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PROPERTIES OF DISCRETE LAPLACIAN

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Abstract

The study of certain isospectral potentials on a discrete lattice with periodic boundary conditions in more than one dimension is an important aspect. The net effect of all interactions of the electrons and ions is periodic potential $Q(x), x \in \mathbb{R}^3$. I studied discrete schrodinger equation and proved some fabulous properties of discrete Laplacian.

Key Words : Laplacian, Diagonal operator, Invariant, Bloch spectrum.

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