

ERROR DIAGNOSIS IN INFINITE WALL BOUNDARY CONDITIONS OF SCHRÖDINGER EQUATION USING RANDOM SIGNAL ANALYSIS

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ABSTRACT

Wireless networking is the branch of communication in which wireless channels are used for the transmission of the signals. There are various terminologies in the field of wireless networking which are taken from quantum physics. In fact quantum physics consists of the signals which are in wireless medium. There are many important theories which are given in the field of quantum mechanics which can be related with the concepts of wireless networks. In this paper we have tried to link the famous Heisenberg Uncertainty Principle and the Schrödinger wave equation with the wireless network in order to find the error in the position, momentum and energy of the network. A new concept is also discussed regarding the error in the probability in which an attempt is made to derive the equation of error with respect to the displacement. In order to derive these equations various concepts of mathematical modeling, Fourier series, Fourier transform, error diagnosis are discussed briefly.

KEYWORDS: Momentum, Wavelets, Duality, Uncertainty