

بسم الله الرحمن الرحيم



الآية الكريمة

قال تعالى

اللَّهُ نُورُ السَّمَاوَاتِ وَالْأَرْضِ مِثْلُ نُورِهِ {
كَمِشْكَاةٍ فِيهَا مِصْبَاحٌ الْمِصْبَاحُ فِي
زُجَاجَةٍ الزُّجَاجَةُ كَأَنَّهَا كَوْكَبٌ دُرِّيٌّ يُوقَدُ
مِنْ شَجَرَةٍ مُبَارَكَةٍ زَيْتُونَةٍ لَا شَرْقِيَّةٍ وَلَا
غَرْبِيَّةٍ يَكَادُ زَيْتُهَا يُضِيءُ وَلَوْ لَمْ تَمْسَسْهُ
نَارٌ نُّورٌ عَلَى نُورٍ يَهْدِي اللَّهُ لِنُورِهِ مَن
يَشَاءُ وَيَضْرِبُ اللَّهُ الْأَمْثَالَ لِلنَّاسِ وَاللَّهُ
بِكُلِّ شَيْءٍ عَلِيمٌ
صدق الله العظيم

(سورة النور الآية 35)

I dedicate this thesis


...To my parents

...To my confidants

And

To my fiancée

...



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In this work the standard model of particle physics Higgs boson in addition to fundamental forces in quantum theory are discussed the promotion of the standard model in all stages from starting with discoveries radioactivity and electron until discovering the higgs boson by high energy accelerator in CERN . Is also exhibited. In addition to the problem of Symmetry Breaking and Quantum gravity.

In this work the effect of gravitational field is also incorporated through the mass term in the Lagrangian,

beside redefining the gauge transformation to make the lagrangian invariant.

الخلاصة

في هذا البحث تمت مناقشة النموذج القياسي للجسيمات الأولية وكذلك بوزن هيغز بالإضافة للقوى الرئيسية في النظرية الكمية كما تم تتبع مراحل النموذج القياسي منذ اكتشاف النشاط الإشعاعي والإلكترون حتى اكتشاف بوزون هيغز بطاقات عالية في مركز الأبحاث الأوروبي، وتمت مناقشة مشكلة إنهاء التناظر والتناقل الكمي. كما تم في هذا البحث إدخال تأثير المجال الثقالي عبر حد الكتلة في دالة لاجرانج ثم تعديل التحويلات المعيارية لتجعل دالة لاجرانج لا متغيرة.

Table of contents

Pag e NO	Subject	
I	الآية	
II	Dedication	
III	Acknowledgement	
IV	Abstract	
V	الخلاصة	
VI	Table of contents	
Chapter 1: Introduction		
1	Introduction	1-1
1	Fundamental Physics	1-2
Chapter 2: Fundamental Forces		
4	Fundamental Forces of Nature	2-1
5	Four Fundamental Interactions	2-2
6	Fundamental Forces in quantum theory	2-3
Chapter 3: Laws of Electrodynamics		
8	Introduction	3-1
9	The laws of electrodynamics	3-2
10	birth of Quantum Field Theory	3-3
11	Quantum field theory and charged particles	3-4
Chapter 4: Standard Model of High Energy Physics		
13	Introduction	4-1
18	The Field and Particle Sectors	4-2
20	Symmetry Breaking and Higgs	4-3
Chapter 5: Beyond Standard Model		
24	Beyond Standard Model	5-1

25	Beyond Standard Model	5-2
26	Quantum Gravity	5-3
28	Symmetry Breaking ,Higgs and Quantum gravity	5-4
	Chapter 6: local guage invariance of math term	
32	Introduction	6.1
33	Free lagrangian and guage invariance	6.2
33	Free lagrangian field dependent term and guage invariance	6.3
36	Conclusions	6.4
37	Reference	