

Review of: "The edge rings of compact graphs"

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Potential competing interests: No potential competing interests to declare.

Let G:= (V, E) is a simple graph (finite graph without loops and multiple edges), and 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. Classification of all the compact graphs up to the essentially same edge rings is also discussed. I recommend the authors to include some topological properties to these structures to enrich their results and to provide an interdisciplinary character to their work. In my opinion, the results are interesting.

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