

Abstract

In this thesis a study of quantum entanglement in coupled LC-oscillators is presented.

Two inductively coupled LC-oscillators are quantized. Ground and excited states of this system are quantum entangled. Entropy of quantum states is calculated.

Oscillators in two different states, one is in unperturbed ground state and the second

is in coherent state, are also studied. The evolution with one oscillator initially in its

ground state, the other in a coherent state is done. Harmonic oscillator propagator is

also used to study the dynamics of the system.