

ORTHOGONAL IDEALS IN LATTICES AND ITS APPLICATIONS TO CODES

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In this paper we study the orthogonal ideals in lattices and apply them to orthogonal codes. We prove a chain lattice has no orthogonal codes. Further we prove that lattices in which $\inf.(a, b)$ is not equal to 0 for all a and b different from zero has no orthogonal ideals. To construct these codes we use the symbols from a suitable lattice. These special class of codes are termed as lattice codes.