

Abstract

In this thesis we study on the cover complexes of f -graphs. Proceeding to the discussion of cover complex of f -graph, we computed the cardinality and dimension of cover complex. Moreover, we evaluated f -vector of the given cover complex. And discuss the primary decomposition of that cover complex. After evaluating primary decomposition we evaluate $\delta_F(I)$ and $\delta_N(I)$. A characterization of f -graph is already known and it is proved f -graph is cohen-macaulay. In this work, we use a different perspective of f -graph by extracting the cover complex of f -graph.