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ON THE SECOND SPECTRUM OF LATTICE MODULES

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Abstract

The second spectrum $Spec^s(M)$ is the collection of all second elements of M. In this paper, we study the topology on $Spec^s(M)$, which is a generalization of the Zariski topology on the prime spectrum of lattice modules. Besides some properties, $Spec^s(M)$ is characterized and the interrelations between the topological properties of $Spec^s(M)$ and the algebraic properties of M, are studied.

Keywords: second element, prime element, maximal element, minimal element, spectral space.

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