my thankfulness and gratitude to Prof. Dr. M. El-Ghoul, Ass. Professor of Pure Mathematics, Faculty of Science, Tanta University, for his continuous encouragement, freely offered facilities and valuable assistance.

I wish also to express my thanks to **Dr. Nabil Abd El-Ghafar El-Kholy**, Lecturer of Mathematics, Faculty of Science, Tanta University, for suggesting the topics presented in this Thesis, for his helpful guidance and facilities he offered and active discussions during his kind supervision of this work.

Finally, I should like to thank the staff members of the Mathematics Department, Faculty of Science, Tanta University.

Ibarahim Noaman

•