

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

يا معشر الجن والإنس إن استطعتم أن تنفذوا من
أقطار السماوات والأرض فانفذوا لا تنفذون إلا

بسلطان (صدق

سورة 33,

Dedication

I am glad to dedicate this work, to my grand family and as a special wise to my parents ,to my sincere wife , to my darling young daughter(Arwah),to whom all participate in my learning operation.

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Abstract

In this work the generalized Euler-Lagrangian is utilized to find Maxwell's equations. It is found that Maxwell's equations can be derived from a new Lagrangian which is different from that of the ordinary Euler-Lagrangian. It is also found that the Hamiltonian of this new Lagrangian is different from that of the ordinary one.

في هذا البحث استخدمت معادلة اويلر- لاجرانج لاشتقاق معادلات ماكسويل. وجد أن إمكانية اشتقاق معادلات ماكسويل من دالة لاجرانج الجديدة، والتي تختلف عن تلك التابعة لاويلر- لاجرانج المألوفة. كما وجد أن دالة هاميلتون لدالة لاجرانج الجديدة تختلف عن تلك المألوفة.

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