

Review of: "The edge rings of compact graphs"

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Let $G := (V, E)$ be a simple graph (finite graph without loops and multiple edges). Consider the polynomial rings $K[V]$ and $K[E]$, and the edge ring $K[G]$. The main result of this manuscript shows that if G is a compact graph, then the projective dimension and Cohen-Macaulay type of $K[G]$ are both equal to the number of the induced cycles of G minus one. The authors also classify all the compact graphs up to the essentially same edge rings. My only comment is to recommend the authors to add some topology to these structures to enrich their results and to provide an interdisciplinary character to their work.