Atom spectrum in abelian categories

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Recently, Kanda has investigated the classification of Serre subcategories of an arbitrary noetherian abelian category $\mathcal{A}$ in terms of some classes of monoform objects which are known as atoms. Since abelian categories do not have enough injective objects in general, Kanda defined monoform objects and atoms and showed that these new notions can be suitable replacements for injective indecomposable modules and prime ideals in Mod-A when A is a commutative noetherian ring. In this talk we will study and develop this theory.

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