

## Dedication

To my father  
                    , mothers  
                                , brothers  
  and my sisters

## **ACKNOWLEDGMENT**

**My gratefully thanks to my supervisor**

**Prof: Shawgy Hussein AbdAlla**

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**finish this study .**

# Abstract

*Wide information about the spectra of Hill operators with potentials of the Ricatti form have been given by the links that consider between the spectra of Dirac and Hill operators .*

*We show the Riesz and Schauder basis for non-selfadjoint schrodinger operators of the spectral date .*

*We also show the root functions of Hill and ID Dirac operators .*

*We study the class of weakly regular boundary conditions and their necessity for completeness in Dirac equations .*

## الخلاصة

تم إعطاء معلومة واسعة حول طيف مؤثرات هيل طبقا لجهد صيغة ريكاتي بواسطة صلة الاعتبار بين طيف مؤثرات هيل ودراك . تم توضيح اساس شاوذر وريس لمؤثرات شروندجر غير المرافقة الذاتية للبيانات الطيفية . ايضا تم توضيح دوال الجذر لمؤثرات هيل ودراك I D . تحت دراسة عائلة الشروط الحدية المنتظمة الضعيفة وحدودتها لاجل التمام في معادلات دراك .

# The contents

Dedication.....	>.....I
Acknowledgments.....	II
Abstract.....	>....III
Abstract (Arabic).....	IV
The contents.....	>.....V

## Chapter 1

### Eigen values of periodic Dirac operators

Section (1.1): Special cases of potential .....	1
Section (1.2): Transformation of potentials and links between spectra of Dirac – Hill operators .....	15

## Chapter 2

### Non-selfadjoint Schrodinger operators with periodic and antiperiodic boundary conditions

Section (2.1): preliminaries of Floquet theoretical and properties of $H^P$ and $H^D$ .....	33
Section (2.2): Fundamental Theorems .....	59

## Chapter 3

### Existence of Riesz bases of root functions and Dirac operators

Section (3.1): Spectra and Riesz projection for Hill and Dirac operators .....	74
Section (3.2): Elementary geometry of bases in a Banach space and geometric criterion to Hill and Dirac operators . .....	85
Section (3.3): Fourier coefficients of potentials and fundamental inequalities with Riesz basis property.....	91

## **Chapter 4**

### **Completeness of root subspace of boundary value problems**

<b>Section (4.1): weakly regular BVP for first order systems.....</b>	<b>102</b>
<b>Section (4.2): Weakly regular BVP for Dirac type systems .....</b>	<b>126</b>
<b>References .....</b>	<b>146</b>