

1159-13-101

Huy Tai Ha* (tha@tulane.edu) and **Takayuki Hibi**. *Max Min vertex cover and the size of Betti tables.*

Let G be a finite simple graph and let $I(G)$ be its edge ideal. We discuss the question of what pairs of integers could be the projective dimension and the regularity of $I(G)$. We give a characterization for when the projective dimension of $I(G)$ attains its minimal value. We also find the spectrum of the projective dimension when the regularity is 2. (Received August 01, 2020)