قال تعالى :
(سَنُرِيهِمْ آيَاتِنَا فِي الْآفَاقِ وَفِي أَنْفُسِهِمْ حَتَّىٰ يَتَبَيَّنَ لَهُمْ أَنَّهُ الْحَقُّ)
فصلت :٥٣

DEDICATION

I dedicate this work to

My mother

My Wife

My babies Myar & Ethar

Friends

Colleagues

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ABSTRACT

The generalized special relativity is used to construct new quantum momentum perturbation theory. This theory is based on momentum eigen equation. Treating elementary particles as vibrating strings or strings of finite length or strings of periodic structure, the momentum was shown to be quantized, for harmonic oscillator particle in a crystal and in a box.

In this work generalized special relativistic spatial and momentum perturbation theory was developed. This theory reduced to Schrödinger picture in the momentum space. It shows that when considering the particle as an oscillating string, the energy is quantized in any arbitrary field. The model also describes spatial evolution of the quantum interacting system typical to the time evolution model in quantum field theory.

المستخلص

أُستُخدمت النظرية النسبية الخاصة المعممة لإيجاد نظرية إضطراب تعتمد على الإندفاع وهي تعتمد على معادلة الإندفاع الذاتية . بإعتبار الجسيمات الاولية أوتار متذبذبة بطول محدود أو بصيغة دورية وضح تكمم الاندفاع في حالة المتذبذب التوافقي والجسيم داخل صندوق الجهد.

في هذا البحث طُور نموذج الإضطراب المكاني الإندفاعي وهذه النظرية تؤول لمعادلات شرودنجر في فراغ الإندفاع ، بوصف الجسيمات بإعتبارها اوتار متذبذبة وضح تكمم الطاقة ، هذا النموذج ايضاً يصف التغير المكاني للمنظومة الكمية المتفاعلة بنفس طريقة التغير الزماني .

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