بسـم الله الرحمن الرحيم

شبكة المعلومات الجامعية

التوثيق الالكتروني والميكروفيلم

شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكروفيلم

قسم

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

يجب أن

تحفظ هذه الأفلام بعيدا عن الغبار

في درجة حرارة من ١٥-٢٥ مئوية ورطوبة نسبية من ٢٠-٤٠%

To be Kept away from Dust in Dry Cool place of 15-25- c and relative humidity 20-40%

بعض الوثائق الأصلية تالفه

بالرسالة صفحات
لم ترد بالاصل

MAGNETOHYDRODYNAMICS STABILITY OF TWO FLUIDS INTERFACE

Thesis Submitted For The Degree of
Doctor of Philosophy
In Science
(Applied Mathematics)

By

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Cairo – EGYPT

2002


بسم الله الرحمن الرحيم

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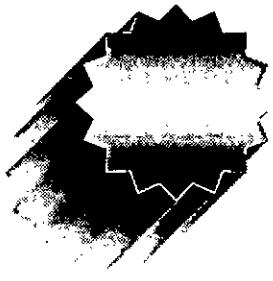
To



My Great Parents

My Lovely Brother

ACKNOWLEDGMENT

I am extremely grateful to Prof. Dr. Samia S. Elazab, Professor of Applied Mathematics, Department of Mathematics, Women's University College, Ain Shams University for her continuous helping from the beginning till the end of this thesis, discussions and encouragement. I would like to thank her for suggesting the problems involved in this work and tackling its difficulties throughout her supervision of this work.

I would like also to thank Prof. Dr. Ahmed E. Radwan, Professor of Applied Mathematics, Department of Mathematics, Faculty of Science, Ain Shams University, for his fruitful discussions and encouragement.

I am deeply grateful to Prof. Dr. Gaber M. Hassib, Professor of Nuclear Physics and Chairman of the National Center for Nuclear Safety and Radiation Control, A.R.E, for his valuable encouragement through his supervision of this work. I am greatly indebted to him for suggesting the problems involved in this work, stimulating advice and continuous help.

Finally, my sincere thanks to the staff members of Mathematics Department, Women's University College, Ain Shams University.

LIST OF CONTENTS

ABSTRACT

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The thesis is mainly concerned with some important stability problems of self-gravitating superposed fluid layers, fluid cylinder surrounded by self-gravitating tenuous medium and pervaded by transverse varying magnetic field. Chapter I discussed the concept of stability, hydrodynamic and magnetohydrodynamics stability. Chapter II concluded that the streaming has destabilizing influence on the medium and the self-gravitating force has stabilizing or destabilizing influence on the system of fluid. In absence of the streaming and self-gravitating forces, it was found that the magnetic fields had stabilizing as the model was acting upon the combined effect of the inertia, self-gravitating and electromagnetic forces, there will be magnetodynamic stable and unstable domains.

In Chapter III, it was concluded that the gravitational stable and unstable domains were presented graphically. Both the streaming speed and densities ratios of the triple fluid layers play important roles in destabilizing character of the present model.