

The co-annihilating ideal graphs of commutative rings

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Abstract. Let R be a commutative ring with identity. The co-annihilating-ideal graph of R , denoted by \mathcal{A}_R , is a graph whose vertex set is the set of all non-zero proper ideals of R and two distinct vertices I and J are adjacent whenever $\text{Ann}(I) \cap \text{Ann}(J) = \{0\}$. In this paper we initiate the study of the co-annihilating ideal graph of a commutative ring and we investigate its properties.