بسم الله الرحمن الرحيم

(....وقُل رَبِّي زدنِي عِلماً)

صـــــدق الله العظيم

طه (١١٤)

Dedication

I dedicate this thesis to my parent Al Ata and Ekhlass. I hope that achievement will complete the dream that you had me all those many years ago when you choose to give me the best education you could.

To my lovely husband, my lovely brother, my lovely sisters, all of my family, all my best friends and my colleagues.

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Abstract

In this work improved quantum mechanical model based on harmonic oscillator for frictional medium is obtained.

This quantum model is used to derive radioactive decay law. According to this model radioactivity is predicted to result from nuclear excitation.

A new statistical physical law which accounts for electric, gravity as well as rest mass energy is obtained. This model is found to have capability of describing nuclear interactions.

المستخلص

في هذا العمل تم الحصول على النموذج الكمي المطور الذي يعتمد على الحركة الاهتزازية للوسط المتذبذب، و يستخدم هذا النموذج الكمي لاشتقاق قانون الانحلال الاشعاعي ، وفقا لهذا النموذج النشاط الاشعاعي يتوقع ان ينتج من الاثارة النووية.

تم الحصول على القانون الفيزيائي الاحصائي الجديد الذي يحسب الكهربيةوالجاذبية كما يحسب طاقة السكون. ووجد ان هذا النموذج لديه القدرة على وصف التفاعلات النووية.

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